



THE SOCIO-ECONOMIC IMPLICATIONS OF THE COVID-19 PANDEMIC: IDEAS FOR POLICY ACTION

Luis Felipe López-Calva and Marcela Meléndez (editors)



Cross-sectional visions

The Socio-Economic Implications of the COVID-19 Pandemic: Ideas for Policy Action

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in nearly 170 countries and territories, we offer a global perspective and local insight to help empower lives and build resilient nations.

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Foreword

The Latin America and Caribbean (LAC) region has been the *global epicentre* of the COVID-19 pandemic since June 2020 – accounting for more than 30 per cent of the world's COVID-19 deaths despite having just eight per cent of the global population.¹ Like other regions, long-term fragilities, inequalities and injustices have been revealed by the pandemic. The LAC region is experiencing its worst economic crisis in a century due to the pandemic, with Gross Domestic Product (GDP) estimated to contract by a massive 8.1 per cent in 2020.² That is largely due to the fact that a large percentage of workers in the region are employed in jobs requiring close physical proximity, with remote-working largely not feasible.³ Indeed, the deep economic recession now threatens to reverse *about a decade* of hard-won progress in reducing poverty and inequality at a time when many people in the region were already publicly demonstrating their discontent.

In these unprecedented times, governments in LAC need timely access to very best of expertise to help them to not merely recover from the pandemic – but to *build forward* better. This is the aim of this new series of *COVID-19 Policy Papers* from the United Nations Development Programme (UNDP), which will contribute to this crucial arsenal of knowledge resources. In particular, it aims to equip governments and policymakers with a range of concrete policy options that can help to address a number of key areas.

Those solutions include proven methods to tackle the deep socio-economic consequences of the pandemic while driving new sources of growth. It also encompasses ways to implement measures to boost access to healthcare and social protection. Specific measures to help governments to insert the "DNA" of a green, low-carbon economy into all recovery and stimulus measures are also examined. The papers also aim to spark a much-needed conversation on new ways to harness the immense potential associated with major digital acceleration now occurring in the wake of the pandemic. Such policy options will be critical to improve people's wellbeing and advance human development in the region. Indeed, by taking-up these policy opportunities, countries in LAC will have a pivotal role in advancing our global mission to tackle climate change, restore nature, and ensure that progress on all 17 Sustainable Development Goals (SDGs) is put firmly back on track.

This research is relevant to all 33 counties in the region as it leverages knowledge garnered from UNDP's role as the technical lead in the UN's socio-economic response to the COVID-19 crisis. That includes in-depth assessments of impact (SEIAS) that we have conducted with UN Country Teams in over 100 countries. It combines these unique insights with the *thought leadership* of a network of leading academic institutions and think tanks in the region and the specialized expertise of UN sister agencies. At this crucial moment, UNDP and the UN system stands ready, at the request of governments worldwide, to help them make the *right choices* to realise that greener, more inclusive, and more sustainable future.

Almi Plenis

Achim Steiner, Administrator, United Nations Development Programme (UNDP)

^{1 &}lt;u>www.ft.com/content/5a55dc6b-b5fd-47a2-b845-8cea8ea731a0</u>

^{2 8.1%} is the estimate from the World Bank and Consensus Forecast

³ www.weforum.org/agenda/2020/10/imf-latin-central-america-economics-finance-pandemic-disease

Preface

The COVID-19 pandemic is one of the most serious challenges the world has faced in recent times. The total cost in terms of human lives is yet to unfold. Alongside the cost of lives and deep health crisis, the world is witnessing an economic downfold that will severely impact the wellbeing of large parts of the population in the years to come. Some of the measures that are currently being used to counteract the pandemic may impact our future lives in non-trivial ways. Understanding the association between different elements of the problem to broaden the policy space, with full awareness of the economic and social effects that they may bring, is the purpose of this series.

Thus far, the impossibility of targeted isolation of infected individuals and groups has led to policies of social distancing that impose a disproportionately high economic and social cost around the world. The combination of policies such as social distancing, lockdowns, and quarantines, imply a slowdown or even a complete stop in production and consumption activities for an uncertain period of time, crashing markets and potentially leading to the closure of businesses, sending millions of workers home. Labor, a key factor of production, has been quarantined in most sectors in the economy, borders have been closed and global value chains have been disrupted. Most estimates show a contraction of the level of output globally. For the Latin America and Caribbean region, the consensus forecasts are at -3 to -4%, and it is not until 2022 that the region is expected to go back to its pre-crisis output levels in scenarios that foresee a U-shaped crisis pattern. According to ECLAC, more than 30 million people could fall into poverty in the absence of active policies to protect or substitute income flows to vulnerable groups.

We face a crisis that requires unconventional responses. We are concerned about the level-effect: the impact of the crisis on the size of the economies and their capacity to recover growth after the shock. But we are equally concerned about the distributional impact of the shock. The crisis interacts with pre-existing heterogeneity in asset holdings, income-generation capacity, labor conditions, access to public services, and many other aspects that make some individuals and households particularly vulnerable to an economic freeze of this kind. People in the informal markets, small and micro entrepreneurs, women in precarious employment conditions, historically excluded groups, such as indigenous and afro-descendants, must be at the center of the policy response.

UNDP, as the development agency of the United Nations, has a long tradition of accompanying policymaking in its design, implementation, monitoring and evaluation. It has a mandate to respond to changing circumstances, deploying its assets to support our member states in their pursuit of integrated solutions to complex problems. This series aims at drawing from UNDPs own experience and knowledge globally and from the expertise and capacity of our partner think tanks and academic institutions in Latin America and the Caribbean. It is an attempt to promote a collective reflection on the response to the COVID-19 health crisis and its economic and social effects on our societies. Timeliness is a must. Solutions that rely on evidence, experience, and reasoned policy intuition —coming from our rich history of policy engagement— are essential to guide this effort. This series also contributes to the integrated approach established by the UN reform and aspires to become an important input into the coherent response of the United Nations development system at the global, regional, and national levels.

Ben Bernanke, former Governor of the US Federal Reserve, reminds us in his book *The Courage to Act* that during crises, people are distinguished by those who act and those who fear to act. We hope this policy documents series will contribute to the public debate by providing timely and technically solid proposals to support the many who are taking decisive actions to protect the most vulnerable in our region.

Luis Felipe López-Calva, Regional Director, Latin America and the Caribbean

Introduction

These volumes present diagnostics and policy recommendations in a set of Policy Documents produced in 2020 as part of an effort to contribute with solid material and ideas to the public policy debate in Latin America and the Caribbean during the COVID-19 pandemic. These documents, turned into chapters, are now offered as a reference to policymakers, researchers and to the wider public interested in discussing public policy priorities and routes for action, as societies see themselves still in the midst of the multidimensional impacts of the pandemic.

Each chapter is self-contained and can be independently consulted. The material has been organized to present works addressing issues pertinent to all countries –matters of public policy that apply to all, regardless of specific contexts, or because of shared characteristics of specific contexts—, in the first of two volumes. The chapters in this first volume helped shape UNDPs own vision on a number of issues, as well as the policy advice we give governments throughout Latin American and The Caribbean in our role as a development agency. Works addressing issues in country-specific settings are presented in the second volume. They also contribute to the comprehension of challenges facing our societies during the pandemic and for years to come, and to strengthening governments' capacities for adequate policy response. While they are indeed country-specific, there are often lessons that apply to many.

The original works providing cross-sectional visions, in the first volume, were commissioned to external experts, with their content defined through bilateral exchanges. Two of them were jointly commissioned with UNICEF (see chapters 7 and 8) and one was co-authored by UNDP colleagues from the Gender Group at the UNDP Regional Hub (see chapter 6).

The works providing country-specific analyses, in the second volume, were produced in house, sometimes with input from external experts (El Salvador, Bolivia, México, Paraguay and Venezuela); in collaboration with external experts (Dominican Republic) or commissioned to external experts (Argentina, Colombia, Honduras, Perú, Jamaica, Uruguay, and The Bahamas). The result is a set of analytical works connected by the common thread of addressing country-specific policy priorities in the context of the pandemic.

1. The COVID-19 pandemic in LAC

1.1. The crisis brought about by COVID-19

Humanity is facing a crisis with no recent precedent: a health crisis turned into economic downfall by the measures to contain it, that will revert us many years in terms of development achievements. Non pharmaceutical interventions (NPIs) in the form of generalized lockdowns and other social distancing measures have forced workers out of their jobs and away from their income-generating activities, demanding action from governments everywhere to protect their citizens and contain the blow to their economies. Challenges facing governments are multiple and range from preventing the collapse of health systems under pressure from spread of the virus, to protecting households from falling into poverty, and protecting employment and the productive base, that once destroyed will take long to recover. If the pandemic is understood, as it must be, as transitory, to be eventually contained by the availability of a vaccine or a treatment, what follows is the need to rise up to the challenge to contain its ramifications as much as possible while it lasts.

The painful fact is that countries in Latin America and the Caribbean were generally ill-prepared to respond to a moment like this one.

1.2. Pre-existing conditions

Responding to the pandemic required capacity for coordinated action between government agencies at the national and subnational levels, and resources for extraordinary additional expending. These are both elements the region lacked entering the pandemic. The response also required quick agreements between

the executive and legislative government branches about strategies to adopt in facing the double health and economic crisis, which have been elusive.

One of the notions we are hearing everywhere is that COVID-19 unveiled our pre-existing fragilities. Now more than ever the way we have set up our societies and made investment choices is proving costly. Under-resourced health systems of varying quality across territories have resulted in institutional stress where Intensive Care Units (ICUs) become over-burdened. Highly informal labor markets have resulted in unprotected workers, because of both, lacking social protection, and invisibility: informal workers have no unemployment insurance and those who did not belong among the poorest have been hard to reach with governmental support because they do not show up in social registries. Unequal living conditions across income groups have resulted in students living through the pandemic in strikingly different ways in terms of the tools and support they have to continue their education, with the poorest carrying the brunt of the long-term costs of being unschooled. Care tasks disproportionately burdening women and often limiting their participation in labor markets have resulted in women suffering through the pandemic in different and possibly worse ways than men. A large part of the toll that COVID-19 is taking on Latin America and The Caribbean is explained by pre-existing conditions.

1.3. Policy challenges, present and future

Designing and implementing adequate policy responses at such a critical moment, is even more challenging when initial conditions run against us. Governments in the region are expected to respond with an efficiency and effectiveness they have often lacked, using the limited resources at hand, and making the most of any new resources that become available. They must make choices under high uncertainty with incomplete information. And they have been doing so to the best of their knowledge and abilities everywhere, in many cases while facing complementary context-specific crises in the form of social unrest, natural disasters or falling commodity prices compromising an already hurt fiscal income.

Policy decisions made today will determine the future course of the region. Countries whose efforts are more effective in mitigating a fall into poverty and protecting the productive base will recover faster once the pandemic is under control. Countries that learn the lessons from the pandemic and quickly move on towards necessary reforms to change those taxing initial conditions once and for all, will also fare better.

Because the challenges at hand are in no way simple to tackle, we took on the task, at the outset of the pandemic, of bringing together some of the best experts in the region to make a contribution.

2. Overview of topics covered in the first volume

The set of works compiled in this book does not exhaustively cover all of the difficult issues that must be addressed by policy, nor does it pretend to. The first volume covers a selection of the issues that became evident priorities as the region progressed into the pandemic. They are presented chronologically, following the order in which individual documents became available.

Chapter 1, by Constantino Hevia and Andy Neumeyer, written in April 2020, argues that the best policy intervention to contain COVID-19 is to develop a technology that reduces the contact rate between infectious and susceptible individuals, while restricting society-wide human interaction as little as possible. Given the enormous costs of universal lockdowns, the rate of return on investments to enable targeted policies of isolation is huge. Targeted NPIs would only isolate a subset of individuals (for example, infectious individuals, persons that are likely to be infectious, and the more susceptible). An action in this direction is aggressive testing to detect infectious and immune individuals. This knowledge will allow immune individuals to circulate freely and work. Aggressive testing also helps to detect infectious individuals early and trace their contacts. Hong Kong, Iceland, Japan, Singapore and South Korea implemented targeted isolation policies. Aggressive testing can also enable policy makers to evaluate (in real-time) the effectiveness of different social distancing interventions (closing schools, shopping malls, sports events, etc.).

Even though universal NPIs are extremely costly, there is no impact evaluation of different interventions. Data can help design evidence based NPIs. Given the global nature of the pandemic a cooperative multilateral solution is desirable. Coordinated efforts to develop pharmaceutical solutions for the containment of the epidemic could allocate resources more efficiently and produce faster results. Coordinated approaches to NPIs can allow many countries to leapfrog towards best practices. A multilateral approach could also establish global protocols for travel across borders. Lifting universal NPIs without the ability of implementing targeted NPIs, before a vaccine or a pharmacological treatment is available, may lead to new epidemic outbreaks and the need for new universal NPIs.

Chapter 2, by Santiago Levy, also written in April 2020, identifies broad areas of concern for policy requiring an immediate shift in economic policy to minimize the human costs of the pandemic, mitigate the social costs, and preserve macroeconomic stability. Mitigation measures should be focused on workers, with available instruments like conditional cash transfer programs, and tax and other registries. Sustaining formal employment is a priority; layoffs and firm closings need to be avoided by subsidizing firms' labor costs and giving them preferential access to credit guarantees conditional upon not firing workers.

Two conditions are required for this recession to transit into an orderly and swift recovery once the pandemic is under control. The first is that the indispensable measures to mitigate its social costs do not turn into a financial crisis, accompanied by the closure and bankruptcy of firms. Mitigation measures require a mix of expenditure switching and augmenting, based on individual country circumstances. Fiscal revenues will fall, and a worsening of fiscal balances is inevitable. To resume growth after the health crisis, it is indispensable to maintain access to external credit. Debt sustainability will require tax increases once the crisis is over, which in some cases should be preannounced. If the recession is very deep and extends beyond the sanitary emergency, mitigation measures need to be extended. This needs to be preannounced to reduce uncertainty to banks and firms and facilitate the flow of credit.

The second indispensable measure is that sanitary strategies evolve. Contrary to prior economic crises, the solution to this one depends on a solution to the sanitary emergency, not in the sense of "eliminating" the pandemic (which cannot happen completely until a vaccine is discovered, or high levels of herd immunity are reached); but in the sense of transitioning to containment strategies that do not depend on the generalized isolation of individuals. If containment strategies do not evolve, the economic crisis will reach levels of magnitude which are hard to imagine. The evolution of the sanitary strategy is an essential part of the economic crisis containment program, and later on, of recovery.

Chapter 3, by José Antonio Ocampo, written in May 2020, contends that the current global economic crisis will be remembered by the limited multilateral financial cooperation agreements to support middle-income economies. Latin American countries have accessed modest resources from the IMF emergency credit lines and other IMF credit facilities; members of the Latin American Reserve Fund (FLAR) have benefitted from the resources of this regional body; and the multilateral development banks have taken measures to support the region. Nevertheless, the programmed resources made available so far are small relative to the need. The dynamic of the Central American Bank for Economic is an exception thanks to its recent capitalization. But the Inter-American Development Bank and the Development Bank of Latin America (CAF) are at the limit of their lending capacity and need to be capitalized, and credit resources from the World Bank to the region are still lower than those offered during the previous crisis.

In terms of foreign debt, a diverse approach would be useful to support countries that need restructuring and create a voluntary supervised multilateral mechanism for a debt standstill for countries requiring it. Beyond short-term actions, it is essential to put back on the table the creation of an institutional mechanism to renegotiate sovereign debts.

Beyond the crisis, it is also necessary to reformulate the region's development strategy. The economic problems of a wide range of Latin American countries were already acute during the years preceding the current crisis, and the slow growth during those years put a brake on, and partly reversed, the improvement in social indicators experienced since the start of the century. The development bank system's support, looking forward, will also be critical.

Chapter 4, by Nora Lustig and Mariano Tommasi, also written in May 2020, emphasizes the need to prioritize the most vulnerable segments of society, especially those in extreme poverty, in designing strategies and specific policy responses during the pandemic. It proposes that these strategies and responses must fall under three guiding principles: (i) reduce epidemiological risks to save lives; (ii) protect livelihoods; and (iii) ensure human capital accumulation. Targeted interventions at the local level must go beyond cash transfers and rely on local actors and grassroots organizations to be effective. Their design must take into consideration heterogeneity within vulnerable groups.

While governments are implementing new social protection emergency programs, the traditional approach will —most likely— not be enough and cannot happen quickly enough in most countries for most people. The pandemic calls for new approaches to social protection, beyond what governments can do. Large corporations, large foundations and affluent individual philanthropists have an opportunity to show how they can make a difference in ways unseen before. But it is not just the world's richest who can make a difference. Lockdowns throughout the world are creating a new type of stark inequality: between those who still have a steady source of income and those who do not. People-to-people social protection can also help finance the needs of the poorest and most vulnerable and compensate the losers in the "lockdown divide."

Chapter 5, by Diana Carolina León and Juan Camilo Cárdenas, written in June 2020, reflects on the COVID-19 crisis as an opportunity for a throbbing economic recovery on a more sustainable path, once the pandemic is under control. It recognizes four windows of opportunity. First, since there is a causal relationship between transport modes, air quality, and human health, the possibility of generating changes to people's daily transportation practices opens a window to structural and sustainable changes over time. Such changes can be promoted through incentives that complement people's motivations to satisfy their needs while promoting the common good. Changes in modes of transportation can also be assisted by urban planning to make routes for healthier transport modes available. Second, e-working results in lower emissions from combustion engines as workers' mobility between home and work is reduced. While a small fraction of workers can e-work, this is the group that makes greater use of private cars and individual forms of transport. Industries where e-working is an option for reducing environmental impact might also consider permanently reducing their air travel carbon footprint. Furthermore, industries able to promote e-work can redesign their use of office space, reducing their energy and space consumption.

Third, there is a window of opportunity in changing consumption pattens. More time spent at home has sparked individuals' curiosity about certain activities that can reduce their ecological footprint. An example is composting, which has aroused the curiosity of many people at home. There is also evidence of practices such as limiting the use of water, turning off lights, disconnecting household appliances, and using reusable bags for shopping, becoming more commonplace. Measures such as taxes on plastic bags have had positive effects. There are opportunities for campaigns that promote more sustainable consumption. An aspect where changes in consumption behavior can occur with a lasting impact on sustainability is in the demand for meat. Changes in individual consumption of bovine meat could relieve the existing pressure of allocating large tracts of land to breeding and feeding livestock, and also conserve forests.

Fourth, in face of the pandemic and the closing of conventional establishments, digital commerce and electronic payments have an opportunity to expand their presence among consumers and firms. Growing participation in digital banking on the part of a significant number of people from the most vulnerable groups during the pandemic, also expands the possibilities of direct trade between producers and final consumers, reducing the need for intermediation. Strategies for encouraging banking participation on the part of lower income groups, will also facilitate access to credit markets for recovery after the pandemic, and to saving mechanisms to soften consumption against shocks. The financial system and the regulators have a major challenge in fulfilling these strategies' potential to aid the most vulnerable.

Chapter 6, by Diana Gutiérrez, Guillermina Martin and Hugo Ñopo, reminds us that the impact and depth of the crisis are different for women and men. Generalized formulas can widen gender gaps and must be avoided. Instead, cross-cutting solutions are necessary in three main areas: homes, work and spaces in between. Responding to the pandemic may be an opportunity to make progress towards equal opportunities for women and men in the medium and long term.

The absence of labor policies that make possible balancing family life with work, not only reduces the number of hours that women can work, but also undermines their productivity per hour worked. It is worth taking advantage of this moment in which people are confined to their homes to make visible, quantify and revalue domestic and care work, usually invisible. An essential first step is to raise awareness of inequalities in the distribution of the burden of care. A massive communicational and educational effort encouraging changes in households' management can be useful. The strengthening of care systems outside the home is also essential as an enabling factor for women in the labor markets. The services of nurseries and early childhood care centers, care for the elderly and care for people with disabilities, are central in redesigning the social organization of care. Centers' working hours must be compatible with the working hours of those who use their services, and increasing their territorial coverage is also necessary.

Adopting and regulating telework, allowing flexible work schedules, adapting workspaces to the specific needs of women and men, and replacing process-oriented work arrangements with result-oriented ones, will contribute to transforming cultural patterns and social norms. Digital skills training will also contribute to the qualification of workers who are forced to stay at home. Challenging traditional gender roles is a task that also concerns the business sector.

Chapter 7, by Sandra García, addresses one of the costlier negative externalities from NIPs: the interruption of primary and secondary education. The health crisis has meant a triple shock for children and adolescents, with the prolonged closure of schools, confinement due to lockdown measures and the loss of economic security in households. This triple shock has both short and long-term repercussions putting the development of an entire generation at risk. Although governments throughout the region have implemented distance learning strategies, intended to maintain a degree of continuity in children's and adolescents' learning and well-being, these solutions have been unevenly implemented and may even further exacerbate pre-existing education gaps. Addressing the educational emergency requires governments to focus on guaranteeing children's and adolescents' learning and well-being.

Priority areas of work include (i) planning for the urgent reopening of schools; developing a strategy to ensure learning for all students in the new context where not all instruction will be in person; (ii) preserving school's protective role and providing services that have been disrupted; and (iii) ensuring the emotional well-being of the educational community (teachers, families and students). Implementing these measures promptly requires the protection of education budgets in the region, promoting cooperation between countries, and coordination between the education sector and other sectors. The crisis could be an opportunity to rethink the current education systems and build ones that close existing inequalities and enable all children and adolescents in the region to reach their full potential. Achieving this, however, requires a long-term vision for managing the current emergency, with investments in rebuilding an education system that ensures access to learning for all students, particularly the most vulnerable.

Chapter 8, by Arachu Castro, discusses the particular challenges posed by COVID-19 to the health of women, children, and adolescents in the region. The pandemic has unexpectedly transformed the access and organization of health services indeterminately, circumventing efforts made in recent years to improve women, children, and adolescent health indicators in Latin America and the Caribbean. In most countries, segmented health services, human resources and medical technology concentration in urban hospitals, primary healthcare and epidemiological surveillance under-financing, and lacking coordination between the different levels of care, have weakened the national response. In this context, maintaining essential health services for women, children, and adolescents presents an unprecedented challenge. Restoring reproductive, maternal, neonatal, and child health services, suspended or limited in many countries during the pandemic, must take place as soon as possible to avoid greater morbidity and mortality.

Increasing public spending on health is an urgent priority towards achieving women, children, and adolescent health equity during and after the pandemic. It is also a priority to strengthen Primary Health Care (PHC) strategies with a family and community approach to achieve universal health access, by allocating at least 30% of health public spending towards them. In addition to helping improve the coverage of services, a quality PHC protects the population from catastrophic health expenditures and solves most health conditions through

health promotion and disease prevention measures, working closely with the population. The strength of PHC systems is associated with better maternal, child, and adolescent health indicators everywhere. Countries with the capacity to respond to challenges posed by the pandemic without suspending health services and nutrition programs, offer a model for those with predominantly curative systems struggling to make their services more flexible, with high potential long-run development costs.

Chapter 9, by Mauricio Cárdenas and Juan José Guzmán, revisits the possibility of a sustainable post-pandemic recovery in Latin America and the Caribbean. At the crux of the pandemic, countries face the need to increase fiscal spending, contain development reversals and not falter in the face of longer-term crises such as climate change. Restoring fiscal sustainability will be essential in order to fund interventions for years, not months. In addition, countries need to emerge better prepared to handle the climate and environmental crisis. To do that, the focus should not be placed exclusively on government expenditures, but also include other policy actions in areas such as public-private partnerships, and the use of financial instruments to de-risk clean investment projects. Elements like extended producer responsibility and polluter-pays principles can help making green investments more sustainable.

Deteriorating credit ratings are likely to restrain middle-income countries' access to financial markets. New structures to access global liquidity such as the issuance of SDG-linked sovereign bonds and the targeted allocation of SDRs with SDG conditionality could better solve the current health, economic and ecological crises. In the long run, these mechanisms can help create a financial and economic system that is more resilient to exogenous shocks in the future.

Chapter 10, by Federico Sturzenegger, addresses the question of debt sustainability and sovereign debt restructurings in LAC. Countries in the region have increasingly used sovereign debt financing in recent years and continued to do so in 2020. After an initial retrenchment at the beginning of the year, debt flows have remained available and debt sustainability does not seem to have been a problem coming into the crisis. It seems neither will be a problem coming out of it. Argentina and Ecuador show that standstills and debt relief are feasible, even in situations of questionable distress. Debt restructuring is feasible even when it is not easy to argue that it provides benefits larger than its costs. In light of the facts, there does not seem to be a need for a major upheaval of financial markets in the form of general preemptive restructurings or outright defaults, less so for a change in international financial architecture.

There is room, however, to highlight lessons about financing during the pandemic and offer insights for policy:

- » Official lending: the scope of official lending has proven limited. While well intended, solutions offered appear difficult to scale up on short notice, and official lenders don't have the muscle to compensate private capital flow swings. For this reason, the discussion must shift towards potential improvements to provide better insurance quickly, encompassing both public and private creditors.
- » Property rights: lockdowns have imposed constraints on labor, but their effect on capital is fuzzier. Labor may enter a standstill forced by regulation while capital obligations, including debt payments, remain undefined. Workers´ lockdowns should somehow correlate with the lockdown of some of their obligations. This is difficult to implement since not all workers are affected in the same way but the issue still merits attention.
- » Standstills: official bilateral debt to poor countries was granted a standstill for the year, providing an initial coordinated signal to financial markets. Yet markets cannot be expected to implement these measures graciously. Setting interest payments aside for pandemic related spending was alternatively proposed, but this did not materialize either. If shocks are large enough, standstills may be improved upon by a transaction including debt relief. Beyond a certain debt threshold, a haircut making debt sustainable is better for all. This leaves relatively little room for standstills as they are dominated by inaction if the shock is not too large, and by restructuring if it is large enough. This does not mean that clauses taking into account this type of measure should not be considered. Pre-arranging for a standstill in the face of catastrophic events could be included in future bond covenants if a neutral organization or objective indicator triggers the clause.
- » Contingent debt: while the idea of debt contingent on risk factors or specific outcomes makes perfect sense, it has not gained traction because (i) contingent payments entail the valuation of an "insurance" premia which markets find difficult to price making contingent debt costly; (ii) some contingent clauses are subject

to moral hazard problems, from policy or data manipulation; and (iii) It provides an improvement only if investors can diversify their risk cheaper than a sovereign can. Mitigation of these problems may come from exogenous triggers to avoid moral hazard issues. However, so far, markets seem to prefer diversifying risks across different financial instruments to bundling risks on a single one.

- » Debt buybacks: this is a form of debt restructuring in which the compensation to creditors is cash. A common critique is that debt buyback would push the price of debt upwards, but the same is true of any restructuring, and yet sizable haircuts have been obtained. The real problem with this approach is the availability of funds for buybacks. The fact that debt restructurings typically issue debt at below market rates, implies that cancelling debt with cash provides no distinctive benefit to the debtor.
- » Debt maturity: up to the late XIX century, sovereign debt was mostly issued in the form of consols –perpetuities that could be repurchased at par at any time—. When the gold standard was abandoned consols were discontinued because shorter maturities acted as commitment mechanisms for better fiscal behavior, preventing government defaults on the principal through higher-than-expected inflation. Inflation adjusted bonds, however, allow to recreate the structure of traditional consols. Perpetuities ensure optimal debt burden allocation across generations, reduce the risk of debt events by avoiding abrupt changes in financing requirements, and reduce debt risk itself and the vulnerability of a withdrawal of funding thanks to the lack of rollovers. They are not used because of their cost. They could, however, lead to optimal debt levels by changing the perception of the cost of debt upwards, and lowering debt use. This would provide stronger positions for debt use at moments of distress.

Chapter 11, by Guillermo Cejudo, Cynthia Michel and Pablo de los Cobos, presents an analytical review of policy responses to the pandemic for COVID-19 in LAC through cash transfer programs (CTPs). Governments throughout the region have predominantly used CTPs to cushion the social and economic effects of the pandemic. These programs have served as a vehicle to reach vulnerable populations. Most LAC countries have used their pre-existing social protection information systems both to register and select the beneficiaries (81% of the programs) and to route the payments (73%). Governments' responses have, to that extent, been limited by the programs' current coverage and the registries' interoperability with other sources of information.

Responses to the pandemic can be distinguished by the ways in which countries innovated with their programs, along with the benefits' coverage and size, as well as by the characteristics of both social registries and single beneficiary registries (existence, coverage, and interoperability). While 64 CTPs were used in the region (in 24 out of 33 countries), 37 of which were emergency bonuses (implemented in 21 countries), more than half of the interventions were directed at a small proportion of the population (directly benefiting less than 10% of it) and consisted of total additional benefits lower than a minimum monthly wage. This suggests three policy priorities for the coming years: to consolidate social protection information systems, to generalize the use of this information for the design, implementation and evaluation of public interventions, and to rethink the role of CTPs as part of social protection systems, understanding that they cannot substitute for them but rather must be understood as a marginal element for social protection.

Over the following months policy documents will continue to be added to the UNDP COVID-19 series, and to the pdf version of this book. The effort to cover as wide a range of policy priorities as possible in the context of the pandemic, providing timely inputs to the ongoing public policy debate in the region, will continue.

3. Overview of country-specific analyses in the second volume

Works in the second volume are also presented chronologically, respecting the order in which they became available. While their reflections on pre-pandemic conditions, and on the channels through which COVID-19 was expected to hit, shaping context-specific crises, are as relevant as ever eight months into the pandemic, policy response analyses refer to the moment in which each of the notes was originally produced.

Country notes are not symmetric. Some are broad in terms of the issues they cover and attempt to give a 360-degree overview of the country's standing vis a vis the pandemic. Others focus on narrower issues critical to country-specific context or in response to priorities identified by UNDP country offices. The richness of content and variety of approaches make it difficult to provide summaries in a standardized manner that properly showcases these works and their messages. Table 1 presents the content and focus of country chapters. We invite interested readers to consult them.

Table 1. Country chapters

Authors	Focus
Daniel Barráez and Ana María Chirinos-Leañez. UNDP Venezuela	Pre-existing macroeconomic crisis and associated challenges to finance additional public spending.
Andrés Ham	Simulations using household-level surveys to assess the impact of alternative cash transfer programs on poverty.
Miguel Jaramillo and Hugo Ñopo	Households' vulnerabilities, through analysis of their main source of income generation: work.
María Laura Alzúa and Paula Gosis	Channels of transmission affecting GDP, labor markets and poverty, highlighting the government's limited room to maneuver, given lack of access to international financial markets and a compromised fiscal situation.
Manuel Mera	Need to redirect fiscal effort towards the most affected, to optimize policy response.
Alfonso Capurro, Germán Deagosto, Federico Ferro, Sebastián Ithurralde and Gabriel Oddone. CPA Ferrere.	Transmission channels and potential adjustments to the government's policy response.
Andrés Alvarez, Diana Carolina León, María Medellín, Andrés Zambrano and Hernando Zuleta	Transmission channels, with emphasis on macroeconomic restrictions and potential adjustments to policy response to protect workers and jobs.
Rodrigo Barraza, Rafael Barrientos, Xenia Díaz, Rafael Pleitez and Víctor Tablas UNDP El Salvador.	Insight on household's vulnerability under COVID-19, based on an analysis of pre-pandemic multidimensional poverty.
UNDP México	Analysis of COVID-19's socio-economic impact in light of pre-pandemic conditions, leading to policy recommendations.
Sócrates Barinas and Mariana Viollaz	Simulation using household survey data offering insight on the government's policy response capacity to contain poverty.
Manuel Mera	Analysis of pre-pandemic socio-economic situation and government's response, to offer policy recommendations.
UNDP Paraguay	Labor markets and vulnerable groups, to encourage a collective reflection on how to move towards a more inclusive growth model.
UNDP Bolivia	How to move forward, in light of the current situation, re-channeling efforts to achieve the Sustainable Development Goals.
	Daniel Barráez and Ana María Chirinos-Leañez. UNDP Venezuela Andrés Ham Miguel Jaramillo and Hugo Ñopo María Laura Alzúa and Paula Gosis Manuel Mera Alfonso Capurro, Germán Deagosto, Federico Ferro, Sebastián Ithurralde and Gabriel Oddone. CPA Ferrere. Andrés Alvarez, Diana Carolina León, María Medellín, Andrés Zambrano and Hernando Zuleta Rodrigo Barraza, Rafael Barrientos, Xenia Díaz, Rafael Pleitez and Víctor Tablas UNDP El Salvador. UNDP México Sócrates Barinas and Mariana Viollaz Manuel Mera UNDP Paraguay

4. Moving forward

This book is coming out at a time when there finally is a light at the end of the long tunnel, due to promising prospects of a vaccine that might put an end to the COVID-19 health crisis in 2021. These are good news that opens opportunities the region should prepare to seize. However, the road will be bumpy. The recovery will require, first, additional fiscal efforts to ensure availability of the vaccine and a vaccination strategy carefully designed to start saving lives and facilitate the restart of economic activity as soon as possible. Universal access to the vaccine will take time. Governments everywhere must understand, however, that only universal access to vaccination will pave a road towards a speedy recovery. The effort to sustain livelihoods and support employment generation must also be maintained until economies are back on track. These chapters provide ideas for action. At UNDP we will continue to support the region in its effort to build a better normal and go beyond recovery, sustaining productive, inclusive and resilient societies.

A Conceptual Framework for Analyzing the Economic Impact of COVID-19 and its Policy Implications

By Constantino Hevia and Andy Neumeyer Universidad Torcuato Di Tella

Abstract

The persistence of universal non pharmaceutical interventions (NPIs), like social distancing that significantly reduce the labor supply and prevent a large sector of the economy from having any activity at all (travel, entertainment and some retail), have significant output costs. They could lead to an output decline that exceeds that of the great depression. All those who temporarily lost their income have to finance their fixed costs (e.g. consumption for households, wages for firms). This creates an unprecedented need for liquidity. If universal NPIs persist, it is likely that many firms will go bankrupt and unemployment will soar. The best policy option is to adopt more efficient NPIs that target only infectious individuals and protect those most likely to strain hospital capacity. A global multilateral cooperative approach to contain the epidemic will achieve better outcomes faster.

1. Introduction

This note offers a conceptual framework for analyzing the economic impact of the coronavirus disease (COVID-19) and considers some policy implications. It is a general note, limited in scope, covering fundamentals that are likely to affect a typical developing economy.

The coronavirus disease 2019 is produced by a new virus for which currently there is no pharmaceutical treatment. The dynamics of the disease are such that, in the absence of non-pharmaceutical interventions (NPIs), it overwhelms the capacity of national health care systems. Hence, governments chose to enact NPIs to contain the spread of the COVID-19 pandemic.

We first describe the fundamental problems that emerging economies currently face. We consider the direct and indirect economic costs of NPIs. We argue that the direct cost of NPIs could be significant: over 20% of GDP over the period in which NPIs are in place. If NPIs persist in time, these direct costs are exacerbated by indirect costs: many households and firms have to continue to pay fixed costs while their incomes fall. This transitory fall in income, coupled with the uncertainty about how long the income shock will last, will lead to a significant increase in the demand for liquidity. We are already seeing sizable portfolio shifts in US asset markets. The financial stress caused by the persistent mismatch between income and expenses will likely result in an increase in unemployment, tax deferments, and debt restructurings.

For emerging economies, NPIs to contain the spread of COVID-19 are being introduced at the same time that commodity prices are falling (25% so far) and sovereign credit spreads are increasing. Emerging economies running current account deficits are likely to experience a sudden stop in capital flows. These shocks are known to cause severe recessions in emerging economies.

The policy implications are that current NPIs are economically unsustainable. Investment in more efficient ways of identifying individuals requiring isolation is imperative. As this is a common concern for the whole world, the quest for more efficient and targeted NPIs should be a global multilateral cooperative endeavor.

We conclude with comments on the economic policy implications of the current situation. We emphasize the conflict between the fiscal stress faced by public finances in emerging economies and the need for immediate palliative economic policies. Governments face a loss of revenue, an increase in the demand for public expenditure, and tightened global financial conditions. The persistence of NPIs is a financial time bomb for the private sector as well as for sovereigns.

In considering the policy responses to the challenge posed by this global constellation of shocks, we encourage governments to assess how much expenditure they can afford in emergency spending bills and to include in them a future fiscal adjustment for the time when the epidemic is over. This budgeting includes as possible sources of funds loans from official multilateral lending institutions and from the monetary authority. Countries with a large current debt service burden may consider sovereign debt restructurings. The domestic policies we consider are expanded loan programs to firms and households in the formal sector and transfers to agents in the informal sector.

This is the first of a set of notes to be released by UNDP. Neither country specific policies nor the distributive impact of COVID-19 are considered.

2. The fundamental economic problems faced by emerging economies

The coronavirus disease 2019 is produced by a new virus for which currently there is no pharmaceutical treatment. The dynamics of the disease are such that, in the absence of non-pharmaceutical interventions (NPIs), it overwhelms the capacity of national health care systems. Hence, governments choose to enact NPIs

to contain the spread of the COVID-19 pandemic. Even though there is a lot of uncertainty about the parameters of the mathematical models that describe the epidemiological dynamics of COVID-19, a recent study indicates that these policies may be necessary for a period of at least several months.¹ South Korea and China have contained the epidemic and are relaxing NPIs. These cases are encouraging but the jury is still out on whether there can be a second epidemic outbreak in those countries after social distancing policies are relaxed.²

The NPIs designed to contain the COVID-19 pandemic, like restrictions on the movement of people and social distancing measures, are expected to have a large impact on economic activity all over the world. This global shock has general equilibrium effects on prices that are known to have a large impact on business cycles in emerging economies.

Emerging economies are affected by COVID-19 through three main channels.

- 1. Direct effect of NPIs on economic activity due to:
 - a. restrictions on the output of many industries such as travel and entertainment,
- b. restrictions on social contact force some people to work from home or to not work at all, also lowering output.
- 2.Terms of trade: many commodity exporting countries are experiencing a sharp fall in the prices of the commodities they export, affecting a sizable fraction of GDP and government revenues.
- 3.Global financial shock. There is a global liquidity shock that entails massive portfolio shifts from riskier assets to safer liquid assets. For emerging economies, this implies capital outflows, an increase in their costs of funding, and a drop in the value of their currencies.

2.1. Direct impact of NPIs

It is too early to accurately estimate how much the direct cost of NPIs will be. We can only speculate. Preliminary data and back-of-the-envelope calculations indicate that they could be substantial.

In China, the drop in industrial production between December 2019 and February 2020 was close to 25%. (tradingeconomics.com/china/industrial-production) Investment in fixed assets, a gauge of construction activity, slid 24.5% during the same period, reversing growth of 5.4% in 2019. Retail sales tumbled 20.5% in the first two months of the year –typically a boom season for consumption– compared with growth of 8.0% in December 2019. (www.marketwatch.com/story/chinas-industrial-output-retail-sales-plummet-2020-03-15)

As of March 20, 20202, in the US, JP Morgan expects a cumulative fall of output in 2020:Q1 and Q2 of 4.5% with a sharp recovery in Q3 and Q4 with an annual year-on-year fall of 1.4%. Goldman Sachs forecasts quarter-on-quarter growth rates of -1.5% in Q1, -6% in Q2, +3% in Q3, and +2.5% in Q4, leaving full-year growth at -3.8% on an annual average basis and -3.1% on a Q4/Q4 basis. JP Morgan assumes that the consumer services with inadequate social distance represent 7% of GDP and will be 63% of normal in March, 25% in April, 63% in May and are back to normal in June.

We are afraid that these forecasts have worrisome downside risks. Several back-of-the-envelope calculations lead to this conclusion. (a) Italy, Spain, Argentina, New York, Illinois and California have been fully locked down for (so far) two weeks. A very optimistic scenario is that economic activity is down to 50% of normal for two weeks and then it immediately rebounds. This would imply a quarter-on-quarter fall of 8.3% in the quarter with

¹ Neil M Ferguson et. al., Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand, Imperial College, March 16, 2020.

² Epidemiological models predict that if a large fraction of the population is susceptible to a disease and the reproductive number is larger than one and outbreak will occur. This is what happened in December in Wuhan with covid-19. If contact rates between infectious and susceptible individuals go back to a level close to the one before the NPIs the epidemic is likely to spread again. See G. Bastin, Lectures on mathematical modeling of biological systems, Université Catholique de Louvain, August 2018 for the conditions for an epidemiological outbreak.

a lockdown with respect to a normal quarter.³ If the lockdown is for three weeks instead of two, the quarter-on-quarter fall rises to 12.5%. (b) Assume that, on average, in a period of social distancing 40% of the economy works at 50% of normal. The implied drop in aggregate output is 20%. Table 1 shows how different combinations of the weight of sectors affected by NPIs and their output drops affect aggregate GDP. A more precise estimation of the impact of COVID-19 on GDP would be to estimate its direct effect on each particular sector and then to use input-output matrices to trace the response to the shocks on other sectors in the economy. (c) With a labor share in output of about $\frac{2}{3}$, if effective labor hours worked fall by 30%, output will fall about 20%. These numbers are daunting. Extended periods of wide social distancing measures could be extremely costly.

Table 1. Hypothetical percentage change in GDP

	Share of output affected by NPIs (%)									
		10%	20%	30%	40%	50%	60%	70%	80%	90%
ted sector	10%	-1%	-2%	-3%	-4%	-5%	-6%	-7%	-8%	-9%
	20%	-2%	-4%	-6%	-8%	-10%	-12%	-14%	-16%	-18%
Output drop in affected	30%	-3%	-6%	-9%	-12%	-15%	-18%	-21%	-24%	-27%
in aff	40%	-4%	-8%	-12%	-16%	-20%	-24%	-28%	-32%	-36%
drop	50%	-5%	-10%	-15%	-20%	-25%	-30%	-35%	-40%	-45%
tbut	60%	-6%	-12%	-18%	-24%	-30%	-36%	-42%	-48%	-54%
O	70%	-7%	-14%	-21%	-28%	-35%	-42%	-49%	-56%	-63%
	80%	-8%	-16%	-24%	-32%	-40%	-48%	-56%	-64%	-72%
	90%	-9%	-18%	-27%	-36%	-45%	-54%	-63%	-72%	-81%

This table shows the percentage change in GDP as a function of the share of the affected sector in GDP and of the size of the collapse in those sectors.

2.2. Indirect impact of NPIs

The direct impact of NPIs in the previous section does not take into account possible second round effects of this shock. There will likely be a series of hard-to-quantify indirect effects further decreasing economic activity.

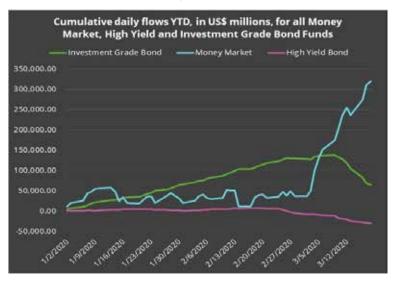
In a social distancing environment, many firms experience negative value added as the cost of inputs exceeds gross production. Firms are unable to sell their goods and services but they still have to pay the wage-bill, service their debts, pay rents and taxes. Extended periods of NPIs will have several further deleterious effects on the economy.

- » Many firms go out of business. This is especially true of firms in intensive social contact industries (travel and entertainment) and in small and medium enterprises (SMEs) with little working capital and limited credit lines. Restarting these businesses may be a long and costly process.
- » Firms depleting their capital will layoff workers. We know from previous recessions that after spikes in unemployment, matching workers and vacancies in the recovery is a slow process.
- » Layoffs reduce aggregate demand.
- » Households and firms facing increased uncertainty save more in the safest assets and ditch risky ones.

³ Economic activity is normal for five weeks and at 50% of normal for one week.

Figure 1 shows how, in the US, private agents are pulling money out of credit markets into money market mutual funds that are de facto backstopped by the Fed. We expect a similar type of increase in the demand for most liquid assets in Latin America.

Figure 1. Sudden increase in the demand for liquidity (U.S.)



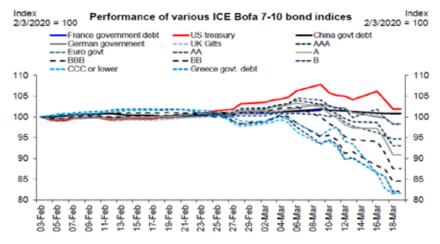
Source: Sunny Oh, Investors pull record \$108 billion out of bond funds this week, Market Watch, March 20, 2020 at 11:33 a.m.

- » The large portfolio shifts towards liquid assets and the uncertain fall in the value of firms will also have an important impact on credit markets:
 - » Exposure to firms that go out of business reduces bank capital.

Banks typically lend to riskier firms that cannot raise funds in capital markets. Figure 2 shows the widening credit spreads for different credit ratings.

» The high demand for cash may dry up short term credit markets. In the US, the commercial paper market lost liquidity. The Federal Reserve is the only buyer.

Figure 2. Evolution of credit spreads among different credit ratings



Source: Torsten Slok, COVID-19 and global financial markets, webinar, Bendheim Center for Fianance, Princeton University, March 19, 2020

- » Restrictions on economic activity and the limits on the movement of people reshape supply chains and production networks with a loss of efficiency.
- » New forms of working (telecommuting) may also reduce efficiency.

In the context of emerging economies two other shocks need to be considered.

2.3. Commodity prices

Commodity prices tend to drive the business cycles in emerging economies (Schmitt-Grohe and Uribe, 2018).⁴ Figure 3 shows an index of commodity prices (oil, soybean, copper, coffee, etc). The fall in commodity prices between January and February has been around 25%.⁵

Figure 3. Index of commodity prices



Source: Bloomberg's index (BCOM) of commodity prices.

For commodity exporters, this shock alone would typically be followed by a sharp currency depreciation and a recession. For countries where commodity exports are an important source of government revenue like, for example, Argentina, Bolivia, Chile, Colombia, Ecuador, and Mexico, this shock to the terms of trade will also strain public finances.

Commodity importers in Latin America and in the Caribbean will benefit from this shock.

2.4. Tightening global credit conditions for emerging economies

The literature on business cycles in emerging economies has documented that economic activity reacts strongly to global credit conditions.6 Worsening foreign financial conditions are associated with deep recessions. Figure 4 shows that yield spreads between Latin American sovereign bonds and U.S. treasuries have roughly doubled

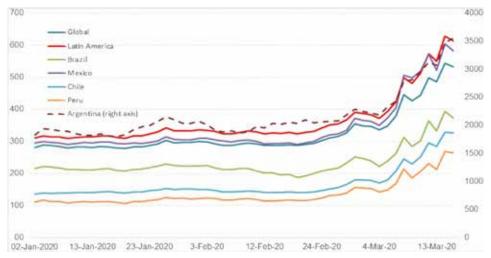
⁴ Schmitt-Grohé, S. and M. Uribe, (2018), "How important are terms of trade shocks?" International Economic Review, 59, 85-111.

⁵ In the energy sector, the fall in the price of oil may not be a direct consequence of COVID-19. Nevertheless, it is a shock that is hitting the economy simultaneously with the epidemic so we consider it here.

⁶ Pablo A Neumeyer and Fabrizio Perri, Business cycles in emerging economies: the role of interest rates, Journal of Monetary Economics, 52 (2), 345-380, 2005. Guillermo Calvo & Alejandro Izquierdo & Luis-Fernando Mejía, 2004. "On the empirics of Sudden Stops: the relevance of balance-sheet effects," Proceedings, Federal Reserve Bank of San Francisco, issue Jun.

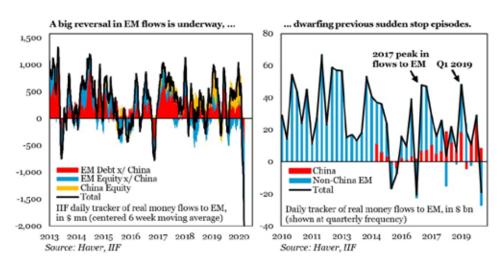
from the beginning of January until today for the best risks in the region. Figure 5 shows data on real money flows to emerging markets (from the Institute for International Finance) that already shows a large sudden stop in capital flows. Countries running a current account deficit will be forced to reduce aggregate demand. Typically, this entails a fall in output accompanied by a fall in consumption slightly larger than the fall in output and a fall in investment that is three times the percentage fall in output. This shows in the trade balance as a fall in imports.

Figure 4. EMBI spreads



Source: Bloomberg.

Figure 5. Sudden stop in capital flows



Source: Robin Brooks and Jonathan Fortum, GMV: The COVID-19 Sudden Stop. IIF working paper, March 12, 2020.

The adjustment in aggregate demand will have to be much larger for commodity exporters running a current account deficit. Especially so, if one considers that this adjustment is over and above the fall in output due to the NPIs.

2.5. Existing leverage poses additional risk

After a decade of near zero interest rates corporations and sovereigns are loaded with debt. If NPIs persist and these institutions cannot service or rollover their debt, a global financial crisis akin or worse than the one in 2008–9 could happen.

Figure 6 depicts the increase in nonfinancial corporate debt in the United States. If there is a persistent recession, B rated debt will likely be downgraded. Short term corporate debt (31% of total debt) stands at about 10% of GDP. Household debt service in the United States is on the order of 10% of personal disposable income. The service of these debts might not be rolled over.

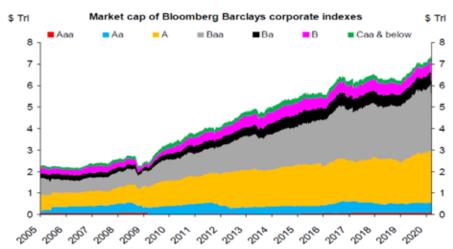


Figure 6. Corporate debt

Source: Torsten Slok, COVID-19 and global financial markets, webinar, Bendheim Center for Fianance, Princeton University, March 19, 2020

Overleveraged sovereigns hit by the fiscal consequences of the recession and the commodity price drop in a world with tight financial conditions might be tempted to restructure their debts. The anticipation of these decisions might turn into a self-fulfilling prophecy. In this context it would be of interest to assess global public sector borrowing requirements against the IMF's firepower.⁷

2.6. Which type of recession: V, U, L or W?

There is a debate on the shape that the COVID-19 recession will take. Making any sort of prediction is a bold endeavor as there is a lot of uncertainty about the length of the NPIs in place and about the possibility that they would be reinstated months after being relaxed.

In the case of very short lived NPIs that do not scar the economic fabric we expect a short deep V shaped recession. This is the forecast of mainstream banks (Goldman Sachs, Morgan Stanley, JP Morgan-Chase, Citi).

There is a considerable risk that NPIs in some form or another will last longer and have more persistent effects. It takes time for unemployed workers to find jobs and for firms to rebuild their working capital.

If the NPIs persist long enough to seriously damage balance sheets of financial and nonfinancial agents the recession will probably look like a staircase.

⁷ Argentina's public sector borrowing requirements in 2018 were 14% of the IMFs \$1 trillion lending capacity. This is indicative that the IMF is probably underfunded in current circumstances.

Cycles of on-and-off NPIs could generate W shaped patterns.

3. Policy implications

The NPIs that are currently implemented in many countries have large economic costs. This section analyses different policy responses for governments in emerging economies markets.

3.1. More efficient NPIs

Societies are adopting extreme NPIs to contain the spread of COVID-19 because epidemiological models predict that health care systems, designed for normal times, cannot handle the extra burden posed by acute COVID-19 patients.

These epidemiological models predict that the daily rate of growth of the number of infection cases is proportional to the number R_0 s-1, where R_0 is the basic reproduction number (also called basic reproduction ratio) and s is the proportion of the population that is susceptible (not immune) to the disease. The ratio R_0 is the expected number of new infections from a single infected individual when all the population is susceptible. The product R_0 s is the expected number of new infections from a single individual when the fraction s of the population is susceptible. It can be interpreted as the ratio between the expected recovery time of an infectious individual and the expected time between new cases. When the recovery time exceeds the time between new cases the epidemic grows. As we do not know the actual number of infectious cases, only those tested, estimates of R_0 and of s are very imprecise. Also, R_0 is not a biological constant: it is the outcome of a complex social equilibrium determined by the frequency with which infectious people make contact with other people for a time period long enough to transmit the virus. R_0 depends on policies and social norms and it can vary across countries, regions, and across time within a region. NPIs, such as the stay at home policies in Italy, Spain, Argentina, California, Illinois and New York are extreme measures to reduce contact rates among people and thus the basic reproductive number, R_0 .

- » The best policy intervention to contain COVID-19 is to develop the technology to reduce the contact rate between infectious and susceptible individuals, while restricting society-wide human interaction as little as possible. Given the enormous costs of universal lockdowns, the rate of return on investments to enable targeted policies of isolation is huge. Targeted NPIs would only isolate a subset of individuals (for example, infectious individuals, persons that are likely to be infectious, and the more vulnerable susceptible).
- » Two actions in this direction are aggressive testing to detect infectious and immune individuals.⁸ This knowledge will allow immune individuals to circulate freely and work. Aggressive testing also helps to detect infectious individuals early and trace their contacts. Hong Kong, Iceland, Japan, Singapore and South Korea implemented targeted isolation policies.
- » Aggressive testing could also enable policy makers to evaluate (in real-time) the effectiveness of different social distancing interventions (closing schools, shopping malls, sports events, etc.). Even though universal NPIs are extremely costly, there is no impact evaluation of different interventions.
- » Assembling a team of statisticians and epidemiologists to design testing strategies and nowcast the basic reproductive number across geographical and social clusters could help governments to allocate medical resources and social intervention policies more efficiently. This data will help to design evidence based NPIs.
- » A plausible targeted NPI strategy could be
 - » Test a representative sample of the population recording their socioeconomic and demographic characteristics.

⁸ Singapore First to Test Out COVID-19 Serological Assay in Outbreak Contact Tracing

- » Use statistical methods to infer whether particular characteristics predict infection in the entire population
- » Develop targeted NPIs and surveillance strategies based on the previous information
- » Increasing the capacity of the healthcare system allows society to achieve herd immunity faster.

An important epidemiological variable to consider is the speed with which herd immunity will be attained. Herd immunity is attained when a large enough fraction of the population is immune (not susceptible) so that contact between infectious and susceptible individuals is less likely. When the share of the susceptible population is lower than the threshold 1/RO, the number of infectious individuals naturally disappears.

If universal NPIs are lifted without the ability of targeting NPIs there is a risk that there will be a new epidemic outbreak and new universal NPIs will be necessary. Epidemiological models (such as the SIR model) predict that, if social distancing measures are relaxed while the share of the immune population is relatively small and medical treatment unavailable, the epidemic may rekindle. The cases of Hubei Province and South Korea, that are currently relaxing social distancing measures, will shed more light on this risk.

- » NPIs should also aim to limit the movement of people but, at the same time, protect the production and movement of intermediate goods so as to avoid disrupting the supply chain as much as possible.
- » Finally, given the global nature of the pandemic a cooperative multilateral solution is desirable.
 - » Coordinated efforts to develop pharmaceutical solutions to the containment of the epidemic could allocate resources more efficiently and produce results faster.
 - » Coordinated approaches to NPIs can allow many countries to leapfrog to best practices. A multilateral approach could also establish global protocols for the international movement of people.
 - » A partnership between UNDP, WHO, non-governmental organizations and the international financial institutions to help developing countries assemble a team of statisticians and epidemiologists to track the epidemic locally will be of great value. It will also facilitate the implementation of commonly agreed international travel restrictions.

3.2. Palliative care policies for the economy

Policy makers in Latin America have vast experience in managing financial and commodity price shocks.

» The textbook response to financial and commodity price shocks is to let the currency depreciate and adjust budget imbalances.

However, they have little experience or guiding academic research addressing supply shocks of this magnitude. As the supply shock is a consequence of social distancing measures put in place to contain the disease, the first policy response should be to use the time awarded by these economically costly measures to develop more efficient ways of minimizing contact between infected and susceptible individuals as indicated in the previous section.

The economic cost of universal NPIs depends on how long they are in place. The longer the universal NPIs are in place, the higher the second-round effects of these interventions will be. As mentioned before, NPIs create a liquidity squeeze: firms and individuals have to finance their fixed costs while they receive little or no income. Firms have to pay their wage bills, service their debts, and pay taxes. Households need to consume food and other basic goods and services. Those agents with liquid assets or access to credit could finance this mismatch between incomes and expenditures while their assets and good credit standing lasts. This liquidity shock induces savers to cash their assets and "de-risk". In addition, the fact that the duration of the universal

⁹ See, footnote 2.

NPIs is uncertain induces agents to increase their precautionary liquid savings. Social networks report that this precautionary savings includes hoarding toilet paper.

Governments at the national and subnational level face a similar problem to private agents as they need to finance their fixed costs with lower fiscal revenues due to the drop in economic activity and the fall in commodity prices. Moreover, social demands for additional government expenditures during the downturn will mount. In emerging economies, the global flight to quality in global financial markets will make it more difficult for governments to place debt. Countries with limited or no fiscal space will face difficult choices and will need assistance from the international community.

Policies in Latin America will have to take into account the fact that 53% of the labor force is employed in firms with less than five workers and that most of national income is accounted for by the employees in larger establishments. (See Table 2, from Matías Busso, Mariano Spector and Andrés Neumeyer, Skills, Informality and the Size Distribution of Firms, 2012). As SMEs by and large live hand-to-mouth and have limited access to financial institutions, providing SMEs and their employees with resources for their financial needs is an important logistical challenge.

» A clear communication policy on the expected duration of the universal NPIs and of the policies to be enacted after the lockdown would reduce uncertainty and ameliorate the liquidity squeeze.

Table 2. Size distribution of firms

	Entrepreneurs			Employees	
LAC					
Firm Size (employees)	0	1-5	6-	1-5	6-
Education	7,8	8,4	11,6	7,8	11,2
Relative Country Income	44%	71%	175%	56%	121%
Income (PPP)	100	141	428	117	273
Share Employment	22%	11%	1%	20%	46%
OECD					
Firm Size (employees)	0	1-10	11-	1-10	11-
Education	12,6	12.9	14,1	12,5	13,6
Numeracy	499	506	549	495	523
Literacy	501	502	535	504	528
Relative Regional Income	34%	84%	115%	55%	75%
Income (PPP)	100	197	381	141	157
Share Employment	9%	5%	1%	20%	65%

Source: PIAAC, IDB Harmonized Household Survey

3.2.1. Monetary and fiscal aspects of financial policy

NPIs increase the demand for liquidity and only the monetary authority can expand available liquid assets. Central banks are in a unique position to provide liquidity without worrying about inflation because of the large increase in the demand for money (liquidity). This provision of liquidity can be implemented by buying either treasury bonds or liabilities of the private sector.

Providing liquidity to stressed formal firms so that they keep paying workers is very important. Financing firms that lose income is a way to provide liquidity to its employees that otherwise would be unemployed. This liquidity will also trickle to SMEs that sell to them to the extent that they can spend the money.

Governments can encourage financial institutions to increase their balance sheet with the objective of providing liquidity to those that need it. On the assets side of the balance sheet, financial institutions could:

- » increase credit lines for households and firms,
- » automatically postpone debt service and
- » increase their liquid assets to service the demands of their customers.
- » In order to expand the liability side of financial institutions' balance sheet
- » the central bank can extend credit directly to financial institutions or indirectly through the treasury
 - » Official financial assistance to corporations might be contingent on the corporate's income drop and on not firing workers.
 - » Banks may need regulatory forbearance to expand their balance sheet without having to raise additional capital (risking a future banking crisis?).

Observe that, in this context, the persistence of NPIs is a financial time bomb.

- » Another mechanism for providing liquidity is for the government to allow firms to defer corporate and labor income taxes for future payments. The tax authority could even lend money to corporations in need. At a future date, when NPIs are removed, the government can securitize and sell claims to these future cash flows to other investors. As obligations to the tax authority are senior to unsecured debt in the event of a bankruptcy, the securitization of future tax payments is a mechanism for those firms to issue senior debt to alleviate their liquidity problems.
 - » This form of intervention has built-in future fiscal adjustment without the need to pass politically difficult legislation in the future to raise taxes or lower expenditures.
 - » International coordination to develop this type of financial instrument with boilerplate contracts can help to make the market for these instruments more liquid and appealing to international investors.

3.2.2. Fiscal policy

The prime directive of fiscal policy is to realize that the persistence of NPIs compounded by the shock to commodity prices and financial conditions requires a long-term fiscal adjustment. At the same time, immediate palliative economic measures to reduce the social pain inflicted by the NPIs require an increase in the fiscal deficit.

In this context, there is a role for multinational development banks (World Bank, IDB, CAF) to provide special financing to fiscally distressed governments. One possibility to finance these massive programs is for these institutions to sell bonds/preferred stocks to central banks engaged in quantitative easing.

When planning the scale of their programs and policy interventions, countries might want to consider the following issues:

- » Include long term fiscal adjustment measures in legislative proposals to increase current government spending.
- » Estimate how much debt governments can issue to private lenders domestically and abroad.

- » Estimate how much governments can borrow from multilateral development banks and the IMF assuming the Rapid Finance Instrument (100% of quota) and a 250% of quota stand-by agreement.
- » Determine how much inflation governments are willing to tolerate to finance these programs through money creation.
- » Reduce temporarily non-critical government programs.
- » If servicing the public debt requires net payments, consider the benefits of restructuring it.

Newly unemployed, self-employed workers in the informal sector, and independent workers will need assistance. Governments should find mechanisms to efficiently and rapidly target monetary transfers to those that are most likely to suffer from the negative income shock. These transfers may be given on top of any formal or informal credit arrangements that those households may get from the government or the financial system. The particular way in which this liquidity should be provided will depend on the institutional capacity of each government.

- » Are existing government programs (e.g. cash transfers) rapidly scalable? Can they be targeted to the individuals most impacted by the economic effects of the NPIs introduced to contain COVID-19?
- » To the extent that it is possible, target financial assistance in the form of loans, not transfers.

The challenge that governments are likely to face is that those who actually need income support may not be those targeted by the current social programs put in place.

A second-best alternative could be to provide universal transfers to all households in the informal sector and/ or independent workers. However, this might be very expensive; let's say the minimum wage times half of the labor force.

Suggestions for the Emergency

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Abstract

Latin America and the Caribbean's health and economic emergency demands an immediate shift in economic policy to minimize the human costs of the pandemia, mitigate the social costs, and preserve macroeconomic stability. Mitigation measures should be focused on workers, with available instruments like conditional cash transfer programs, and tax and other registries. Sustaining formal employment is a priority; layoffs and firm closings need to be avoided subsidizing firms' labor costs and giving them preferential access to credit guarantees conditional upon not firing workers. Mitigation measures need a mix of expenditure switching and augmenting, based on individual country circumstances. Fiscal revenues will fall, and a worsening of fiscal balances is inevitable. To resume growth after the health crisis, it is indispensable to avoid a financial crisis and maintain access to external credit. Debt sustainability will require tax increases once the crisis is over, which in some cases should be preannounced. If the recession Is very deep and extends beyond the sanitary emergency, mitigation measures need to be extended. This needs to be preannounced to reduce uncertainty to banks and firms and facilitate the flow of credit. Overcoming the crisis requires a transition in the strategy to contain the virus, from generalized to localized confinements, accompanied by more tests and other measures that allow renewal of contacts between people.

1. Introduction¹

Over the last few weeks the global economic context changed drastically and for the worse. Every country in the world is suffering the repercussion of coronavirus. There will be a global recession, deeper than the one experienced in 2008-2009. Latin America and the Caribbean (hereon, LAC) will not be able to isolate itself from this situation. With variations from country to country, the region will suffer a severe recession of uncertain length.

This document offers some proposals to tackle this situation. These are general ideas that must be tailored to each country's particular conditions, and then quantified. The timeframes and parameters used here are only illustrative and must be adjusted based on experience. A lot depends on the orders of magnitude. It is urgent to make estimates, even if imperfect, and to act very quickly. It is equally urgent to update our understandings of what is and is not feasible. Measures that a few weeks ago would have been considered "unthinkable," or "politically impossible," will probably prove insufficient in a couple of weeks. Unprecedented times require unprecedented responses.

2. This crisis is different

It is useful to compare this crisis to the 2008-2009 one. Both are external crises that impact LAC through the market for goods: fall in commodity prices, lower exports, a decrease in tourism and potentially also remittances; and through financial markets: capital outflows from the "flight to quality", and currency depreciations.

But there are three additional elements in this case:

- » the external demand shock will be reinforced by internal effects, as the pandemic's progress across countries demands closure of offices, restaurants, hotels, theaters and, in general, of economic activity where people congregate. This will make the shock a very strong one, affecting practically everyone (with the possible exception of economic activity in rural areas);
- » in some countries, primarily those with manufacturing activity integrated in the world market, the shock will be more complex due to interruptions in value chains. Supply contractions will compound the demand fall, with factories closing due to lack of intermediate inputs; and,
- » in other countries, less integrated to manufacturing chains and more dependent on final goods imports, the reductions in global production and lower trade flows may cause substantial supply problems.

Conceptually it is useful to separate the crisis in two stages. The first, while the pandemic lasts, characterized by social distancing; the second, once the virus is under control, with gradual recommencing of social interactions. At the beginning of the first stage, which started a few days ago, economic activity drops because individuals cannot go out shopping, not because of lack of income, and because workers are impeded to go to their workplaces, not because firms lack sales. Nonetheless, this situation will soon evolve: as lack of economic activity reduces firms' sales, layoffs will start and workers' incomes will drop; the income of the self-employed will also drop, even if they keep on carrying out their regular activities (assuming sanitary restrictions allow). Towards the end of the first stage, what started as a crisis due to the need to isolate individuals, will evolve into a "traditional" economic crisis, in the sense that economic activity will be depressed because of lack of demand and income, not because people cannot be together.

¹ Document prepared for the UNDP. I thank Marcela Meléndez and Luis Felipe López-Calva for very useful comments. The views expressed here are the author's and not necessarily reflect those of UNDP.

Not enough is known about COVID-19. Particularly, little is known about how long the factors behind the pandemic will persist, including the possibility of mutations or reappearances.² This implies that no one knows when the first stage will end, that is, when workers will be able to slowly return to their jobs, and people go out of their homes and shop. That said, one can imagine that the first stage will last two or three months (although evidently this judgement must be evaluated in the face of experience). It is equally hard to predict how long the second stage will last, because a lot will depend on the measures taken during the first. If these are adequate, the second stage may be short, say five or six months; if not, it can last much longer. That said, it will also depend on global measures, in particular on how quickly the United States and Europe recover, and growth resumes in China.

This division of the crisis in two stages suggests that towards the end of the second stage, say November, we will return to normality. Hopefully. But what happens in the next few months will redefine normality. It is natural to think that by year's end we will be where we were at the beginning. But the world will be different in many dimensions: tourism flows, production chains, conditions in financial markets, etc. What started as a transitory shock may in some dimensions become permanent. For example, if there are long-lasting changes in the activities of tourism cruises, the Caribbean and similar destinations will be affected; if multinational businesses decide to shift their production chains, the manufacturing sectors in some countries will be affected. These aspects are not discussed in this document, and normality near the end of 2020 is assumed to be not too different from what it was at the start.

Immediate adjustments to economic policy are required

In the context of a more severe and complex crisis than the 2008–2009 one, it is essential to have clarity about the objectives that economic policy should pursue, and the instruments that can be deployed to reach them. The proposal here is that economic policy be immediately restructured around three objectives:

Objective 1: minimize the human cost of the pandemic;

Objective 2: minimize the regressive effects of the crisis, with measures to protect workers' incomes, especially low-income ones; and,

Objective 3: preserve macroeconomic stability and the capacity to resume growth once the economic crisis resulting from the pandemic concludes.

It is always difficult for governments to rapidly readjust their plans, especially when this implies a radical shift. Every government has legitimate objectives associated with infrastructure projects, education, rural and regional development programs, and the like. I do not propose to abandon those objectives, but to postpone them, explicitly recognizing that, due to the drastic change in global context, this is the best way –in some countries the only way– to reach them further down the line. The quicker this is recognized and, in parallel, credibly communicated to the markets, the lesser the economic costs will be resulting from the perception of confusion and lack of understanding of the gravity of the situation. (Part of the extreme volatility experienced by financial markets in the United States over the last few days derives from the perception that the US government does not have –or at least did not have until very recently– a clear understanding of the size and nature of the challenge it faced, and had not articulated a coherent response).

² Events in Hubei province and the City of Wuhan in China in the next few weeks, as economic activity resumes, will be important to judge if one quarantine proves enough to control the virus, or if reappearance force a second quarantine or a change in the containment strategy.

4. Objective 1: minimize the loss of life from the pandemic

This objective is conceptually the simplest, but operationally the most complex one, at least during the first stage of the crisis. To reach it, public health systems must have all the budgetary resources necessary to face the pandemic. The constraint here must be operational capacity. It is impossible to make quantitative estimates given the uncertainty of the virus' evolution, but all the required budgetary allocations and administrative facilities must be made to allow resources to flow exceptionally quickly.

Health systems are already taking emergency actions, as this is as it should be. Nonetheless, it is necessary to in parallel revise the containment strategy, given the immense cost of indiscriminately suspending economic activity for a long period of time. Many countries are innovating to design more targeted isolation strategies, based on the early identification of contagion points, increased testing to detect who is a carrier and who is not, and on novel mechanisms to identify who should and should not be isolated.

A prolonged generalized isolation, of over two months, would lead to a very deep recession, or practically to an economic collapse, which would in turn reduce the resources at the disposal of health systems. In other words, while initially no expenses should be spared to tackle the pandemic with the generalized isolation strategy already laid out, new more effective and less costly modalities to respond to the virus should be designed parallel. The experience of South Korea and Singapore are very valuable in this context.

5. Objective 2: Protect workers' incomes

The fall in internal demand in the next few months will be unprecedentedly strong, at least in some countries. In that context, the first priority must be to help those directly affected, which in this case are workers. Measures must focus on those between 25 and 65 years of age, who were in the labor market before the crisis, and who are at risk of losing their income.³

At times, counter cyclical expansions of public expenditures are confused with the measures used to mitigate the social costs of a recession. They are undoubtedly related, but conceptually they must be separated. Where possible, and considering each country's macroeconomic context, mitigating measures must be financed through a counter cyclical expansion of expenditure, which should also help dampen the recessive effects of the crisis. However, there may be cases where a country's context makes it impossible to increase expenditures; in those cases, expenditures must instead be redirected. The point is that one way or another, public expenditures must be channeled to mitigate social costs. Section VI discusses this issue in more detail.

Mitigating measure must consider the specifics of this crisis. What is needed in this case is to aid workers at risk of losing their incomes, because they will soon be laid-off from the companies they work for; because they will not be able to attend their jobs; or because if they are self-employed or manage a micro-firm, they will not be able to carry out their regular activities, because sanitary restrictions do not allow it, or because they have very few clients (as these cannot leave their homes). The epicenter of the crisis is the labor market, and that is where efforts must be centered.

Expanding many of the existing social programs may not be the adequate response to this crisis. Some may be adapted, as proposed below for conditional cash transfers programs (hereon, CCT). However, others, while they should be maintained, must not be expanded as part of the response to the crisis. For example, many

³ All workers risk infection, but not all risk losing their income; in particular, public workers, and to a lesser extent, rural workers.

⁴ In extreme cases where the is not possibility of external financing and redirecting expenditures isn't enough, a tax increase will be required. In these cases, it is essential the this be as progressive as possible. Although clearly a tax increase is highly undesirable at this juncture, that option must be weighed against the option of inflationary financing, which would de facto be a tax on all households. Moreover, in countries without their own currency, inflationary financing is not an available option.

countries in LAC have non-contributory pension programs. These pensions must be maintained in real terms, but not expanded. Those in retirement will not be directly affected by the crisis; they are already outside of the labor market and will not lose income as a result of the recession.

For similar reasons, educational scholarships for children and youth training programs, and employment programs should not be expanded either. The labor market will deteriorate rapidly and severely in the coming weeks. Under those conditions it will be very hard to place new workers into the labor market; one must first help those that are already in it, because they are the ones at risk of losing a substantial part of their incomes. Similarly, microcredits are not an adequate tool to face this crisis either. Micro and small firms will face a demand problem of uncertain duration; many of them will not be able to pay off their debts, at least during the first stage of the crisis, because they will fewer clients. It does not make a lot of sense to indebt them. In fact, one does not want to help those firms, but their workers-owners; and what they need is rapid income.

The targeting criteria of social programs typically revolve around the concept of vulnerable households or vulnerable families, based on indicators like number of children, number of elderly, years of schooling of adults, access to clean water and electricity, and the like. In general, this works when designing programs and measures to help households overcome structural deficiencies. But the situation faced now is different. Without denying the importance of these deficiencies, this crisis' novelty lays in the vulnerability derived from a sanitary enclosure that impedes those who a few days ago where working to continue doing so. What is urgent is to attend to this new vulnerability. This does not mean that the prior targeting criteria be abandoned; these must be maintained for the purpose of programs in place before the crisis. But it does mean that, for the purpose of the mitigating measure to the social costs of this crisis, new ones must be adapted.

In that context, it is useful to classify workers in four groups. First, those that are members of a family that benefits from an existing CCT (like Familias en Acción in Colombia, Bono de Desarrollo Humano in Ecuador, Bolsa Familia in Brazil or Prospera in Mexico). Second, those employed by a firm that affiliates them to contributive social security. Third, those registered with fiscal authorities for tax purposes, but that are not registered by a firm to contributive social security. And fourth, those that do not belong to families benefitting from a CCT, are not in a firm that registers them with social security, and are not registered with fiscal authorities. Henceforth, I refer to the first group as poor workers on a CCT; the second, formal workers; the third, registered workers; and the fourth non-registered workers.⁵

It must be noted that these groups are not mutually exclusive; there can be an overlap between them, although probably small. It must also be noted that this classification can vary between countries, as well as the proportion of workers in each case. Its purpose is to determine how to help each group. We want to answer two questions: First, ¿what public policy tools, already operating in the country, can be used to transfer income to workers during the first stage of the crisis? Second ¿how many workers would be excluded, and what options exist to help them that can be implemented in the very short term?

5.1. Poor workers in a CCT

Typically, the registries of CCT beneficiaries have information on all household members.⁶ This allows identifying households with members between 20 and 65 years of age (which is taken here as working age, although this range must be adjusted for each country). We propose an income transfer to households with members in that

The classification of workers as formal or informal varies between countries depending on their laws and their enforcement (in some countries self-employed workers and obligated to enroll in contributory social security and in others they are not; and in some countries there are self-employed workers that do meet this obligation). As a result, in the third group there may be self-employed workers that do contribute to social security and that would be usually classified as formal. Nonetheless, as detailed further below, what matters here is that they are not associated with a formal firm, even if they themselves are formal.

⁶ Other poverty programs can also be applied. What remains important is: (i) being able to identify people of a working age, and (ii) having an operational monetary transfer system (or being able to create this system quickly). Above I make reference to poor workers who are part of a CCT, but it should be understood as poor workers on any program that fits the mentioned criteria.

age range, of an amount that must be further calibrated, but that should be around the median of the wage distribution of all informal workers, which is probably close to the labor income that poor workers currently receive. In principle, these transfers would compensate for the loss of income in the extreme case that they all become unemployed. The transfers must clearly be announced as transitory, not be conditioned to any behavior by the beneficiary and must be eliminated once the economic emergency is over, near the end of the second stage.

It is worth highlighting that the transfers should not be conditioned on the number of kids, as is usually the case with these programs, or on assistance to school or health clinics. They should also not be conditioned on working; in fact, at least in the first stage, they are partly for not being able to work. That said, calculations can be sharpened. The prior proposal supposes participation rates of 100% in the labor market, which clearly was not the case before the crisis.

The effectiveness of this measure depends on the CCT's coverage and the quality of its registry. In countries where the CCT has wide coverage, as could be Brazil and Mexico, the measure helps protect a large portion of poor workers from the effects of recession. In countries where it does not, as could be Peru for example, it will not be very effective, although that does not mean it should not be implemented; simply that more must be done with other tools.

The quality of the registry also matters. Inclusion errors in this case can be a virtue, as they help to make transfers to informal workers who are not poor. Exclusion errors instead are worrying. It is necessary to better understand each country's case, in order to see if these are more significant in urban or rural areas and determine what can be done to correct them very quickly.

5.2. Formal Workers

The objective must be no layoffs and, the other side of the coin, no firm closures. This is a difficult objective to achieve, but the closer countries can get to it, the lower the social cost of the crisis will end up being, and the higher the possibility of resuming growth once it ends.

Experience from prior crisis in LAC indicates that the cost from the destruction of formal jobs is higher than that of lost salaries. The available data indicates that these are the most productive jobs, as well as the ones that offer workers the best prospects in terms on learning, training and professional growth. When a worker leaves formality, the investment that the firm made in her training is lost; part of the investment that the country made in her education is also lost, as are the taxes paid by the firm that employed her. And, of course, her family loses the right to medical attention and other social security benefits, precisely what must be avoided in the context of a medical emergency.

Moreover, it must be clear that, once the sanitary emergency is over, the country's productivity, and its capacity to quickly recover from the crisis, will greatly depend on preserving pre-established relations between formal workers and their firms. During the first stage of the crisis many laid off formal workers will accept almost any job so as to have some income. Later on, once the crisis is over, if they the firm that laid them off survives, it will have to hire and train other workers. On the other hand, firm bankruptcies translate into losses of tangible and intangible assets that the country requires to grow. This rotation and waste of assets end up being very costly for the country and must be avoided as much as possible. Without a doubt, protecting formal employment must be a priority objective.

¿How can it be achieved? The general idea is to temporarily reduce firms' labor costs without reducing employment and minimizing the reduction of salaries. Two conditions are required: first, that the government

⁷ The "normal" CCT, per say, would continue to exist. What is suggested is using its registry and system to reach workers in their homes.

subsidize part of labor costs; second, that the subsidy be conditioned on certain behavior by the firm, in particular, to not fire any workers.

There are many ways of subsidizing labor costs. One of them is to subsidize non-salary costs. We explore this option first, in the understanding that section VII proposes that under certain circumstances salaries should also be subsidized.

There is large variation between countries in the region in the composition and magnitude non-salary costs. Nonetheless, we can divide them in three categories: first, contributions to social security which give a present benefit to workers (certain or contingent) like health and daycare services, child allowances, or disability, life, work accidents and unemployment insurance. Second, contributions to social security for a future benefit, mainly pension funds, and in some countries like Jamaica or Mexico, savings for housing. And third, contributions earmarked to ends that do not represent a proportional benefit to the worker, present or future, as are training or education programs for the general population, or others.

With that division in mind, during the first stage the proposal is to maintain contributions for the first category, but to fully finance them from the national budget; and to suspend contributions to the second category and most, or ideally all, of the contributions for the third, in all cases conditioned upon the firm not laying off any worker.

The reasoning behind suspending contributions for retirement pensions (and, in certain cases, housing), is very clear: there is little sense forcing workers to save for their future consumption, or for an asset like housing, when their present consumption is being strongly threatened. The reasoning behind suspending contributions to training programs and the like is similar: in the context of an acute crisis, these programs are of secondary importance relative to the central priority of maintaining formal employment; aside from that fact that many of the contributors do not benefit from them. This is not the time to make cross-subsidies from formal workers to other ends.

Now, the registries of social security institutes allow identifying the number of firms and the number of workers that each firm had on February 29th, 2020.¹⁰ With that information, a program ("No Layoffs in My Firm" to use a name that appeals to future reputation) can quickly be put in place that offers participating firms:

- » during the first stage of the crisis, substituting firms' and workers' contributions to programs in the first category with resources from the national budget; and,
- » the possibility of subsidizing, during the second stage of the crisis stage, a share of workers' salaries.

The reduction in labor costs associated with these measures varies from country to country. In some it can be substantial; in others it can be less relevant, because contributions as a share of salaries are low. However, in all cases, workers' access to health, disability, life, or work accidents insurance, among others, is preserved. Sadly, maintaining life insurance can prove very important in this crisis; in its absence, the families of some workers could be left in a tough spot.

⁸ The region's retirement systems are either defined contribution in individual accounts or pay-as-you-go. The first case is simpler: less resources would be accumulated in the retirement account, reducing the size of the pension in the future. The second is more complicated in the sense that contributions from active workers are directly financing pensioners. In that case reserves can be used, or the financing may need to continue, but from government resources.

⁹ In some countries, important programs are financed through these contributions, amongst them, for early child development. Those programs must undoubtedly continue, but at least during the first stage of the crisis must be financed directly by the government. Other programs may have lower priority and can be suspended or slowed down.

¹⁰ This date is taken as the pre-crisis level of employment, but it could also be the 15th of march. It is likely many firms already started, or will start in the coming days, to reduce their workforce.

¹¹ The suspension of contributions for retirement pensions would not impact the accumulation of required weeks to qualify for a pension, as workers would keep contributing to the other programs (with government resources). This is relevant to countries that require minimum periods of contribution in order to qualify for a pension.

The efficacy of this measure depends on two factors: the magnitude of reduction in labor costs and the share of formal employment in total employment. Here there is also wide variation among LAC countries. Clearly, for those where formal employment is low, as are Honduras, Guatemala, or Bolivia, the measure has low efficacy. Nonetheless, even in those countries it still relevant, as it helps the more productive firms stay in business, positioning the country better for when the worst part of the crisis has been overcome.

In the context of this crisis we must highlight that the objective is to maintain workers' income, not necessarily that they attend the workplace. In fact, during the first stage of the crisis, for sanitary reasons it may be desirable that many do not attend. However, this should not be an impediment for them to collect their wage. Because of this, during the first stage it will also be necessary to: (i) manage the timing and payment of vacations flexibly, and (ii) establish criteria for transitory disability payments associated with the pandemic, financed by from disability insurance. (This highlights again the importance of maintaining formal employment).

Firms' response to this measure depends on many factors: they sector they are on, the size of the shock that they face, their access to credit, their expectations about the crisis' length, etc. For some the reduction in labor costs may be sufficient to maintain the same level of employment. For others it may not. In the second group there may be some that wish to retain their employees (they know them, they have trained them, etc.), and can finance keeping them on the payroll for a short period with the same wages. But there will be others that cannot. In those cases, voluntary agreements between firms and employees must be encouraged, with temporary salary reductions that allow firms to survive while no one loses their job. Generally, these agreements should be facilitated by countries Ministries of Labor.

It may be that in some cases firms attempt to take advantage of the crisis and reduce salaries even if this is not necessary for the business to survive. To minimize this possibility, it could be stated that salary reductions are only permitted to firms that participate in the "No Layoffs in My Firm" program, and maybe only from the third month on, for example. Another variant would be to allow firms to postpone payment of a part of the wage from the critical months of 2020 to 2021; that is, the same wages are registered, under the agreement a part will be payed once the crisis is over, or at least once the sharpest stage is behind (de facto, workers would give credit to their firm with no interest, to avoid losing their jobs and the totality of their wages). Clearly, there are many other variants. It is hard to find a balance here, as the crisis will affect different firms differently. The point is to recognize that an acute situation requires innovative options to reach what must be the main objective: workers do not lose their job, and they still receive all or most of their salaries, while still maintaining access to social security.¹²

Nevertheless, there will be some firms that regardless of the measure proposed, will reduce employment, perhaps because they believe the shock will persist for many months, or perhaps because they have no access to credit. It is hard to predict how many will find themselves in this situation, but these cases will be reduced to the extent that if firms know that if the recovery does not begin by the end of the first stage, there will be additional aid as long as there are no layoffs; I return to this point in section VII.

Many firms will soon begin to have liquidity problems. Because of this, in addition to the reduction in labor costs, access to credit must be facilitated, taking advantage, when possible, of development banks. Once again, the wide variance between LAC countries makes a general discussion difficult. That said, an option which could be relevant are guarantee programs from development banks to facilitate credit from commercial banks. In that context, an idea worth exploring is that these programs be more generous for firms which do not layoff their workers. In this case, aid is doubled: lower labor costs and preferential access to credit.¹³ This combination could raise the number of firms that do not layoff.

¹² The suggestion to postpone paying part of the salary can be relevant in countries where the minimum wage is high, and there are legal barriers to reduce it.

¹³ The government would not determine which firms have preferential access; firms would self-select. The ones that do not layoff get it. Those that do would still have access to credit, but without preferential conditions.

Three more observations. First, this is the most direct measure governments have at their disposal to maintain formal employment. Second, the measure facilitates negotiations between firms and workers. And third, the measure only costs public resources if firms do not layoff workers; firms that lay off do not receive any subsidies. The government spends funds subsidizing firms only as long as they keep all their workers on the payroll.

These observations imply that the proposed measure is budgetarily more efficient than generalized subsides to all formal firms, or generalized reductions to corporate taxes, or other alternatives that have been suggested (e.g., lowering the cost of electricity). From the point of view of maintaining employment and formal workers' incomes, these last options are problematic because they do not approach the objective directly; they deal with it indirectly. Because of this, in principle, they must be discarded; their efficiency in terms of "formal jobs saved per dollar spent" is lower (and in addition they distort other margins of behavior).

Finally, it is clear there are many variants of the proposed measure. For example, limiting it to only firms employing x number of works (focusing on small and medium sized); limiting it only to workers earning up to x level of wages (excluding firm managers and staff with very high wages); limiting it to only activities most affected by the pandemic (e.g., restaurants and factories, but excluding those that can function without the agglomeration of people); limit it by region (ex: touristic zones), etc. The benefits of doing so depend on the intensity and the nature of the shock in each country; on administrative capacities; on budgetary cost considerations; and on the balance between these and the other proposed measures. For reasons of space these variants are not explored further here, but it must be noted that to the extent that the shock is a generalized one, the easiest and most convenient is a broad-based measure.¹⁴

5.3. Workers registered with fiscal authorities

Tax authorities have registries of individual taxpayers and micro firms subject to special tax regimes. Occasionally, in this last case, contributors are not legally constituted firms (that is, firms registered with limited liability or similar legal figures), but individuals. It is worth noting here that in many countries in the region the dividing line between an individual worker and a micro-firm is vague.

Again, there are many variations between countries, and it is difficult to undertake a case by case discussion. That said, the general objective is to identify and, critically, to have a medium to transfer income to a subset of workers in the next few months, that are neither in a CCT nor work for a formal firm. These last workers, even if they are included taxpayer registries, would not be beneficiaries of this measure. Here we are attempting to reach those that cannot be helped via the formal firm. This group is mainly conformed by informal workers, but also includes self-employed workers that may be affiliated to social security. Ideally, taxpayer registries have reasonable coverage of these workers, at least of those in urban zones, which are the ones that will be the most affected during the first stage of the crisis. If they do not, one can consider complementing them with the registries from sub-national entities, when states, provinces, or municipalities charge fees for economic activity.

The proposal is to use these registries to make a temporary income transfer of the same duration as that proposed for poor workers in a CCT. The amount can be set in different ways: equally for all; in proportion to the taxes paid in 2019; in proportion, but with a maximum amount equivalent, say, to the median of the tax distribution, etc. Transfers do not have to be identical, but they must have some progressivity. Much depends on magnitudes and administrative capabilities. Without underestimating its importance, I do not discuss this aspect further here. What is key is that these workers have a secure income during the first stage of the crisis, independently of whether they are able to attend their job or not because of sanitary restrictions.

¹⁴ That said, it's evident that for public sector workers this measure is not necessary, as they do not run the risk of being fired (in the understanding that workers who are government contractors are included in this category). Similar reasoning applies to other workers like employees in embassies, religious organizations or private universities. The key is to help workers in private firms who are at risk of losing their job and income because their firms is either going to lay them off or go bankrupt.

Undoubtedly, there remains a universe of workers that do not belong to any of the three previously mentioned groups, informal unregistered workers. This universe will vary from country to country according to the coverage of its CCT, of its taxpayer registry, and its labor informality. Besides quantifying it, it must be characterized in terms of its urban-rural composition, income level, and any other available information.

The size and composition of this universe is critical. If it is a small, it may be that the transfers made to the three previously identified groups are enough to protect the majority of those affected by the crisis, understanding that it will never be possible to protect all. However, if it is large, and if it is also primarily urban, it is necessary to find other ways to identify them and quickly reach them with a transfer. In this context one can note that some countries have non-contributory health programs for informal workers (in some cases for all of them, as in Peru, Mexico or Jamaica, and in some cases only for lower income ones, as in Colombia). The information from these programs must be evaluated to determine if working-age individuals can be identified; afterwards, it will be necessary to think of a mechanism to quickly reach them with an income transfer.

All that said, it is useful to note that in some labor markets in LAC are characterized by the high mobility of workers between the formal and informal sectors, and by the absence of unemployment insurance. This means that layoffs of formal worker layoffs will in part translate into an increase of informal workers (and another part in open unemployment). The influx of laid off formal workers to informality would depress the income of those already in that condition before the shock. In addition, to the extent that the income of formal workers does not fall, their demand for products produced by informal workers would not fall either (as long as sanitary restrictions allow). This is another argument that highlights the strategic importance of preserving formal employment; informal workers are also helped by ensuring formal employment does not fall.

On the other hand, it must sadly be recognized that during this crisis some workers that do not have life insurance from social security could lose their lives. Because of this, a proposal is made for the government to make special compensations to families who lose a worker because of coronavirus. This could take the shape of an annuity similar to a survivorship pension, with benefits equivalent to the ones that the family would have received in the case the worker had been formally employed when the pandemic started. The objective is simple: to avoid leaving families helpless after the crisis is over. Ideally no one would have to benefit from this measure, but its introduction will help in contexts where the social fabric is being strongly strained.¹⁵

Finally, this crisis is not the moment to introduce a universal minimum income (even if considered desirable under normal circumstances). This measure is less effective as it would disperse resources between people who, throughout these critical months, are not directly impacted (individuals who despite being of working age were not in the labor maker, senior citizens, students, or workers who will not be affected like those in the public sector). As discussed below, the crisis will strongly depress tax revenues and deteriorate fiscal balances. In that context, its indispensable to assure that available public resources are channeled towards those who will, or are already experiencing, a strong drop in their income.

Moreover, a minimum income does little to maintain formal employment and avoid firm closures, a critical issue since the recovery from the crisis will depend on there being firms that can offer workers productive jobs. The instruments applied to mitigate the social impacts of the crisis must also consider the need to resume growth once it has been overcome.¹⁶

¹⁵ That said, it's evident that for public sector workers this measure is not necessary, as they do not run the risk of being fired (in the understanding that workers who are government contractors are included in this category). Similar reasoning applies to other workers like employees in embassies, religious organizations or private universities. The key is to help workers in private firms who are at risk of losing their job and income because their firms is either going to lay them off or go bankrupt.

¹⁶ That said, in countries where formal employment is almost inexistent, as are registries, fiscal or other, and where administrative capabilities are very weak, a flat transfer without targeting (or with quick-and-dirty methods to try to exclude, say, workers in the last quintile of the income distribution), could be the only short term option. Considerations here would be budgetary ones, to the extent that the larger the universe of beneficiaries the lower the size of the transfer.

6. Objective 3: preserving macroeconomic stability

Objectives 1 and 2 generate four paths to mitigate the social impacts of the crisis, and require public spending for: (i) the health system to attend the pandemic; (ii) workers from poor families in a CCT; (iii) subsidies to labor costs for formal firms and; (iv) income transfers to the rest of the workers.¹⁷ Evidently, numerical calculations and many operational details are still missing. But what is most important at this juncture is to direct government action to where it has the highest social impact, avoiding the dispersion of efforts into numerous measures that could have little efficacy in terms of the objectives being sought.

The recession will reduce tax revenues. This phenomenon will intensify in countries where revenues depend on the prices of primary commodities (as with oil in the case of Ecuador and Colombia, or copper in the case of Peru or Chile). In other countries, the fall in commodity prices may actually be beneficial (e.g., oil importers like the Dominican Republic). On balance, however, tax revenues will fall, in some cases quite dramatically. Even without any additional public expenditures to mitigate the crisis' social impact, fiscal balances will deteriorate rapidly, and debt to GDP ratios will increase.

Unfortunately, this crisis finds most LAC countries with less solid public finances than in 2008-2009. Generally, debt to GDP ratios are higher, reducing in most cases the capacity for counter cyclical responses, or exposing countries to a negative reaction from financial markets in the case that a counter cyclical expansion of spending gives the impression they have lost control of their public finances. In the extreme, one could face an unexpected and abrupt interruption ("sudden stop") of capital flows, which would limit the capacity to issue debt of countries that still have it, and strongly affect the debt placements and refinancing of their main private firms.

The immense challenge being faced is how to finance the expenditure required for objectives 1 and 2 without undermining macroeconomic stability, and the possibility of resuming growth once the pandemic ends. Ideally, governments could in the first instance obtain resources from the IADB, WB and CAF. However, these institutions' balance sheet do not allow for large increases in lending. For smaller countries it may be possible that new loans from these banks, jointly with the redirection of undisbursed balances from existing ones, could contribute to finance a relevant part of required expenditure. But for the rest this is not feasible, as the amounts involved are clearly.

In the face of this reality, as a second instance governments could place debt in private markets. Nonetheless, the context for doing this is very bad because: (i) the high volatility in financial markets associated with the recessions in the United States and Europe; (ii) the fact that many OECD countries, including the United States, will be issuing debt in the coming weeks, in unprecedented volumes, which could saturate markets. Now, it is true that OECD central banks are injecting unheard of amounts of liquidity; that interest rates are at historic lows; and that many investors are searching for higher yielding assets. But it is also true that sovereign risks for most countries in the region have increased, and that the combination of depressed commodity prices, recession, deterioration of fiscal positions together with large increases in expenditures may make credit very expensive and short term, or inexistent.

The balance of these observations varies from country to country, and it is impossible to make a general judgement. Nonetheless, it is a mistake to believe that the fact that Germany, the United States, France, and other OECD countries, are increasing their debt without giving large considerations to its sustainability, means LAC countries can do the same. With few exceptions, like Chile or Peru to mention two notable cases, the reality is that our countries face larger restrictions to access financing in the markets. Consequently, our challenge in this crisis is larger than that faced by OECD countries, because we must not only consider the mechanisms to spend quickly and protect workers (and, where possible, maintain aggregated demand); we must also consider the short-term financial implications. We must not, in the anguish that we all experience given the problem we

¹⁷ Ignore here the contingent cost of credit guarantee programs and survivorship pensions for workers without social security

presently face, adopt an "let us increase expenditure now and we will see the rest later" attitude. Currently there is no financial crisis in the region; it is important to keep it so.

From the point of view of sustaining aggregate demand, it is desirable that mitigating measures be financed by external debt, and not by redirecting expenditure or by higher taxes. Here is a suggestion that could help facilitate this option. This consist in legislating an immediate increase in public expenditure and, in parallel, an increase in taxes to be put into effect once the crisis is surpassed, say, early or mid-2021. This tax increase would be legislated as temporary and its sole objective would to be to finance, ex-post, the additional 2020 expenditures. Collections would be placed in a separate account to the National Treasury, and the tax increase would remain in place until it is assured that debt to GDP ratios are on a sustainable trajectory. The key points here are to: (i) avoid deepening the recession with a tax increase today; (ii) strengthen the credibility of the country's commitment to the sustainability of its debt; (iii) signal to financial markets that the government is acting prudently, and; (iv) simultaneously indicate to society that extraordinary expenditure measure will require paying off once the economic emergency is over.

Ideally, the tax increase must be progressive. That said, some taxes can be progressive, but collect very little, or be new taxes where potential revenues are very uncertain. Clearly, there is a difficult trade-off between distributive and revenue objectives here, a trade-off that is sharpened in a context where what is required is to show fiscal solidity so as to access financing and carry out cyclical expenditures without risking a financial crisis. It is difficult to have a general discussion given the heterogeneity of the region, and careful analysis of each case is indispensable.

The credibility of the future tax increase is crucial. That is why reference was made to a legislative act. If this is not feasible, a strong substitute mechanism is required. Here the options vary widely, depending on country's institutional and political context. At the end of the day, one has to recognize that there is a problem of inter temporal consistency, that requires novel mechanisms to address it. The more successful countries are in this task, the more space they will have for a more generous social mitigation response, that implies a counter cyclical expansion of expenditures consistent with preserving stability.

The crisis will be less intense to the extent that there's more confidence in country's fiscal solidity. Governments and large firms will have better access to international financial markets; and medium and small firms to national ones. Put differently, government interventions must not consist solely of measures to mitigate the crisis' social cost. They must also focus on reducing uncertainty and building confidence, because this will reduce the crisis' intensity and duration; these are, in a sense, part of the counter cyclical response, intangible but equally important.

7. Uncertainty, credit and the possibility of further aid in the crisis' second stage

It was mentioned previously that one of this crisis' characteristics is that, originating from an insufficiently known virus, it is very hard to determine its duration. Formal firms, commercial banks, and economic agents in general face unprecedented uncertainty. Undoubtedly, facilitating credit either from commercial or development banks must play a fundamental role to help firms get through the crisis' first stage. However, in some cases the problem can be credit demand, rather than supply. If firms consider that the demand contraction will last a long time, they may not ask for credit even if it is available. The cost of losing their assets in the face of a credit that they consider will not be able to serve can be higher than that of ending operations.

¹⁸ This does not imply that this ratio should return to its March 2020 level. In face of the shock's magnitude, it may be that higher debt levels are justified for several more years. This may not matter too much, as long as the debt is sustainable.

To deal with this issue, we suggest measures to lengthen the period in which firms can survive, avoiding bankruptcies and losses of formal employment. In particular, it is suggested that if in three or four months economic indicators point towards a very long second stage, support measures to workers be prolonged for three or four more months, with a variation for formal ones: besides the suspension of contributions to pension and, in some cases, housing funds, and the subsidy for the remaining contributions to social security, that the government also subsidize a certain percentage of workers' salaries (based on labor registries and wages as of the 29th of February of 2020), as long as, as in the first stage, the firm does not lay off workers.

It is important that this measure be announced from the start, including the percentage of support provided (for which the necessary calculations are required). The objective is to facilitate planning to formal firms and increase their incentives to access credit lines and keep operating instead of closing. Firms and banks must know that, if in a few months there is no sign of recovery, the government will intensify its support, and they must also know through which measures. More precisely, they need to know that support to firms will increase as long as they do not lay off workers. The point is this: firms will be more willing to ask for credit if they know they will receive more support in the case of a longer crisis. On their part, banks will be more willing to offer credit if they know that firms will be further supported. Of course, support for the second stage must have preannounced indicators that everyone is aware of, and that cannot be manipulated to be triggered.

On the other hand, it is clear that in the coming months many unexpected situations will arise that will require a flexible response. We are experiencing unprecedented times. In this context it is impossible to plan everything, and governments must have margins to respond. The second stage may involve additional measures, in response to situations that no one can predict now. Nonetheless, the point is that, through the mechanism proposed to maintain formal employment, the government will reduce uncertainty for firms and banks, and that this reduction of uncertainty will, in turn, help to reduce the intensity of the crisis.

Of course, measures for this second stage must be framed within the government's financing possibilities. That is why it is vital to preserve stability during the first stage. Ideally, by the time we reach the second stage the pandemic is either controlled, or else that isolation measures are more localized and shorter. As a result, workers can return to their jobs, people can agglomerate and, more generally, economic activity can be undertaken minimizing the risk of contagion. Without a doubt, aggregated demand will be depressed in three or four months. But if one managed to maintain stability, there will be better chances of creating space for additional expenditure actions to help workers, as the ones here mentioned, which simultaneously reduce social costs and accelerate the recovery.

8. Interconnection between sanitary and economic measures

While this crisis originated outside LAC, sanitary measures have already transformed it into an internal crisis in every country. Undoubtedly, at this point the economic costs from the interruption of economic activity associated with the generalized isolation, are larger than those due to the fall in commodity prices and export, or to higher risk premiums or currency depreciations.

Therefore, and contrary to prior economic crises, the solution to this one depends on the solution to the sanitary emergency, not in the sense of "eliminating" the pandemic (which could not happen absolutely until a vaccine is discovered, or high levels of herd immunity are reached); but in the sense of transitioning to containment strategies that do not depend on the generalized isolation of individuals. If containment strategies do not evolve, the economic crisis will reach levels of magnitude which are hard to imagine, and a lot of what is mentioned in this document will prove insufficient or no longer pertinent.

Two conditions are required for this recession to have a "V" shape, that is, a drastic fall in production and income for two or three months, and then an orderly and swift recovery: (i) that the indispensable measures to mitigate its social costs do not create in turn a financial crisis, accompanied by the closure and bankruptcy of firms; and; (ii) that sanitary strategies evolve. This document can help fulfill the first condition. But a lot rests

on advances in the health front. In other words, even a very well-designed package of economic measures can prove insufficient to overcome the crisis and resume growth. The evolution of the sanitary strategy, from generalized isolation measures towards more focused strategies, is an essential part of the economic crisis containment program, and later on, of recovery.

Practically every country in the region has decreed generalized isolation. But few have suggested how these will be abandoned. Credible announcements from governments in this area are part of the response to the economic crisis.

International Financial Cooperation in the Face of Latin America's Economic Crisis

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Abstract

This essay argues that the current global economic crisis will be remembered not only for being the worst since the Great Depression and one in which the domestic policies adopted by the developed countries were ambitious, but also by the limited multilateral financial cooperation agreed, in particular to support middle-income economies. The Latin American countries have benefited from the improvement in the IMF emergency credit lines, although with modest resources, and can access other credit facilities of that institution. Members of the Latin American Reserve Fund (FLAR) also have the possibility of accessing the resources of this regional body. The multilateral development banks have taken various important measures to support the countries of the region, but the programmed resources have so far been limited. The programmes announced by the Inter-American Development Bank and the Development Bank of Latin America (CAF) are important, but these banks are at the limit of their lending capacity and need to be capitalized. The World Bank has increased its credits to the region, but these are still lower than those that it financed during the previous crisis. The dynamic of the Central American Bank for Economic Integration stands out thanks to its recent capitalization.

1. Introduction¹

COVID-19, the worst pandemic in a century, has generated, in turn, a global economic crisis characterized by the Managing Director of the IMF, Kristalina Georgieva, as the worst since the Great Depression of the 1930s (Georgieva, 2020b). The effects of the confinement and social distancing measures on the population have been devastating for economic activity, as they paralyze "non-essential activities", which can account for up to 50 per cent of economic activity in many countries. The disruption of the financial markets has also been profound at the global level and has generated the worst flight of portfolio capital from emerging markets in history. In turn, international trade is experiencing a powerful contraction, deepening the recession that was already being faced towards the end of 2019 as a result of the global economic slowdown and "trade wars", especially between the United States and China. Added to this was the fall in prices of an important group of basic commodities against a trend that was already negative for some years back. Exports of services is also experiencing a fall, especially due to the paralyzation of tourism and air passenger traffic. Of no less importance, remittances of migrant workers to their countries of origin will show a marked fall, and new controls are being imposed on international migration.

In the case of Latin America, the pandemic has arrived late and its effects in terms of people affected and mortality have so far been less devastating than in China and the developed countries. In economic terms, however, the pandemic is hitting the region after five years of slow economic growth, which can be characterized as a "lost half decade" (Ocampo, 2020). Apart from the direct effects of confinement on the countries where this has been imposed, or those which the population has adopted voluntarily to protect itself, the economies of the region are also experiencing the effects of the global crisis, including on trade, paralyzation of tourism, sudden interruption of foreign financing, the fall in commodity prices and the drop in flows of remittances. Latin America will experience the most pronounced fall in economic activity in the developing world, echoing the pattern which has characterized it in recent decades – although with varying effects between different Latin American countries. The 2020 recession will, moreover, be the worst since the Second World War, and there is thus the danger (and almost a certainty) that the lost half decade will turn into another lost decade.

Against this adverse background, both globally and regionally, international financial corporation has so far proved very feeble, in contrast with the strong cooperation led by the G20 (Group of Twenty) during the North Atlantic financial crisis of 2008–09.² This essay analyses the debate and decisions adopted in terms of current international financial cooperation and the extent to which it benefits Latin America.³ It is divided into seven sections, the first of which is this introduction. As a background, the following two offer some considerations about the global and regional context. The fourth presents a general analysis of international financial cooperation, and the fifth and sixth analyse international monetary cooperation and that of the multilateral development banks, and their impact on Latin America. The final section sets out a few conclusions.

It should be noted that contributions by academics to the current debates have been enormous (see, for example, among others, Baldwin and Weder de Mauro, 2020, Levy, 2020, Stiglitz et al., 2020, and my contributions with others in Gallagher, Ocampo and Volz, 2020, Gallagher et al., 2020, and Griffith-Jones, Maradon and Ocampo, 2020). I cannot do full justice here to these contributions, although I will refer to some suggestions formulated by different authors on the reforms necessary to tackle the crisis in the emerging and developing economies.

¹ Given the speed of the events through which we are living, this essay must be analysed in the light of information and policy decisions adopted up to May 1st 2020. I thank Marcela Meléndez for her comments on the previous version of this essay, and María Luisa Montalvo and Víctor Alejandro Ortega for their collaboration in its preparation.

² I prefer this term to the more commonly used Global Financial Crisis because, although its effects were global, it concentrated in the United States and Western Europe. The bulk of emerging economies did not experience a financial crisis and their recovery was rapid, driven by China and high commodity prices.

³ In my analysis, I leave Cuba out, which is not a subject of the international financial cooperation which I analyse in this article, and Haiti, which is, but is the subject of special mechanisms for very low-income countries, to which I refer only marginally. For its part, Venezuela faces particular problems with respect to the international financial institutions mentioned throughout the essay.

2. The global context

The recent International Monetary Fund's World Economic Outlook (IMF, 2020b) estimates a decline in global GDP at market exchange rates of 4.2% in 2020.⁴ This is the result of falls of between 5 and 7% in major developed economies and 5% or more in emerging and developing economies as a whole, with Latin America as the worst performing region. This estimate is much more pessimistic than those suggested by other organizations a few weeks earlier.⁵ The powerful reduction in forecasts has been a characteristic of recent international analysis and reflects recognition of the devastating effects on economic activity generated by confinement (quarterly contractions which were already strong in the first quarter⁶ and may reach two-digit levels in many economies in the second quarter). The basic IMF forecast assumes that these effects will gradually dissipate – as is reflected in recent data from China, the country which was affected the earliest. There is obviously uncertainty about whether there will be medical instruments (especially mass diagnostic testing available for all countries, effective treatment systems, adequate hospital capacity and, eventually, vaccines) which would prevent further severe outbreaks, which would force general confinement of the population again, thus delaying the recovery of economic activity.

The crisis will certainly be more severe than that experienced by the global economy during the North Atlantic financial crisis (-2.0% in 2009, according to the IMF, at market exchange rates), especially because of its truly global reach, with few countries having positive growth rates (very modest in the cases of China and India according to IMF estimates) unlike the recession of 2009 which did not happen in a broad group of emerging and developing countries, especially in Asia. Hence the Managing Director's comparison is with the Great Depression of the last century. It should be noted, however, that this crisis will have essential differences from the Great Depression in terms of its depth, duration and the speed of recovery. It should be recalled that in the United States, GDP fell during the Great Depression for three consecutive years, with a cumulative fall of 27% according to the historic figures of Angus Maddison,⁷ and only returned to 1929 levels a decade later. Even in the case of the twelve major European economies, the recession also lasted three years, although it was less severe (a cumulative fall of 9.6%) and the 1929 level was regained in 1935. Thus, although the collapse in GDP has been even faster than during the Great Depression, it is not clear that the crisis will be as profound and prolonged. The recovery will almost certainly be quicker, and in this sense more comparable to that from the North Atlantic financial crisis, although initially deeper and truly global in character. The basic IMF projection is growth of 5.4% in 2021 (at market exchange rates) which would more than offset the 2020 recession, although not in all countries. However, as the organization recognizes, this is an optimistic scenario, as it assumes that there will not be further severe public health problems. In the pessimistic scenarios, if the recovery takes longer than expected in 2020, there would be an additional fall of 3% this year, and if this were combined with a further outbreak in 2021, activity would be 8% below that projected next year.8 In any case, it is most likely that the recession will be less prolonged than during the Great Depression.

In the face of these effects, developed countries have been adopting aggressive measures in terms of increases in public spending and reduction or deferral of payment of taxes, provision of liquidity, and credit lines and loan guarantees for the business sector. The adoption of ambitious policies is correct, as, according to An

⁴ The most publicized IMF estimate is -3.0%, calculated at purchasing power parity prices. This estimate is not comparable with those at market exchange rates used by the United Nations, the World Bank and the majority of private analysts. The IMF estimate is skewed by the greater weight of China and India in global GDP at purchasing power parity prices. Furthermore, an essential weakness of the IMF measure is that it is not comparable with the evolution of financial and commercial aggregates, all of which are estimated at market exchanges rates and prices.

⁵ See, for example, United Nations (2020a) and Economist Intelligence Unit (EIU, 2020), which only a few weeks earlier had forecasted -0.9% and -2.5% for the global economy as a whole, respectively.

⁶ A contraction of 6.8% in the case of China, the country which was affected the earliest, and 4.8% in the United States, and 3.8% in the Eurozone, two regions where the economic effects of the pandemic only began to be felt severely in March.

⁷ www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-database-2010

⁸ These estimates are at purchasing power parity prices.

and Loungani (2020), policy choices must be guided by the worst scenario foreseeable, given the inability of economists to forecast recessions that can last more than a year. Both in fiscal and monetary terms, the IMF estimates that the packages are stronger than those adopted to tackle the North Atlantic financial crisis (IMF, 2020c and 2020d). In fiscal terms, for example, it is estimated that the G20 countries have adopted spending or tax relief packages equivalent on average to 3.5% of GDP compared to 2.1% in 2009 (IMF, 2020d, Figure 1).

The policies and their composition, however, are very different. The case of the United States stands out, where the fiscal package is huge (6.9% of GDP, and it was expanded after the IMF Report) to which we have to add loans and guarantees equivalent to 4.2% of GDP. The intervention by the Federal Reserve has also surpassed that adopted in 2008–2009, not only in its magnitude but also in the purchase of less secure assets. Japan has also aggressively adopted fiscal measures and loans and guarantees (10.0% and 10.5%, respectively).

European countries have been less ambitious in fiscal terms, with packages that generally range from 1 to 3% of GDP, but reach 4.4% in Germany, which has temporarily suspended its "black zero" budget rule. Some countries in this region, however, have been aggressive in terms of loans and, especially, loan guarantees, which together reach 30% or more in Germany and Italy, and between 10 and 16% in Spain, France and the United Kingdom. There has also been a new wave of provision of liquidity by the European Central Bank and the national central banks. The European Union has been immersed, however, in the debate between the countries of the "North" and the "South" on a joint programme financed by Eurobonds to support the most affected countries, prominent among them Italy and Spain.

It should also be noted that, in contrast, China's expansionary policies have been less pronounced than those adopted in the face of the 2008-09 crisis (a 2.5% of GDP fiscal package, according to the IMF). It should also be highlighted that the fiscal measures adopted then led to a strong recovery of its economy, which in turn stimulated many emerging and developing economies, including through the rapid and strong rebound of commodity prices. This reflected the lower fiscal margin that the Asian giant has today, a constraint which affects many emerging and developing economies.

The effects on financial markets were initially devastating, even before the real effects of the crisis began to be seen. They were reflected in the collapse of equity markets worldwide, the increase in risk spreads on emerging market bonds and those of private firms with low credit ratings. However, thanks to the strong interventions by central banks, these falls were less pronounced than during the North Atlantic financial crisis, and even came to a halt, generating a recovery in financial markets since late March – albeit partial in relation to pre-crisis levels (IMF, 2020c). One of the most pronounced effects was the worst flight of portfolio capital from emerging economies in history, which exceeded \$100 billion (IIF, 2020 and IMF 2020c; for simplicity in the rest of the essay, I use the symbol \$ to refer to United States dollars). The risk spreads for these economies and even more for the so-called "frontier markets" have remained high, but with the fall in benchmark interest rates (those of United States Treasury bonds), bond yields and, ultimately, the costs of new financing have remained at relatively moderate levels, and several countries have begun to issue bonds on international markets since mid-April more rapidly than in past crises. We will return to these subjects in Section 4.

Another effect of the crisis has been a strong contraction in international trade. In this regard, the fall in the volume and value of trade had started at the end of 2019,9 and was reflected in a slight fall in the volume of trade in that year by 0.1% according to the World Trade Organization (WTO, 2020). The IMF (2020b) estimates that the global trade volume will fall by 11% in 2020, a figure slightly higher than the contraction of 10% experienced in 2009. For its part, the WTO (2020) estimates that the fall will range between 13% in the basic scenario to 32% in the most pessimistic one. This strong fall is due not only to the global recession, but also to the logistical problems of ports, international transport, the effects of confinement on supply of manufactured

⁹ See in this respect the statistics published monthly by the CPB Netherlands Bureau on behalf of the European Commission, www.cpb.nl/en/worldtrademonitor. These figures indicate that the 12-month moving average of the volume of global exports was negative from October 2019, and in value from August.

goods and the difficulties faced by existing value chains. The crisis may, in practice, generate the destruction or severe contraction of many international value chains, thus putting a brake on the principal source of growth of international trade for several decades. For this reason, the recovery may be much slower than experienced in 2010 (when it grew by 13%, which more than offset the fall in 2009, according to IMF data). For its part, in terms of basic commodities, the crisis generated a profound fall in prices of oil and other energy products, a less pronounced reduction in those of basic metals, and diverse trends in the case of agricultural products.¹⁰

As shown in Table 1, the recent recession takes place against a background of the slowdown experienced by the global economy since the North Atlantic financial crisis, a trend which led some analysts to talk about a possible "structural stagnation" of the most developed economies. As can be seen, the fall was strong and widespread in 2010–19 compared with the 2002–07 boom, but also with the growth experienced between 1990 and 2007. In the latter case, there are two exceptions: South Asia, due to the more rapid growth of India in recent times, and the transition economies, which had experienced an initial economic collapse after the fall of communism around 1990. It should be added that the slowdown in global economic growth since the North Atlantic financial crisis was much worse in the case of the volume of international trade, which grew at its slowest pace since the Second World War: 3.1% annually in 2007–19, compared to 7.3% annually in 1986–2007.

Table 1. Annual growth rates of the principal regions of the world

Annual grow	th rates of the principal regi	ions of the world	
	1990–2007	2002–2007	2010–2019
World	3.0%	3.9%	2.8%
Developed economies	2.4%	2.6%	1.8%
United States	3.1%	3.0%	2.2%
Japan	1.3%	1.7%	1.0%
European Union	2.2%	2.5%	1.5%
Other	2.8%	2.9%	2.2%
Economies in transition	0.3%	7.9%	1.8%
Developing economies	5.3%	7.0%	4.5%
Africa	3.8%	5.9%	2.8%
East Asia	7.8%	8.8%	6.1%
China	10.6%	11.7%	7.3%
South Asia	5.4%	7.1%	5.5%
India	6.1%	7.9%	6.7%
West Asia	4,4%	6.6%	3.8%
Latin America and the Caribbean	3.2%	4.6%	1.4%
South America	3.3%	5.1%	0.8%
Mexico and Central America	3.1%	3.4%	2.7%

Source: United Nations Department of Social and Economic Affairs.

¹⁰ The IMF data on commodity prices indicate that in March, prices of energy products had fallen by 44.7% compared with the average for 2019, and oil by 48.2%; as is well known, the fall in oil prices was dramatically more acute in April. Basic metals had fallen by 12.9% in March and agricultural products which are used as industrial inputs, by 7.5%, but food and drinks by only 3.4%, although with very diverse patterns by product (an increase in Arabica coffee prices, for example, and a fall in cereal prices). World Bank projections (2020c) for the full year follow this pattern.

¹¹ Own calculation based on UN historical series up to 2007 and IMF thereafter.

3. The Latin American context

Within this global pattern, Latin America has been the region in the developing world with the worst performance since 1990, including during the 2002–07 boom. Furthermore, as shown in Figure 1, the region recently experienced anemic growth, the worst since the Second World War. In the previous five years of weak economic growth, those which followed the 1997 Asian crisis, average annual GDP growth was 1.5%. In 1980–85 (the worst five years of the debt crisis), it was 1.2%. In the last five years, it barely reached 0.2% (0.9% excluding Venezuela)

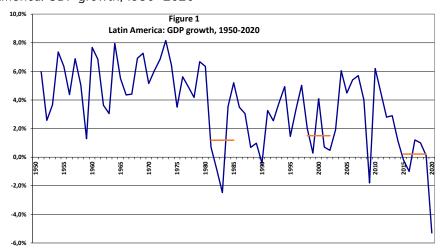


Figure 1. Latin America: GDP growth, 1950-2020

Source: ECLAC. The horizontal lines refer to average annual growth of low growth indicated in the text.

This poor performance reflects not only economic problems, but also complex political crises and transitions in several countries, notably Venezuela. Brazil experienced its deepest recession since the Second World War in 2015–16, and has been recovering very slowly, in the midst of major domestic political changes. Under new political leadership, the Mexican economy stagnated and even fell into recession in the first half of 2019, which was reflected in a small decline in GDP for the year as a whole. Argentina has been facing deep domestic macroeconomic imbalances and an unaffordable external debt, as well as a political transition.

But the economic problems of Latin America began well before the current wave of economic and political instability. It is worth remembering that economic growth in the region during the last three decades (1990-2019 to be precise) was only 2.7% a year, half that achieved in the thirty years that preceded the lost decade of the 1980s (5.5% annual growth in 1950–80). Almost all the economies of the region have grown less than during that time (the exceptions are Bolivia, Chile and Uruguay¹²); the fall was particularly dramatic in Brazil, Mexico and Venezuela. This shows that, over and beyond the current crisis, the development patterns of the region need to be considered in depth.

All the principal multilateral organizations which serve the region have published analyses and projections for the Latin American countries in recent weeks (World Bank, 2020a, IADB, 2020, ECLAC, 2020a and 2020b) to which can be added the IMF estimates in its most recent World Economic Outlook (IMF, 2020b). All forecast a substantial recession, as does Goldman Sachs (2020), the first private entity that forecasted a strong fall in economic activity in Latin America. As shown in Table 2, these organizations estimate a fall of around 5% for

¹² It should be noted that only two economies, both small, Panama and the Dominican Republic, have grown at a rate higher than 5% in 1990-2019, but in both cases the growth is also slightly lower than in 1950–80.

the region as a whole, which will be particularly severe in Argentina, Brazil, Ecuador, Mexico and Venezuela. Among the larger countries, Chile and Peru would be less affected and Colombia would be the one with the best performance – a matter for debate.¹³ In general, the smaller countries, with the notable exception of Ecuador, have better expected performance according to these estimates: falls of 3% or less in the case of the Central American countries (with the exception of Nicaragua), the Dominican Republic, Bolivia, Paraguay and Uruguay (although in the latter, ECLAC estimates a fall of 4%). For the region as a whole, the 2020 recession will be the worst since the Second World War (in practice, much worse than 1983, the worst year of the debt crisis) and one of the worst since the beginning of the 20th century.¹⁴

Table 2. Projections of economic growth in Latin America

	ECLAC		IMF	World Bank			
	2019	2020	2020	2020			
Argentina	-2.2	-6.5	-5.7	-5.2			
Brazil	1.1	-5.2	-5.3	-5.0			
Colombia	3.3	-2.6	-2.4	-2.0			
Chile	1.1	-4.0	-4.5	-3.0			
Ecuador	0.1	-6.5	-6.3	-6.0			
Mexico	-0.1	-6.5	-6.6	-6.0			
Peru	2.2	-4.0	-4.5	-4.7			
Venezuela	-25.5	-18.0	-15.0	n.d.			
Latin America and the Caribbean							
2020	0.1	-5.3	-5.2	-4.6			
2021			3.4	2.6			

Sources: ECLAC (2020b), IMF (2020b) and World Bank (2020a)

All the organizations acknowledge the region's poor economic performance in recent years, as well as the economic shocks that they face as a result of COVID-19. The shocks include those mentioned above: the contraction of international trade, the interruption of value chains and the reduction in commodity prices. To these we must add the fall of intraregional trade as a result of the recession in all the countries of the region, an essential issue for the trade in manufactured goods. The collapse of tourism is an additional element for the countries which depend on that activity. Added to this are the effects of financial turmoil: the flight of portfolio capital, increases in risk spreads and exchange rate depreciations with their inflationary effects. To these we should add the reductions in remittances, both from abroad (especially from the United States and Spain) and intraregional, which will fall overall by 19% in 2020 according to World Bank forecasts (2020b).

¹³ See in this respect the projections of the principal research centre of Colombia, Fedesarrollo (2020), whose most optimistic scenario is a fall of 2.7%, but also contemplates two alternatives, with contractions of GDP of 5.0% and 7.9%.

¹⁴ If the data of the ten economies for which there has been information since 1900 are added together (Table 1 of the Statistical Appendix of Bértola and Ocampo, 2012), the only worse years would be 1914 and 1930.

The effects of the pandemic and the confinement measures have also begun to be felt. The pandemic has arrived with a lag, which has been an advantage for governments that decided to take early action (unfortunately, not all). The problems of Guayaquil have been the most serious, but the trajectory of confirmed cases and deaths in Brazil has also been of great concern. As many analysts have highlighted, the scale of the contagion, including the deaths associated with the pandemic, may be underestimated due to a lack of testing to detect the disease; the data from different countries are not, moreover, strictly comparable, due to differences in the way their data are collected and reported.

In terms of economic policy, the great constraint is the fiscal margin available to countries in the region, which is much more limited than the fiscal space they had to tackle the North Atlantic financial crisis, an issue which has been highlighted by several analysts from the Inter-American Development Bank (IADB). Izquierdo and Ardanaz (2020) emphasize that the average deficit of countries of the region was 3% of GDP in 2019 compared to 0.4% in 2008, while the average public debt was 62% of GDP in 2019 compared to 40% in 2008.

The response of countries of the region has been in line with international trends, but has been very diverse. Central banks have provided extensive liquidity (with the obvious restriction for dollarized countries). Governments have adopted fiscal programmes, especially in support of the health sector and poor and vulnerable households, as well as reduction or deferral of certain tax payments, but the scale of the corresponding packages is very variable. According to IADB estimates, the largest, as a percentage of GDP, are those of El Salvador, Peru, Chile and Brazil (Pineda et al., 2020). Some have also launched credit lines or loan guarantees on a large scale. In this regard, the most notable cases are those of Chile, Colombia, Peru and Uruguay. Despite the foregoing, the magnitude of macroeconomic support in most countries is modest compared with that of the developed countries.

The social impacts are and will be substantial, as pointed out by ECLAC (2020a and 2020b). They arise, moreover, in a context of deterioration in social conditions since 2014, largely as a result of the poor economic performance of the region. The inadequate investment in health is reflected in weak and fragmented systems which do not guarantee universal access in many countries. The interruption of school attendance also means an interruption of school meal programmes, which several countries have sought to provide in various ways, including with cash subsidies. The great digital divide associated with diversity of access to computers and digital platforms means that students from humble backgrounds are particularly affected and even prevented from benefiting from virtual education. On top of that, the informal character of employment means that a high proportion of households in confinement have no income, and may not have the help provided by conditional cash transfers if they are not poor, but are nevertheless vulnerable. Many micro and SMEs may end up in bankruptcy, which is extremely worrying, as they generate a high proportion of employment in the region. As a result of all this, ECLAC estimates that poverty will increase from 30.3% in 2019 to 33.8% in 2020, which is equivalent to an additional 24 million people in a state of poverty.

4. An overview of international financial cooperation during the crisis

The debate on international cooperation has highlighted that, while the pandemic has affected Western Europe and the United States earlier and has reached developing countries with a time lag, the latter are economically and socially more vulnerable. The reasons are many: confinement is much costlier for a population with the limited resources of developing countries, who live in small and crowded spaces, sometimes without access to water; income support for the poor sectors does not exist or does not reach the intended population; health systems are of poor quality and do not cover the whole population; and informality of employment is widespread and means that confinement leaves a wide section of the population without an income. Added to all this is

¹⁵ See the monitoring by the IADB of the spread of the pandemic in the region: www.iadb.org/en/coronavirus/current-situation-pandemic.

the fact that, as already indicated in relation to Latin America, fiscal space is more limited and access to credit to finance greater public spending is more restricted. For this reason, there is agreement about the need to adopt ambitious policies to support emerging and developing countries. The financial requirements of these countries are immense: \$2.5 trillion according to both IMF (Giorgieva, 2020a) and UNCTAD (2020a) estimates.

Faced with these vulnerabilities and needs, the international cooperation which has been agreed up to now has been extremely limited, both in terms of actions taken and resources to which emerging and developing economies will have access. This is particularly true of the group of middle-income countries, to which almost all Latin American countries belong, ¹⁶ as there have been somewhat more relevant actions —albeit insufficient—for lower-income countries¹⁷ and it is much more likely that the latter will intensify.

The weakness of multilateral cooperation was particularly evident in the meetings of the Group of 20 and the Bretton Woods institutions that took place in Washington in the third week of April. Indeed, the Spring Meetings of 2020 will be remembered, not only for having been the first in history which took place in a virtual format, but also for the limited international decisions adopted in the face of the magnitude of the current crisis. All this happened despite the leadership of IMF Managing Director, Kristalina Georgieva.

There have, of course, been ambitious promises and sincere expressions of international solidarity. The Heads of State of the Group of 20 committed at the end of March "to do whatever it takes and to use all available policy tools to minimize the economic and social damage from the pandemic, restore global growth, maintain market stability, and strengthen resilience" (G20, 2020a). The Ministers of Finance and Central Bank Directors of the G20 said something similar in their declaration during the meetings of the Bretton Woods institutions.

However, the multilateral actions did not match these promises. In fact, the actions in place are in strong contrast to the "Global Plan for Recovery and Reform" adopted by the G20 Heads of State in London on 2 April 2009 to address the international crisis of the time (G20, 2009). This declaration led to the most important reform of IMF credit lines in history, the largest issue of IMF's Special Drawing Rights (SDR), capitalization and massive increase in the lending of multilateral development banks, and an ambitious reform of financial regulation. With some delay, it also led to the start of efforts to strengthen international tax cooperation, which was assigned to the OECD, the adoption in 2012 of the so-called "Institutional View" of the IMF on capital flows, and the increase and redistribution of IMF quotas; the latter, unfortunately, was five years late due to a delay in the approval of the corresponding resources by the United States Congress.¹⁸

In comparison with these actions, and the needs of the emerging and developing economies, the announcements in the Spring Meetings of the Bretton Woods institutions and the parallel actions adopted by the G20 were minuscule. This limited international cooperation contrasts with the ambitious domestic policies adopted by developed countries. As we saw in a previous section, in the case of the United States, these policies were much more aggressive than those adopted by the North American powerhouse in the face of the 2008–09 financial crisis. In contrast, its support for international actions has been, as we shall see, limited. The European countries also adopted pronounced counter-cyclical policies and were more open to multilateral cooperation. Indeed, the contrast between the aggressive domestic economic policies of developed countries and the limited international cooperation seems to be an important mark of the current crisis.

¹⁶ The exception is Haiti, which is not analysed here for the reasons explained in Note 2.

¹⁷ Includes new IMF resources, debt relief and suspension of debt service during 2020. The World Bank has also significantly increased its programmes for the poorest countries. I shall refer to some of these issues later.

¹⁸ See detailed analysis of these issues in Ocampo (2017).

5. International monetary cooperation and its effects on Latin America

The agenda for monetary issues is broad, as pointed out by Gallagher et al. (2020). It includes six areas: (i) provision of international liquidity; (ii) creation and expansion of IMF credit lines; (iii) guarantees that this institution will have adequate resources to do so; (iv) possible coordination of regulation of capital flows and of decisions by risk rating agencies; (v) actions aimed at managing problems of over-indebtedness in various emerging and developing economies; and (vi) active use and expansion of regional monetary agreements. In the rest of this section, we will analyze these issues and their relevance for Latin America.

In terms of provision of liquidity, the proposal which received the widest support was the issue of at least \$500 billion in SDRs IMF, doubling the issue in 2009 as part of the multilateral policies adopted at that time.¹⁹ To make better use of this issue, a special fund could be created so that countries that will not use the SDRs received could lend them to the IMF to fund its programmes, or use them to support other programmes in favor of developing countries (capitalize multilateral banks or increase official development assistance). It would obviously be useful to have a distribution based on criteria other than quotas²⁰ that determine the allocation of SDRs to countries, but this would require a change in the IMF Articles of Agreement, which would be a prolonged process and hard to accept by the principal members.

Given the share of Latin American countries in IMF quotas, this issue would mean an increase in its international reserves of \$37.7 billion, equivalent to a slight increase of less than 5% of these reserves at the end of 2019 and a little more than 40% of the net capital and financial flows to the region in that year.²¹ The distribution by country would be that shown in Table 3: as a proportion of GDP it would reach 0.7% on average, ranging from 0.6% and 0.8% for most countries, but a higher amount for those for which GDP in dollars has fallen substantially in recent years (over 2% for Nicaragua and Venezuela).

There are more ambitious proposals, including one by some Heads of State and former Latin American ministers (Cardoso et al., 2020) for issuing a trillion dollars of SDRs. Although it would be useful, it would require approval and not mere consultation of the United States Congress, which is required when the SDRs allocated to the United States exceeds its IMF quota – which would doubtless delay the decision.²² This means that the maximum issue that would avoid having to go to that legislative body is equal to the total IMF quotas, which today is around \$650 billion dollars.

Table 2	O	af atia	A	countries in	
Table 5.	Quotas	OI Lauii	Amencan	countries in	IIVIT

		Quota in IMF	Effect of an issue of \$500 billion		
	Million of SDRs	Million of SDRs Million of dollars Percentage of total		Million of dollars	% of GDP
Brazil	11.042	15.120	2.31%	11.574	0.62%
Mexico	8.913	12.204	1.87%	9.342	0.77%
Venezuela	3.723	5.097	0.78%	3.902	2.52%
Argentina	3.187	4.364	0.67%	3.341	0.65%
Colombia	2.045	2.799	0.43%	2.143	0.65%
Chile	1.744	2.388	0.37%	1.828	0.62%

¹⁹ For an earlier version of these suggestions, see Gallagher, Ocampo and Volz (2020b). See also Collins and Truman (2020).

²⁰ As reflected by a lengthy historical debate, the alternative criteria could be level of development, to allocate a larger amount to the poorest countries, or the demand for international reserves of different economies. See a detailed analysis of these issues in Ocampo (2017), Chapter 2.

²¹ The referenced data are taken from ECLAC (2019).

²² This is what happened in 1997, but for a different reason: the change in the composition of IMF quotas. As we saw, the IMF capitalization agreed in 2010 took five years to be approved by the United States Congress.

Peru	1.335	1.827	0.28%	1.399	0.63%
Ecuador	698	955	0.15%	731	0.68%
Dominican Rep.	477	654	0.10%	500	0.59%
Uruguay	429	588	0.09%	450	0.76%
Guatemala	429	587	0.09%	449	0.62%
Panama	377	516	0.08%	395	0.61%
Costa Rica	369	506	0.08%	387	0.65%
El Salvador	287	393	0.06%	301	1.16%
Nicaragua	260	356	0.05%	273	2.09%
Honduras	250	342	0.05%	262	1.10%
Bolivia	240	329	0.05%	252	0.63%
Paraguay	201	276	0.04%	211	0.53%
Total Latin America	36.006	49.302	7.55%	37.740	0.72%

Source: IMF Values in SDRs are converted to dollars at the exchange rate on May 1st. The estimates as % of GDP refer to 2018, based on GDP ECLAC estimates for that year.

Although the proposal for a substantial issue of SDRs had wide support among the members of the IMF and public opinion, it was vetoed by the United States during the Spring Meetings of the Bretton Woods Institutions, with the argument that close to 70% of the resources would go to G20 countries, the majority of which did not need them to tackle the crisis (Mnuchin, 2020). Surprisingly, India supported the view of the United States. Although it is true that somewhat less than two fifths of the SDR issues benefit emerging and developing countries, it is also true that it is the only participation that these countries have in the creation of international money ("seigniorage" as it is called in the economic literature) – the privilege enjoyed by the United States, the Eurozone and, to a lesser extent, other developed countries and China. In fact, the benefits from the issue of SDRs would be considerable for many low-income countries (Collins and Truman, 2020).

It is worth adding that, to contribute to the creation of international liquidity, the United States Federal Reserve relaunched its swap lines with other central banks, following a practice that had already been put into effect during the North Atlantic financial crisis. However, only four emerging economies have access to this mechanism: Brazil and Mexico in Latin America, and the Republic of Korea and Singapore in East Asia (the latter, it should be added, are still classified as emerging, but are already high-income countries). A new mechanism was the creation of a repo instrument, which allows the Federal Reserve to buy Treasury Bonds which countries want to sell to it; this support, however, only benefits countries with large amounts of foreign exchange reserves.

In terms of creation and enlargement of credit lines, the most important reform was the doubling of the IMF's emergency credit lines, of which the relevant one for middle-income countries is the Rapid Financing Instrument (RFI).²³ In the context of simplifying and streamlining procedures, this decision is giving rise to the rapid approval of a multiplicity of credits to a wide range of countries, with resources that can reach as much as \$100 billion – although up to the end of April, the resources utilized barely reached \$15 billion. The fundamental advantage of these lines is the absence of ex-ante conditionality and thus of the "stigma" associated with such conditionality.²⁴ In April, seven Latin American countries (Bolivia, Costa Rica, Ecuador, El Salvador, Panama, Paraguay and the Dominican Republic) had already made use of this credit line, obtaining in total an amount slightly more than \$3.3 billion (Table 4) These are, to date, the modest resources that have been received by the Latin American countries under the new IMF programmes.

²³ On these and other reforms introduced by the IMF, see IMF (2020a).

There is also the possibility that they can be added to the use of other Fund facilities, although in the cases where this has happened, the emergency credits have been granted for less than the amount of the country's quota. This happened with Ecuador on May 1st, when the rapid financing line was approved for 67.3% of its quota.

Table 4. Loans to Latin American countries approved through the Rapid Financing Instrument

Country	Million SDRs	Date of approval	Million dollars
Bolivia	240,1	Abril 17	328,8
Costa Rica	369,4	Abril 29	505,8
El Salvador	287,2	Abril 14	393,3
Panama	376,8	Abril 15	515,9
Paraguay	201,4	Abril 21	275,8
Dominican Rep.	477,4	Abril 29	653,7
Ecuador	469,7	Mayo 1	643,2
Total	2.422,0		3.316,4

Source: IMF. The values in SDRs are converted to dollars at the exchange rate on May 1st.

Table 5 Regular loans to Latin American countries approved by the IMF

	Date of approval	Maturity	Loan	Disbursed					
	(Month, day, year)	(Month, day, year)	(Million SDRs)	(Million dollars)	(Million dollars)				
A. Flexible Credit Line (FCL)									
Colombia	May 1, 2020	Abril 30, 2022	7.849,6	10.748,3	0,0				
Mexico	November 22, 2019	November 21, 2021	44.563,5	61.019,9	0,0				
B. Stand-By Agreemen	ts (SBA)								
Argentina	June 20, 2018	June 19, 2021	40.714,0	55.748,9	43.698,8				
Honduras	July 15, 2019	July 14, 2010	149,9	205,2	109,5				
C. Extended Fund Faci	lity (EFF)								
Ecuador	March 1, 2019	March 10, 2022	3.035,0	4.155,8	1.653,9				
D. Stand-By Credit Fund (SCF)									
Honduras	July 15, 2019	July 14, 2021	74,9	102,6	34,2				
Total			96.386,9	131.980,7	45.496,4				

To these are added those facilities which benefit other countries, but were already in effect before the current crisis: the flexible credit lines of Colombia (renewed on May 1st) and Mexico, the stand-by credits of Argentina and Honduras (one of them concessional in the latter case) and the Extended Fund Facility granted to Ecuador²⁵ (Table 5). Thus, eleven countries in the region are already receiving some support from the IMF. As the flexible credit lines operate as a kind of "insurance" for the countries, they have not so far been disbursed: disbursements of the other credit lines total some \$45.5 billion, the bulk of them to Argentina. It is possible that other countries may request access, whether to the flexible credit line (Peru, perhaps Chile and Uruguay), the emergency line and perhaps some of the more regular programmes. The exception in terms of access is Venezuela, whose request for credit for \$5 billion was rejected by the IMF in March with the argument that there was no clarity among the member states about who is the legitimate president of the country.

Another of the recommendations which has been under discussion is the creation of an IMF swap facility. This recommendation was made by the IMF's own technical staff two years ago (IMF, 2017) but was rejected by the Board. The G20 Eminent Persons Group on Global Financial Governance (2018) subsequently made a

This credit was suspended on May 1st, at the time when Ecuador was given access to the emergency credit line. Ecuador will, however, seek again long-term credit support from the IMF.

similar recommendation. It may be said that the short-term liquidity line created by the IMF in April responds to this demand, but it is a highly partial response. It will operate as a revolving credit line up to 145% of the country's quota and without ex-ante conditionality, but access is limited to member states "with very strong policy frameworks and fundamentals", as in the case of the flexible credit line. So, few countries will have access to it. On top of that, there are doubts about the extent to which the economic deterioration generated by the current crisis will be taken into account in this evaluation. Furthermore, the attraction of the new credit facility is limited because its resources are much lower than those of the flexible credit line and cannot be combined with other Fund credits.

In order to finance the greater demand for credits, the IMF needs to increase the resources available to it up to an amount that the Managing Director has estimated in a trillion dollars. In this regard, an unfortunate decision was adopted last year not to increase quotas and defer this decision until 2023. It is deplorable that the G20 has not decided to accelerate this process, given the additional resources that the Fund needs to tackle the COVID-19 crisis and the wide recognition that this must be the institution's principal resource. The additional funds will be obtained from the doubling of the New Arrangements to Borrow (NABs) approved in January 2020, reaching close to \$500 billion and bilateral credits granted by several countries. The major contribution of the United States will be its support for the NABs. It should be noted that Brazil, Chile and Mexico also make a modest contribution to this mechanism and, together with Peru, to the bilateral lines. Other Latin American countries, notably Colombia, should also support these mechanisms.

A fourth action line which has been suggested by several analysts is a coordinated regulation of capital flows to curb, in particular, the massive flight of portfolio capital from emerging economies.²⁶ This action would be in line with the "institutional view" on capital flows approved by the IMF in 2012 (IMF, 2012). Similarly, it has been suggested that credit rating agencies should suspend their downgrading of ratings (or outlook within rating grades) during the crisis, as these feed the flight of capital. Mexico and Colombia have already been affected by decisions of this kind, although they have maintained their investment grade; Argentina and Ecuador, as well, within their speculative grades. Neither the G20 nor the IMF have expressed any views on these issues.

The fifth subject, debt relief, has been the subject of a wide range of proposals, both institutional (United Nations, 2020b, UNCTAD, 2020c) and by analysts (see, in particular, Bolton et al., 2020, Brown and Summers, 2020 and Reinhart and Rogoff, 2020). This is a field where partial actions have been adopted in relation to low-income countries, but not to middle-income countries such as those of Latin America.

The IMF decided in April that 25 vulnerable members (to which four more could be added) will be exempt from repayments and interest on their debts to the institution during an initial period of six months, thanks to the resources available in the renewed Catastrophe Containment and Relief Trust (CCRT). In turn, the G20 offered a suspension of debt service of all International Development Association (IDA) countries for the rest of the year, a measure which, according to Brown and Summers (2020) should be extended to the whole of 2021. The corresponding decision has already been adopted by the Paris Club and China will almost certainly take a similar decision, although on a bilateral basis. It is not clear, however, whether private creditors will, as requested by the G20. This programme does not cancel the debt, which will continue in place and will continue to accrue interest. In Latin America, Honduras and Nicaragua will benefit from this decision.

In the case of middle-income countries, there are critical cases which require restructuring of the debt, with major relief elements. The most important cases in Latin America are Argentina and Ecuador. The first of these countries has already made an offer to its creditors for a large reduction in its obligations: a three year grace period, a major reduction in interest (2.3% on average, which compares with rates of 10% for the majority of its bond issues) and a modest reduction in the principal of 5%. It is unlikely that this offer will be accepted by the creditors, and this country could thus end in a default. Although there are proposals for fairly general debt

See, on this subject and that of rating agencies, Gallagher et al. (2020).

standstill for emerging and developing economies (see in particular UNCTAD and Reinhart and Rogoff, among the works cited above), other proposals are rather aimed at recommending voluntary mechanisms.

The most interesting proposal is that of Bolton *et al.* (2020), who suggest creating a central financial credit facility in the World Bank or regional development banks that would benefit countries who choose to participate on a voluntary basis, which would facilitate deferral of amortizations and the use of the interest to finance the health emergency. The interest would, however, continue to be an obligation of the debtor countries that must be paid in the future, and creditors would thus retain a right over them, as well as to amortizations. In this way, the credit facility would operate as a mechanism for refinancing debt service during the emergency. It would apply to all bilateral and commercial debts on equal terms. Apart from its voluntary character, it would be subject to intermediation and strict monitoring by the multilateral bank managing it.

It should be added that, over and beyond the short-term actions, the United Nations and UNCTAD have suggested that an institutional mechanism should be created for renegotiation of sovereign debt, a subject which has been on the agenda for the last two decades, with progress limited to the definition of principles and clauses that allow individual renegotiation of a country with its creditors, but with no specific institutional framework in place.²⁷

It is important to emphasize that it makes no sense for Latin America to adopt a uniform rule in this area. Indeed, as shown in Figure 2, which shows the evolution of the JPMorgan's EMBI index, although the risk spreads on bonds issued by the emerging economies rose during the current crisis, they remained below those reached during the North Atlantic financial crisis and, especially, those which prevailed after the Russian default in August 1998 (which, in turn, succeeded the 1997 Asian crisis) for close to years. Most importantly, with the strong fall in bond yields used as a benchmark to calculate these margins (ten-year United States Treasury Bonds), the bond yields of emerging economies have remained on average well below those reached during previous crises, and even the levels reached during upheavals in the international markets for emerging economies in 2018.

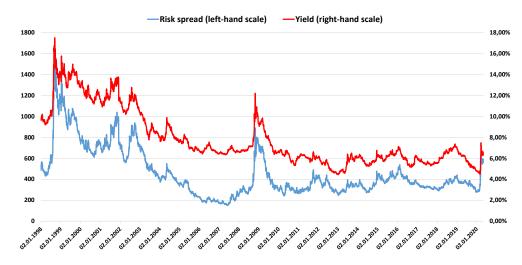


Figure 2 Risk spreads and yields on emerging market bonds (JPMorgan EMBI Index)

Source: Bloomberg

Furthermore, bond markets for emerging economies have begun to open up much more rapidly than after the North Atlantic financial crisis, when they took a little over twelve months after the collapse of the North

²⁷ See a review of the corresponding debate in Ocampo (2017), Chapter 5.

American investment bank, Lehman Brothers, to open up. This shows that there is again a "search for yield" by several investment funds in developed countries, to offset the very low or negative yields of developed countries' bonds. An additional reflection is the fact that the capital flight from emerging economies, which reached \$66.1 billion in March, fell to \$7.4 billion in April (JPMorgan, 2020).

Latin American countries have already benefited from bond issues by Panama at the end of March and since mid-April, by Peru, Guatemala, Mexico, Paraguay, two public companies (Ecopetrol of Colombia, with minority private participation, and Codelco of Chile) and, as we shall see, the Central American Bank for Economic Integration (CABEI). The Mexican issue on 22 April was the largest in its history: it placed \$6 billion with various maturities, at a very reasonable cost (5% for 12-year bonds, the rate most comparable to those of the EMBI) and was oversubscribed 4.75 times.

In this context, a uniform debt solution for the countries of the region does not make sense, as it does not for middle-income countries in general. There are three different cases which need to be addressed separately: (i) those for which a profound restructuring of their debt is needed; (ii) allowing other countries to apply voluntarily to a debt standstill mechanism such as that proposed by Bolton et al. (2020); and (iii) countries with access to new private financing, which would keep up debt services and would mix such financing with credits from the IMF and multilateral development banks.

It is worth highlighting, lastly, the role of regional monetary mechanisms. These mechanisms expanded strongly after the North Atlantic financial crisis and now have \$585 billion available, equivalent to some 60% of those available to the IMF (Gallagher et al., 2020, Table 1). They are highly concentrated in European funds and the East Asian Chiang Mai Initiative. The deepening of relations between the IMF and regional agreements to form a denser Global Financial Safety Net must be the subject of an active effort, as recognized by both the IMF (2017) and the regional agreements (Regional Financial Agreements, 2018). The strengthening of this network should be accelerated during the crisis.

This collaboration must be based on the complementarity, but also the independence of the institutions, and respect for their respective mandates and governance structures. Although without adopting hierarchical principles of any kind²⁸, the regional agreements must respect the preferential creditor status of the IMF. It is not appropriate, however, for there to be a formal relationship with IMF programmes, which were the subject of much criticism during the Eurozone crisis and are one of the reasons why the resources of the Chiang Mai Initiative have not been used. In the latter case, the basic reason is that, beyond the 30% of resources to which a country is entitled, it must have a formal programme with the IMF, a rule which the members of that agreement do not view favourably in light of the experience of the Fund programmes during the Asian crisis at the end of the last century.

In the Latin American case, we have the Latin American Reserve Fund (FLAR, according to its Spanish acronym), to which eight countries belong: the five Andean countries plus Uruguay, Costa Rica and Paraguay, in the order in which they joined the organization. As part of the measures to strengthen the Global Financial Safety Net, an important task is to expand its membership, until all of the Latin American countries are members. This task has been on the organization's agenda, but its results have been only a partial success: efforts in this direction need to be intensified during the current crisis.

FLAR has had a very successful history of support to its members during the various crises that it has faced, starting with the Latin American debt crisis, which broke out just after its predecessor, the Andean Reserve Fund (FAR), had been created. The member countries used it, at times, as a substitute and at others as complement to the IMF resources. Indeed, there are several cases where countries have requested FLAR support when they did not want to have a formal IMF programme (for example, Colombia in the 1980s). In any case, given the

²⁸ This means that the principle of "lead agency" proposed by the IMF (2017) must not be adopted.

limited resources available to FLAR, the IMF is irreplaceable for large-scale programmes. In that case, countries can use FLAR as a complement or a bridge to an IMF loan, taking advantage in the latter case of the greater flexibility of the former in approving financing.

Table 6 FLAR: Capital contributions and maximum credit limits (Million dollars)

Country Su			Marrianna	Maximum credit limit by type of financial support			
	Subscribed capital	Paid-up capital	Maximum credit limit	Balance of payments support	Liquidity facility	Contingency faciity	
Bolivia	328,1	256,4	666,6	666,6	282,0	538,4	
Colombia	656,3	512,9	1.282,3	1.282,3	512,9	1.025,9	
Costa Rica	656,3	513,1	1.282,7	1.282,7	513,1	1.026,1	
Ecuador	328,1	256,5	666,8	666,8	282,1	538,6	
Paraguay	328,1	256,0	640,0	640,0	256,0	512,0	
Peru	656,3	512,9	1.282,2	1.282,2	512,9	1.025,8	
Uruguay	328,1	257,0	642,4	642,4	257,0	513,9	
Venezuela	656,3	30,7	76,7	76,7	30,7	61,3	
Total FLAR	3.937,5	2.595,4	6.539,7	6.539,7	2.646,6	5.242,0	

Table 6 shows the maximum credit limits that member countries have with FLAR, both overall and for each financing facility (balance of payments, liquidity and contingency). The total amount for member countries comes to just over \$6.5 billion. Almost all of it is available because there is only one credit in effect, with Ecuador (for balance of payments) for \$205 million, while the others taken by Costa Rica and Venezuela were paid in January and March of this year. As the Venezuela credit was paid with the capital contribution of that country to the institution, the support that FLAR can give to it is limited today.

The great advantage of FLAR is that its programmes do not have any ex-ante conditionality, although there is an obligation on the country requesting the credit to present a macroeconomic programme to the organization. Its chief disadvantage, as has been indicated, is the scale of the resources available to it, so its lending will almost certainly have to be complementary to that of the IMF, whether as a bridge or as a parallel programme – although not a joint one. It must be added that a further disadvantage during the current crisis is that FLAR facilities can only be used for balance of payments needs and, thus, cannot be used to finance governments at a time when these demands are very high; the IMF programmes can, however, be used for fiscal purposes. Perhaps, therefore, a temporary exception might be appropriate, allowing balance of payments credits to also be used for fiscal purposes.

6. Cooperation from the multilateral development banks

One of the most important financial instruments that the international community and a broad range of countries, both developed and emerging and developing, have is the development banks. These institutions have the fundamental objective of supporting long-term development policies —fostering innovation, infrastructure development, promotion of equity and environmental sustainability—, but they can also be used as countercyclical instruments. Moreover, some projects associated with long-term strategies can be pushed during crises to support the recovery of economic activity. These banks, therefore, are a powerful "visible hand" which governments can use to mitigate the economic and social consequences of the current crisis.

The network of development banks includes over 400 institutions at the global level, with total assets of over \$11 trillion and they lend some \$2 trillion per year, according to estimates of the Agence Française de Développement (AFD). They include the World Bank Group, as well as several regional banks (such as the IADB

and the Development Bank of Latin America, CAF, according to its historical acronym²⁹), subregional (CABEI) and interregional banks (the Islamic Development Bank) and a wide range of national banks widely varying in size – from the China Development Bank and the German KfW to small institutions in some developing countries. One of the great potential benefits is to act as a network of institutions, with multilateral banks supporting the activities of national banks. If the entities making up this network increased their lending by 20%, they could mobilize an additional \$400 billion a year; with leverage of private resources, this amount could be doubled (Griffith-Jones, Morodon and Ocampo, 2020).

During the North Atlantic financial crisis, multilateral development banks played an important counter-cyclical role, offsetting, at least partially, the contraction of private international financing (Ocampo et al., 2011). Furthermore, the counter-cyclical role that these institutions can fulfil was finally explicitly recognized by the banks and the economic authorities themselves. This lack of recognition had ignored the lessons of the past, which suggested that, in addition to the provision of liquidity by monetary institutions in times of crisis, it is equally important to provide official long-term financing to support public spending and public and private investment – the role precisely fulfilled by multilateral development banks.

As a group, these institutions increased their credit commitments to emerging and developing countries by 71% between 2008 and 2009.³⁰ Their disbursements grew by 45% in 2009 and continued to show dynamic growth in 2010. This lag in disbursements occurred despite the measures adopted to accelerate them: loan advances and fast track loans. The net disbursements (i.e. net of payments by countries to the multilateral banks) behaved in a less dynamic fashion, holding back the support to countries. It should be emphasized, however, that thanks to the changes in the policy for approving credits and the creation of a fast-track emergency disbursement fund, the IADB performed better than other multilateral banks. It was able to reduce the lag and strongly increase disbursements in 2009 – but the special facilities to address the crisis subsequently lapsed.

The World Bank responded with particular energy to the crisis, almost doubling its lending commitments, but, curiously, it was much more aggressive in its response to middle-income countries than to low-income countries, as reflected in the greater growth in loans by the International Bank for Reconstruction and Development (IBRD) than those of the International Development Association (IDA). This was also true for the multilateral banks as a whole, and was reflected in a decrease in credit commitments to low-income countries, from 32% in 2007 to 22% in 2009.

The response of the banks was conditioned in part by the limits on their capital. For this reason, as I pointed out, in the Plan approved at its meeting in London in April 2009, the G20 agreed to support the capitalization of the multilateral development banks. That of the Asian and African Development Banks was rapid and massive: a 200% increase in that year in both cases. That of the IADB, approved in March 2010, was less ambitious, gradual and less than hoped for by the Latin American and Caribbean countries: some 70%. That of the World Bank took place in April 2010, was even more modest, and formed part of a set of reforms aimed at increasing the participation of emerging and developing countries in the capital of that institution. (On the capital of these institutions, see Table 7 below).

This counter-cyclical response moderated, although it certainly did not totally offset, the impact of the strong fall in private flows to these countries. Another area in which they played an important role was the rapid provision of commercial credit services, which were used by a wide range of private banks.

Two important lessons of the response of the multilateral banks during the North Atlantic financial crisis are, therefore, the need to have ex ante mechanisms for rapid disbursements during crises, and for greater

²⁹ I refer to CAF as a regional bank, as this is reflected in the name of the institution adopted in 2010, although it kept the initials of its predecessor, the Andean Development Corporation. Its members are Latin American countries, with the exception of a few Central American ones (only Panama and Costa Rica are members) and some countries of the Caribbean, Spain and Portugal.

These data and those which follow may be consulted in Ocampo et al. (2011), Figure 7 and Tables 11 and 12.

automaticity in the repositioning of their capital. An alternative to accelerate disbursements which was used at that time and, as we shall see, has been used by some institutions during the current crisis, is to allow reassignment of credits already approved for other emergency purposes. Another could be to defer debt service with the institutions themselves – a practice which, however, could affect their credit ratings. It should be emphasized that rapid access to resources is particularly critical in the sphere of social protection, where the speed of delivery of resources is the essence of its effectiveness.

The relative importance of support by the multilateral development banks to Latin American countries has changed radically over recent decades. The World Bank played a lead role until the 1980s, supplying over half of loans. However, as shown in Figure 3, its loans to the region have not shown any increasing trend since the nineties. Nevertheless, the World Bank has continued to play a critical role during crises, as shown by the increase in loans to the region in 1998–99 and especially in 2009–10.

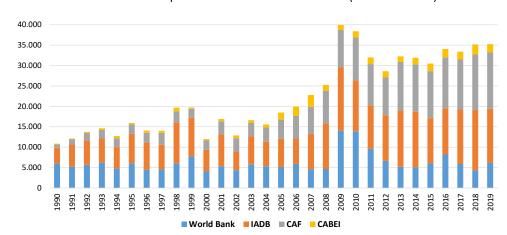


Figure 3. Loans from multilateral development banks to Latin America (Million dollars)

Source: Respective institutions

The lead was taken over by the IADB in the nineties and subsequently by CAF and CABEI. The dynamic of CAF has been particularly important: representing barely a fraction of IADB loans to Latin American countries in the nineties, it came to emulate it, providing as much in the way of resources as the IADB in recent years. If the loans to the private sector by the Inter-American Investment Corporation are added to this, the IADB Group continues to be more important. It should also be pointed out that CAF is the only one of the four banks where there is not division between borrowers and non-borrowers and, thus, all its members can benefit from its credits. Although CABEI is a much smaller institution, it has special importance for the Central American countries: it represents about one fourth of the stock of multilateral loans to these countries (with the exception of Panama) and has been increasing its share, competing with the IADB in recent years as the major source of financing in the subregion.

It should be noted, however, that the response capacity of the World Bank and the IADB to the 2008-09 crisis was much more aggressive than that of CAF and CABEI. This suggests that, during periods of crisis, the implicit support of the developed countries, in particular the United States, facilitates access to capital markets on advantageous terms. Conversely, CAF and CABEI can find themselves partially affected by the closure of capital markets or the higher cost of credit for emerging economies during these periods.³¹ It should be emphasized, however, that CABEI joined in the wave of bond issues by Latin American countries in recent weeks, selling a five-year bond for \$750 million on 29 April, the largest issue in its history, with a coupon of only 2%.

³¹ CAF may now find itself affected by the fall in its credit rating which occurred at the end of 2019 because of its loans to Venezuela, despite the fact that these have been paid, as have those that the country had with FLAR, with the contribution of capital to the institution.

As shown in Table 7, in terms of authorized capital and equity, CAF was the bank which had the greatest growth between 2007 (before the onset of the crisis at that time) and 2019. Both CAF and CABEI were capitalized earlier than the World Bank and the IADB during the crisis; in addition, as we saw, the capitalization was gradual in the last two cases. In 2018, a new capitalization of the World Bank was approved: an increase in paid-up capital of the IBRD of \$7.5 billion and the International Finance Corporation (IFC) of \$5.5 billion. In addition, as a whole, the capital of the IFC has grown much more than that of the IBRD since the 2008–09 crisis (by 95%), based essentially on the reinvestment of profits. In turn, in December 2019, a capitalization of CABEI from \$5 to \$7 billion was approved, and finalized in April, so that it now exceeds CAF in terms of capital growth since 2007.

Table 7. Authorized capital and equity of the multilateral development banks that support Latin America (Million dollars)

	Authorized capital			Equity				
	IBRD	IADB	CAF	CABEI	IBRD	IADB	CAF	CABEI
2007	189.801	100.953	5.000	2.000	39.926	20.353	4.127	1.636
2008	189.801	100.938	10.000	2.000	41.548	19.444	4.554	1.708
2009	189.918	104.980	10.000	5.000	40.037	20.674	5.287	1.813
2010	189.943	104.980	10.000	5.000	37.555	20.960	5.753	1.929
2011	193.732	104.980	10.000	5.000	39.683	19.794	6.351	2.028
2012	205.394	116.880	10.000	5.000	36.685	20.681	6.865	2.142
2013	223.181	128.781	10.000	5.000	39.523	23.550	7.817	2.268
2014	232.791	144.258	10.000	5.000	38.985	23.697	8.763	2.396
2015	252.821	156.939	15.000	5.000	38.637	25.253	9.524	2.573
2016	263.329	170.940	15.000	5.000	37.063	26.460	10.474	2.723
2017	268.937	170.940	15.000	5.000	39.798	32.247	11.122	2.831
2018	274.730	170.940	15.000	5.000	41.844	32.929	11.863	3.198
2019	279.953	170.940	15.000	5.000	42.115	33.871	12.797	3.300
Growth 2007-19	47.5%	69.3%	200.0%	150.0%	5.5%	66.4%	210.1%	101.8%

Source: Respective institutions

All the banks which serve the region have adopted special support measures during the crisis: special lines to address the crisis, fast-track approval, although with modest resources: increases in the scale of credit programmes, within their capital restrictions: streamlining of credit approvals; and, in several cases, the possibility of reassigning credits already approved to the needs of the emergency. Beyond completing the capitalizations of the World Bank Group in 2018 and CABEI in 2019, there have not been any announcements of capitalization of the banks since the onset of the COVID-19 crisis.

According to the presentation by the President of the World Bank to the Development Committee on 17 April, the programme to tackle the crisis is based on three pillars: (i) protecting the poorest and most vulnerable households; (ii) supporting companies and saving jobs; and (iii) helping developing countries to implement emergency health programmes and strengthen economic resilience (Malpass, 2020b). Two important elements of the packages announced are the significant weight of resources destined for low-income countries —thus correcting one of the problems of the World Bank's programme during the crisis a decade ago— and the emphasis on actions aimed at the private sector through the IFC, offering loans for international trade, support for working capital and medium-term financing to private companies that are struggling with interruptions of supply chains.

The immediate support package approved in mid-March made \$14 billion of new financing available to countries, in accelerated form: \$2.7 billion from IBRD, \$1.3 billion from IDA and \$8 billion from IFC (including \$2 billion of reassigned resources), and the prioritization of \$2 billion from the Group's existing portfolio. The resources of the fast-track facility have already benefited five Latin American countries —Argentina, Ecuador, El Salvador, Honduras and Paraguay— in April, although with modest resources, which in total amounted to \$115 million (credits of \$20 million, except Argentina which was \$35 million).

Beyond the emergency programme, the Bank, at the end of March, approved a package of \$160 billion for the next 15 months. This amount means a substantial increase over the annual average of \$64.4 billion approved in 2009–10. This more extensive package includes emergency credits, which can be activated or added to existing projects, and the accelerated restructuring of countries' projects. Five Latin American countries have already benefited from this extended package in April: Bolivia, Colombia, Dominican Republic, Honduras and Panama.³² Combined with the emergency credits, Latin America has, therefore, received approval from the World Bank for \$695 million in April, which is above the monthly average in recent years, but still less than the monthly average amounts approved in 2009–10.

It should be highlighted that in March, the President of the World Bank expressed to the G20 the need to link recovery policy to structural reforms: "Countries will need to implement structural reforms to help shorten the time to recovery and create confidence that the recovery can be strong. For those countries that have excessive regulations, subsidies, licensing regimes, trade protection or litigiousness as obstacles, we will work with them to foster markets, choice and faster growth prospects during the recovery." (Malpass, 2020a). This association is unfortunate, given the recent rejection by many emerging and developing countries of this view, and the minimal relationship that it has with the economic emergency, where the universal pattern has been increased state intervention.

The programme announced by the IADB to tackle the crisis started from the principle that the virus affects not only people's health, medical services and hospital care, but also the economy, the survival of many companies, family finances and, if not properly managed, it can generate a social crisis. It established four priorities: (i) immediate public health responses; (ii) measures to protect the incomes of the most affected population groups through existing transfer programmes, and extraordinary transfers to workers in the informal sector and companies particularly affected by the crisis; (iii) assistance to SMEs, through credit facilities, guarantees of liquidity, financing of foreign trade, restructuring of loans and support for supply chains; and (iv) support for countries in the design and implementation of fiscal measures to finance the response to the crisis, continuity plans for the execution of public spending and procurement, and measures to contribute to economic recovery.

The programme includes an adjustment of its credit lines and streamlining of approval processes. In terms of resources, it includes the allocation of an additional \$3.2 billion to the programme initially stipulated for loans in 2020. These resources, added to the available programmed resources make up to \$12 billion available to countries which can be used to deal with the health crisis and the economic effects stemming from the pandemic. This amount, however, would be very similar to the annual average credits in recent years, so that, more than the amount, the priority has been the reassignment of resources to support the battle against the pandemic. In immediate terms, it has also offered countries the possibility of reassigning already approved loan resources to the new priorities generated by the emergency, in an amount equivalent to 10% of each loan or up to \$50 million (whichever is greater). The private portfolio of the Inter-American Investment Corporation amounts to a further \$5 billion and includes lines of support to financing of production chains and trade, and to support banks in a context of severe liquidity constraints.

³² Bolivia, with a reassignment of \$20 million of an existing credit, Colombia with a contingent loan for \$250 million, Dominican Republic with a programme of emergency measures for \$150 million, Honduras with a loan of \$119 million for disaster risk management and Panama with one of \$41 million for development policies.

Added to all this are the technical cooperation resources, both their own and from non-regional partners, which give priority to platforms for exchange and learning, and development of a menu of prototype projects to provide immediate responses to the specific demands of countries. Analyses of the effects and alternatives to address the various dimensions of the crisis, which are published in the IADB Research Department series, "Ideas Matter", have also made a very important contribution.

For its part, CAF is assisting in the emergency with four specific actions in terms of credit. The first is a contingent line of credit, approved at the beginning of March, of up to \$300 million to respond flexibly to the needs of public health systems: these resources allow support of up to \$50 million per country. The second is a rapid disbursement emergency credit line approved at the end of March of up to \$2.5 billion, to speed up approval of operations that support the emergency measures which are being adopted by countries. The third is the possibility of reprogramming existing credits, including allowing changing their objective and destination. The fourth is the priority given to working with national development banks to support SMEs. It is not clear, however, that CAF can increase its credits substantially above the high levels which it achieved both in 2018 and 2019, the highest in its history, and which were leveraged by the capitalization of the entity in 2015.

Added to this are the non-reimbursable technical cooperation resources of up to \$400,000 per country, from which several member countries have already benefited. These resources are intended to ensure the safety of people working in prevention, containment and care of COVID-19 patients and the purchase of basic supplies.

Finally, on 31 March, CABEI launched its Programme of Emergency Support and Preparation in the face of COVID-19 and Economic Recovery to the value of \$1.96 billion. In terms of credit, it comprises three components: \$1 billion in credits to support the management of the liquidity of the central banks of regional founder and non-founder members, \$3 \$600 million of emergency budgetary support, and \$350 million to provide support for liquidity in a country's financial sector with the objective of supporting micro and SMEs. It should be emphasized that, unlike the IADB and CAF, the recent capitalization of the entity and the bond issued at the end of April allow it to significantly increase credits, up to some \$3 billion, which means growth of 45% in relation to the average achieved during the last few years.

The rest of the emergency programme is made up of non-reimbursable resources: \$8 million for emergency activities of the Central American Integration System (SICA), \$2.1 million for the purchase of testing kits, medicines and medical equipment for the detection of COVID-19, and \$25,000 for prevention and contingency campaigns in the Trifinio region (El Salvador, Honduras and Guatemala).

Finally, it should be emphasized that the net contribution of the multilateral development banks will be less, due to the delays in disbursements of approved credits and the amortization of previous debts by countries. This also happened, as we saw, in 2009. Thus, overall, and in the absence, in particular, of additional capitalizations of IABD and CAF, the resources provided by the multilateral banks to Latin American countries will increase modestly in comparison with the response to the North Atlantic financial crisis, despite the fact that the effects of the current crisis are stronger. For this reason, actions in this field, as on the monetary front, must be substantially reinforced to tackle the severe economic and social problems generated by COVID-19.

7. Conclusions

The current economic crisis will be remembered not only for being the worst since the Great Depression and one in which the domestic policies adopted by the developed countries were ambitious, but also by the limited multilateral financial cooperation agreed. This is true, in particular, of the measures to support middle-income economies. The actions in favour of low-income countries have been stronger, but also insufficient.

³³ The regional founder members are Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, and the regional non-founder members are Panama, Dominican Republic and Belize.

Clearly, multilateral action has been far from the "whatever it takes" approach to which the G20 Heads of State committed at the end of March.

In terms of international monetary cooperation, the most frustrating has been the refusal to issue SDRs by the IMF, the lack of a decision and even proposals to advance the increase of IMF quotas, and the lack of collective measures to tackle the flight of capital from the emerging economies and to halt the reduction of credit ratings by the agencies concerned. Latin American countries have benefited from the IMF emergency credit lines, although with resources that are modest, but can access other credit facilities of that institution if they so wish. The eight member countries of FLAR also have the possibility of accessing the support of that regional organization. The crisis must give rise to an initiative to expand the membership of this regional body.

In terms of foreign debt, a diverse approach would be useful which supports ambitious restructuring of foreign debt of those countries that need it (Argentina and Ecuador, in particular) and create a voluntary supervised multilateral mechanism for a debt standstill for those countries that require it. In addition, the early recovery of the bond market of emerging economies since mid-April is good news, and has allowed access to private funds for several Latin American countries and public sector firms, as well as for CABEI. It should be added that, beyond the short-term actions, it is essential to put back on the table the need to negotiate the creation of an institutional mechanism to renegotiate sovereign debts.

The multilateral development banks that serve the region have created various emergency credit lines to tackle the crisis, streamlining procedures and several of them have allowed rechanneling of some already approved credits to support measures adopted by countries to tackle the health, social and economic emergencies generated by COVID-19. The most dynamic has been CABEI, supported by a recent capitalization. The World Bank has also increased its credits to the Latin America, although they are still lower than those financed by that institution during the previous crisis. The two principal multilateral banks for the region, IADB and CAF have also taken important measures, but they face lending limits and need to be capitalized to support the countries of the region during the crisis in a more aggressive way. As a whole, in terms of resources, the support by the multilateral banks to Latin American countries programmed to date is insufficient.

It should be remembered, finally, that the economic problems of a wide range of Latin American countries were already acute during the years preceding the current crisis, and that the slow growth during those years put a brake on and reversed in part the improvement in social indicators which had been experienced since the start of the century. Moreover, economic growth in the region has been slower in the past three decades than during the three decades prior to the debt crisis, and the region continues to be characterized by multiple social problems, among them having one of the worst income distributions in the world, The crisis, in addition, will leave a negative legacy in terms of growth in the world economy and international trade, and fewer opportunities for Latin American migrants, among other adverse effects.

Over and beyond the crisis, it is necessary, therefore, to reformulate the region's development strategy, some elements of which must be a determined drive to scientific and technological development, re-industrialization, a strong and depoliticized support for regional integration, a firm commitment to the reduction of inequality and an important contribution to global efforts in environmental matters, both combating climate change and protecting biodiversity. For all these issues, which go beyond the objectives of this essay, the support of the development bank system will also be critical.

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COVID-19 and Social Protection of Poor and Vulnerable Groups in Latin America: A Conceptual Framework

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Abstract

The growing crisis caused by the coronavirus pandemic has dire implications for Latin American societies. As is often the case, the most vulnerable segments of society, especially those living in extreme poverty, are being hit the hardest. This article identifies strategies and specific responses designed to achieve three goals: (1) reduce epidemiological risks to save lives; (2) protect livelihoods; and (3) ensure human capital accumulation. Epidemiological externalities as well as humanitarian concerns demand universal social inclusion. In order to protect the health and lives, livelihoods, and the human capital of the poor and vulnerable, it will be essential to, first, implement targeted and decisive interventions at the local level that go beyond transferring cash; second, allocate adequate amounts of resources to fund income support and these other key interventions; and, third, rely on local actors and grassroots organizations for the interventions to be effective.

1. Introduction

The global COVID-19 pandemic, along with foreign and domestic responses to it, are inflicting severe costs to society as a whole in terms of both lives and economic losses. Even if the pandemic were miraculously not to have reached Latin America, the adverse external shocks (falling demand for exports and tourism, declining commodity prices, shrinking remittances and unprecedented capital outflows) would have hurt the countries significantly. The pandemic and the measures designed to contain it, compound the negative impact on living standards in ways that we are still trying to assess given the uncertainty surrounding the timing of the discovery of a cure or a vaccine.

Although every level of society has been affected, the intensity of the effect has varied widely across social groups. The pandemic is impoverishing the poor and exacerbating inequality. Informal workers are severely affected by the lockdown measures. Low skill workers are not able to work from home. The poor and the vulnerable, especially those living in extreme poverty are being hit the hardest, not only in terms of lost incomes, but in terms of how their life conditions and future are threatened by this whole situation. As the virus spreads from more affluent districts where it arrived first, it affects populations that live in poorer sanitary conditions, and suffer from multiple deprivations, which are magnified due to lockdowns.

The current situation calls for urgent actions on multiple connected fronts: (1) the epidemiological, healthcare and sanitation front; (2) the economic front; (3) the labor market front; and (4) the social protection front. This paper focuses on one important component of the social protection front, which is to identify strategies capable of achieving three goals for the poor and vulnerable: (i) reduce epidemiological risks to save lives; (ii) protect livelihoods; and (iii) secure human capital accumulation. The aim of the paper is to provide a conceptual framework to guide policy design.

The complex vector of shocks induced by the pandemic shift downwards pretty much everybody's incomes. Among other things, for given poverty lines, it will bring increases in the number of poor in official statistics. A recent report by ECLAC estimates that the number of poor people will rise by approximately 30 million. Macroeconomic and other measures at this time are (should be) attempting to soften the downward shift of the income curve. A number of measures are (should be) devoted to soften the employment and income blow on many affected individuals, including quite prominently those at the risk of falling into poverty. But, for the most part, those who were already poor will also suffer great income losses, pushing a number of them below the extreme poverty line. Nearly 16 million people according to ECLAC, could join the extreme poor in 2020 as a result of the pandemic. Those who were already poor before the pandemic should definitely be given priority when it comes to income support, but that will not be enough to effectively protect their lives, livelihoods, and human capital. These individuals, the chronic poor, experience not only income poverty. They also tend to live in overcrowded homes, lack basic social services, receive poor healthcare and education, and face various forms of violence and discrimination. This group includes residents of urban slums and other areas of concentrated poverty, undocumented migrants, indigenous communities, afrodescendants as well as other ethnic and racial minorities. Within these groups, children, women, the elderly, the disabled, the mentally ill and those belonging to certain groups such as LGBT face even greater deprivations.

Paying special attention to the poor and vulnerable in the policy response is crucial for three main reasons. First, because this group is already suffering from multiple deprivations, there is an ethical imperative to prioritize their needs as they are the ones who can least afford to be hit by the multiple negative shocks detonated by the pandemic. Second, the negative effects on this group are likely to have long-lasting impact. Modern

¹ News from the United States show that low-income and racial and ethnic minorities are disproportionately represented among the severely ill and the dead. Surveys collected for Chile and Peru, among others, indicate that the economic impact of the pandemic is felt disproportionately by the urban poor.

² In some economics literature, the word "vulnerable" is used to refer to people whose income is above the poverty line but are at risk of falling into poverty if faced with an adverse shock. Here we are not using the term in that way, but in the standard dictionary sense of "a person in need of special care, support, or protection because of age, disability, or risk of abuse or neglect."

development literature emphasizes the permanent effects that temporary shocks can have on the lives of poor infants and children. Circumstances such as child malnutrition, school dropout, and traumatic experiences occurring at early stages in life, often have irreversible effects. Research on past crises reveals that these long-lasting effects do exist and are a leading cause for persistent inequalities and low mobility.

In a pandemic, there is a crucial third reason to prioritize the poor and vulnerable. As the virus rapidly spreads, those engaged in more precarious day-to-day realities not only face a greater risk of contagion but are also a plausible source of transmission. If these groups are not compensated at least in part for their income loss during lockdowns, for example, it will be very difficult for them to comply with the restrictions. If tests or the eventual vaccine are not made widely available and at no cost, the poor and vulnerable are likely to choose not to be tested or vaccinated. This externality is one of the main arguments in favour of prioritizing these groups within the context of a pandemic. "Forgetting" to protect certain sectors of society (such as slum-dwellers, the homeless, undocumented migrants, or the transsexual population), can severely hinder the ability to contain the spread of the virus. During a pandemic, universal social protection becomes a precondition to achieve success in combatting the spread of the disease.

COVID-19 exacerbates pre-existing inequalities and vulnerabilities

Groups at risk of contagion, illness, and death

Older individuals and individuals with pre-existing health conditions are the two main groups at risk of contracting and succumbing to COVID-19. As for age, the share of elderly people in the population of Latin America is not large (less than 9%). Regarding pre-existing conditions, however, the situation is worrisome. Excess weight and obesity are very prevalent in Latin America (nearly 60% of the population) and 10% of the population suffers from diabetes.³

The Oxford Poverty and Human Development Initiative has proposed three indicators to capture the risk of COVID-19 infection: a lack of access to safe drinking water; the use of noxious fuels inside the household; and malnutrition. Following these guidelines, approximately 142 million people are in danger of contracting COVID-19 in Latin America. That number represents close to a quarter of the region's population.

Multiple deprivations

Using the international poverty indicator of USD 5.50 per day (expressed in terms of purchasing power parity), the poverty rate in Latin America is 23%. Nearly 4% of Latin Americans live in extreme poverty (i.e., those at or below the USD 1.90/day poverty line), and do not earn enough to purchase the minimum amount of food to have adequate nutrition. Ten percent of Latin Americans (delineated by the USD 3.20/day poverty line) are at risk of falling into extreme poverty. This percentage is notably higher in some Latin American countries such as Bolivia, Guatemala and Ecuador.

Income poverty is only the tip of the iceberg in terms of the lives of the chronic poor, however. For most of the population we are focusing on, poverty is a life condition that implies deprivations in multiple dimensions. Over 80% of those included in the poorest quintile of income distribution work in the informal sector and therefore have no access to unemployment insurance, contributory pensions, or other benefits. Twenty-two percent of Latin Americans lack access to safe drinking water; 34% are deprived of internet connectivity, which is so essential in these circumstances; and, 45% do not have a bank account.

³ All sources for the figures cited in this text are reported in the longer version of the paper. <u>Lustig y Tommasi_COVID</u>, <u>Pobres y Vulnerables_V Larga Mayo 2020</u>.

While the severity of poverty is higher in rural areas, about two thirds of the poor live in urban areas. It is presumed that it will be this segment that the pandemic will strike the hardest. Over 20% of urban residents live in slums, where conditions in terms of overcrowding and poor habitat are extreme.

The COVID-19 shock interacts with all these inequalities and vulnerabilities

All of the deprivations mentioned above, which give shape to multidimensional poverty, interact, in turn, with the conditions generated by the pandemic to create a potentially vicious cycle. Many of these vulnerabilities make people more likely to get infected by the coronavirus, and many of the effects of the pandemic exacerbate the suffering produced by the deprivations.

For example, living in slums make people more susceptible to become infected and potentially seriously ill because of overcrowded spaces and of the lack of access to water and sanitation. Labor market informality is a key aspect of poor and vulnerable people's lives and it amplifies the effects of the sharp income decline produced by the pandemic, particularly for people who own few or no assets. Informal workers have no access to state-sponsored social insurance. And, while in most countries cash transfer programs now exist, their coverage may be too limited to be an effective instrument to cope with the impact of the pandemic. Furthermore, the poor not only have very limited chances of having a job that can be performed remotely, but even if that were the case, they would have a hard time doing so, given the conditions of their homes and the lack of infrastructure (including internet connectivity). These circumstances feed back on the possibility of "staying home." If the poor lack the means to satisfy their basic needs in the short term, they cannot follow the rules of social isolation. They cannot stay at home if that prevents them from getting their daily sustenance.

Staying at home means enduring a number of hardships caused by overcrowding, the lack of basic services, and the poor environments in which the homes are located. In addition, education and trust-worthy sources of information are less likely to reach these families as they lack the tools necessary for connectivity. Moreover, for this segment of the population, staying at home could cause other problems, and could breed other health issues, especially given the current health sector scenario in which issues unrelated to coronavirus are not receiving proper attention. Also, the confinement, boredom, uncertainty, and fear associated with the current situation could exacerbate family dysfunctions which, in the extreme, worsens domestic violence and child abuse.

Among the most important vicious-cycle dynamics that the combination of the containment policies and economic fallout of the pandemic can produce are those affecting the human capital of children. In particular, undernutrition in utero and at the early stages of life is likely to increase as a result of lowered incomes. Second, school closures are likely to deeply affect the children of poor households who may find it extremely difficult if not impossible to continue their education at home due to lack of adequate equipment, connectivity and – above all— coaching. It is quite likely that children will end up with lower achievements and many might drop out of school altogether. This year may end up being the one with the largest loss of human capital in modern history; that loss will be distributed very unfairly, with the poor enduring the brunt of this cost.

3. A brief profile of the vulnerable groups

As we said in the introduction, our goal is to provide a conceptual framework for an effective policy response to protect the health and lives, livelihoods, and the human capital of the poor and vulnerable. Defining the income poor is straightforward. It entails comparing people's incomes with the country's poverty line. Anybody whose income is below the poverty line is classified as poor and belongs to the target population we are concerned with. To help poor families cope with income losses during the pandemic is also straightforward: governments should expand existing cash transfer programs (or add new ones if so required).

However, here we argue that other forms of deprivations –beyond lack of sufficient income– require equal attention. Being subject to violence from a domestic partner or to discrimination in the health system because

of skin color, sexual orientation or migratory status are deprivations that become exacerbated during the pandemic. These dysfunctional behaviors cannot be combatted simply through cash transfers. Similarly, the difficulties that poor children in slums may encounter to continue their education during schools' shutdowns cannot be solved with cash transfers. Cash transfers will not produce the type of coaching children need for effective home schooling. The design of an effective policy response thus calls for an identification of the vulnerable groups and their particular circumstances. In what follows we briefly provide that for some of the main vulnerable groups.⁴

- » Urban poor. The urban poor, especially those living in slums, face at this time very high stakes regarding their epidemiological risk, their livelihoods, and their human capital and life conditions. They coincide with various other categories of deprivation.⁵ They are largely informal workers, with no assets, nor social security. They live in overcrowded homes, without water or sanitation. A large fraction of them has no access to internet. They face pre-existing health situations. Most of them do not have access to the banking system. Various family dysfunctions are common, which under the lockdown measures can get magnified, to the point of domestic violence and child abuse. As developed in the following section, for this group staying at home is very hard.
- Women.⁶ Most women are involved in the service sector, which has been especially hard-hit by social distancing measures. Women are the heads of many single-parent households, which are at greater risk, making women more vulnerable to financial instability. Women throughout the region are responsible for a very large share of domestic chores, which in many cases have increased due to the quarantine. Women are the main victims of domestic violence, and abuse has gotten worse, as the quarantine has forced families to lock down together, further raising tensions amongst household members. Additional frictions will arise as families struggle to make ends meet. Even before the arrival of COVID-19, 15% of Latin American women had reported suffering from domestic violence.
- » Children. There are more than 150 million children in Latin America. Nearly half of them are poor. Even without reference to extreme cases such as children who live on the streets, many of these children face great vulnerabilities in normal times, and additional ones at this moment. There are children who can find themselves completely alone due to the death or sickness of a sole caretaker. Many children see their living conditions worsen due to income problems of their parents. Many are facing difficulties in receiving care in the current circumstances. Poor children's schooling is at risk due to school closures. The educational disadvantage experienced by poor children, teenagers and young adults are worsening, now that they are isolated in their unconnected homes with their uneducated parents. Many children face several of these risks and deprivations at the same time. And, especially for small children, any of these temporary situations might have permanent effects.
- » Senior citizens. Besides having the greatest chance of dying of COVID-19, the elderly also stand out as a vulnerable group from a social perspective. They are highly dependent on others as they are not experienced in handling technology or communication tools. Some of them live alone, and have difficulties accessing food, medical care, and medicines due to the lockdown situation.
- » Indigenous people. Latin America has close to 50 million inhabitants, from over 500 different ethnicities, who belong to indigenous communities. These communities account for 8% of the total population of the region, 14% of the poor, and 17% of the extremely poor. In terms of their relationship with the labor market, they are involved in precarious jobs for low-skilled workers. Indigenous communities also have restricted access to education and have a first-hand experience with the negative impacts of climate change. Moreover, they

⁴ This is not meant to be an exhaustive list. References to other vulnerable groups are provided in the longer version of the paper.

⁵ Many of the conditions we describe here apply also to rural poverty.

⁶ Another paper in this series will focus on COVID-19 and gender issues.

lack access to medical centers and basic sanitation, and they have very poor health conditions compared to non-indigenous people with similar characteristics. Because they do not have sufficient saving capacity and must rely on daily wages in order to survive, following the isolation rules set by the government is usually not an option for them.

- » Migrants. Migrants, especially undocumented, are often among the excluded and discriminated against. They tend to work in the service sector, especially in the hospitality industry, which has been hit particularly hard. Unless they are long-term permanent residents, migrants are not entitled to receive benefits from cash transfer and other programs. Thus, complying with lockdowns becomes an impossible tax since the safety net for these groups is nil. This is quite problematic because then these groups become natural carriers of the virus and can trigger new outbreaks. The problem becomes compounded because in some countries undocumented migrants do not have access to the healthcare system.
- » Other vulnerable groups. The "forgotten" and excluded population includes other groups as well: for instance, the homeless, people in jail, sex workers, and transgender. In designing the policies to contain the spread of the virus and mitigate the impact of the ensuing economic crisis, policymakers must be as inclusive as possible. The overriding guiding principle should be what we stated in the introduction: universal social protection becomes a precondition to achieve success in combatting the spread of the disease. Social protection here refers to income support as well as support for other dimensions of wellbeing.

4. Impact of lockdown measures on the poor and vulnerable: reporting from the field

To prevent the virus from spreading unchecked and in the absence of robust testing, tracing and isolating capacity, the most frequently used interventions involve those that keep physical contact between individuals to a minimum. Most Latin American countries have implemented full lockdowns (quarantines) or milder forms of it. How are the poor and vulnerable being affected by these containment policies?

What follows summarizes how the lockdown measures and social distancing are impacting the poor and vulnerable. This assessment is based on the results from a survey carried out in poor urban neighbourhoods in Argentina and brief reports on additional fifteen countries prepared by UNDP country offices. Such information could be a valuable input to help prioritize interventions that make lockdowns and social distancing among the poor and vulnerable feasible while at the same time mitigating the negative impact on the wellbeing of these groups.

Below we present the main issues raised. The order is based on the frequency and ranking by which the issues were mentioned.

- » Income. Twelve of the sixteen countries named falling incomes among the main concerns. Reports for ten of the sixteen countries named falling incomes as the first concern and two report mentioned it as a second one. Households that depend on the income of self-employed workers are at higher risk than those who rely on social transfers from the government.8
- » Health. Eight of the sixteen countries named health-related issues (access to medication and health services) among the main concerns. Of the eight, five put health issues as the first or second most important concerns. There are major obstacles when it comes to having access to much-needed medication and prescriptions.

⁷ The Argentina report is based on over 1000 interviews carried out during March 2020. The longer version of this paper provides more details about this study, which is based on a collaborative, nation-wide effort carried out by nearly 500 researchers who conducted interviews with local sources. That exercise shares the spirit of defining the relevant dimensions of multidimensional deprivation through participatory processes. The longer paper also summarizes the reporting by UNDP offices.

⁸ In this matter, Argentina, with a fairly extensive reach of non-contributory social transfers, might be one of the outliers in the region.

Usual services have been restricted, and people who generally have had difficulties with their own health care are now experiencing even greater difficulties. This is particularly problematic for the children of less structured families and for the elderly.

- » Domestic violence. Six of the sixteen countries named domestic violence among the main concerns. There are some reports that violence has increased more generally since isolation began, both in the streets and inside households. The high levels of alcohol and drug consumption in some of these districts constitute a time bomb.
- » Food supplies. Five of the sixteen countries named access to food among the main concerns. Some difficulties regarding this matter include: i) a lack of adequate provision of supplies in the neighborhood grocery stores where the poor go to shop; ii) a sharp increase in prices; iii) low levels of income; iv) difficulties experienced by NGOs, churches, and other local social actors in keeping their usual operations running under current circumstances.
- » **Discrimination.** Five of the sixteen countries mentioned discrimination or exclusion of minorities, migrants or members of the LGBTIQ community among the main concern.
- » Overcrowding. Five of the sixteen countries named overcrowding among the main concerns.
- » Education. While access to education was not included among the main concerns, the in-depth report for Argentina revealed that virtual classes are not available for everyone since connectivity services are asymmetrically distributed in these neighbourhoods. The Education Ministry has not been able yet to provide printed booklets to all children requiring the materials. Since young people have not been able to properly start their academic year, their situation has deteriorated. Many children do not receive enough parental encouragement in this area. Dropping out of school is a frequent phenomenon and these temporary circumstances might have permanent effects for children and adolescents at the margin.

5. Designing and implementing an effective response

This section outlines principles, institutional and budgetary recommendations to design and implement effective policy responses. It also includes a number of specific policy recommendations, many of which are already being tried out throughout the region.

5.1. Guiding principles

- 1. Integrate under a consistent overriding umbrella epidemiological, economic, and social strategies.
- 2. Prioritize the well-being of the poorest and most vulnerable people in society. This is imperative not only for humanitarian reasons, but also in order to minimize the impact of epidemiological and economic externalities, as well as political risks.
- 3. This should be done with the three goals of
- i. Preserving lives
- ii. Preserving livelihoods
- iii. Preserving human capital
- 4. The poorest and most vulnerable groups require a special focus, in terms of
- i. Income
- ii. Direct actions beyond income
- iii. The need to complement general policies (health, education, security, communication during the pandemic, and others) with special actions to reach and integrate them.

5. This requires

- i. Urgent actions in the short term (weeks) to:
 - » maintain essential flows (income, food)
 - » avoid negative consequences of circumstances (such as violence, etc.) that cannot be changed in a week (such as housing)
- ii. Strategic investments in the medium term (months)

Designing strong structural responses for the foreseeable future is just as important.

For instance: It is fundamental to invest in connectivity services in the short term, to take advantage of technological tools that may fill in the gaps and prevent misinformation and a lack of effective communication.

- 6. When designing interventions, it is vital to take into account the levels of heterogeneity within vulnerable groups.
- 7. Use and benefit from the presence of non-governmental actors who work in close proximity to these groups. It is important to exploit local social networks.
- 8. Take into account the organizational and budgetary implications of all of the above. Such implications are explored in the next section.

5.2. Institutional recommendations

As discussed above, many communities and groups of Latin Americans suffer from a large number of simultaneous deprivations; in other words, they suffer from multidimensional poverty. These pre-existing situations are worsened by the COVID-19 pandemic, which puts at risk not only their lives and livelihoods, but also their human capital. Modern human development theory recognizes that over the life course of persons there are critical events that might affect them forever – such as the burning of a home, the death of a family member, inadequate health care during pregnancy, child malnutrition, traumatic experiences, teen pregnancy, domestic violence, drug consumption, and school dropout. Given the existence of multiple reinforcing dimensions of deprivation, and given the risks of such disruptive life events, it is of utmost importance that –in normal times and even more so during the current emergency– public interventions be able to have the necessary focus in order to assist this vulnerable population in their life situations. For the most vulnerable people, general, top-down policies are not enough. They require to be accompanied by coordinated efforts, which pay attention to the specific risks and needs faced by each community, each family, and each individual. Expressed in public policy jargon, coordination across government sectors and focus on local and individual circumstances are essential.⁹

How best to achieve such coordination and focus from an organizational point of view? There are two essential institutional functions that need to be carried out for the effective design and implementation of policies towards the chronic poor and most vulnerable. First, it is necessary to have enough physical and social proximity with the vulnerable communities so as to have their trust, and to be able to act as an intermediary between the specific needs of the community (family and individual) and the often large and disorganized supply of public programs. Second, it is necessary to have enough coordinating or cajoling capacity with regards to central agencies, ministries, and programs, so as to be able to have the particular needs of the community properly addressed in a timely fashion.

⁹ While the logic developed here applies more directly to the case of vulnerable populations who share a common geographic location, it can, with some adjustment, apply to vulnerable groups that share deprivations and risks in spite of not being close in space. Yet, even for such vulnerabilities, often agents who are close geographically, are crucial for "big" policies to be effective on the ground. In the appendix of the longer version of the paper, the authors describe through a particular case how networks on the ground can help address and prevent domestic violence. Without these proximate agents, even the best policies on paper become futile

¹⁰ The number of programs is large in some Latin American countries and smaller in others. In most cases, programs are not well-coordinated under a common strategy.

Different specific governmental structures might fulfill such institutional functions. Countries in Latin America have governmental units which resemble this logic to various degrees or not at all. Space and time considerations prevent us from giving full diagnostics and suggestions specific to each case, which among other things would be conditional on the characteristics of the federal system of the country and the allocation of functions across levels of government. In general terms, two steps are necessary: (1) identifying which of the existent government structures are in a better position to fulfill the institutional functions and (2) empowering the most suitable structures with both adequate resources and strong political backing from the highest level authority (which in most Latin American countries is the Office of the Presidency).

The two essential institutional functions described above may not be simultaneously fulfilled by any single particular government agency. In such cases, it may be necessary to elevate the rank of an agency with territorial reach and put a high-profile figure in charge. An alternative could be the creation of an inter-ministerial group with one ministry being the primus inter pares and in charge of leading and coordinating the rest. Under the pandemic, for obvious reasons, the Health ministry has some leadership role at this point but –given the complex set of trade-offs countries are facing— the mandate of such groups or task forces must go beyond health considerations.

In broad terms, an appropriate structure includes three crucial layers: (i) an Agency in charge of assisting the most vulnerable populations, (ii), a corresponding Territorial Units in each poor neighborhood and community, and (iii) a set of local networks and organizations.¹¹

(i) Coordinating Agency.

It is desirable that the coordination of all State efforts aimed at providing social support to poor neighborhoods and communities be coordinated by an agency in charge of this task. This agency should adjust all general policies (dissemination of information, epidemic control, income transfers, food, health, security, and education) to the particular needs of these communities. It should demand from the line ministries the complementary measures needed in each case. For instance, how to implement preventive measures such as handwashing if there is no running water; how to continue providing education to populations with little or no internet access; how to observe stay-at-home measures in overcrowded settings or for the homeless; and so on. It should also coordinate the Territorial Units in each neighborhood or community. It should gather, through the territorial units, information regarding the general and specific needs of these populations.

(ii) Territorial Units

The Territorial Units should be located inside each poor neighborhood and community. They will have the main tasks of:

- » Coordinating the implementation of all interventions from the national, provincial and local line sectors.
- » Involving neighborhood networks and local organizations (NGOs, churches, social movements) in identifying specific urgencies and priorities.
- » Enhancing the networks of local social actors.

One natural question at this point is what role each level of government should play here. Space limitations prevent us from going into details since these roles will be conditional on a number of country-specific considerations, including the vertical allocation of governmental functions and resources, and the state capabilities at each level. Suffice it to say that, in most of Latin America, the unit that can address the need of the poor living in slums or of indigenous communities, for instance, is not the municipality. The latter tend to cover larger geographic areas and must respond to a diverse and heterogeneous group of stakeholders.

¹¹ In the longer version of the paper, we describe in detail actors, roles and recommendations at various layers from the highest level of government to the local.

Political economy dynamics and bureaucratic logic make more convenient that these Territorial Units report to the provincial or even national government and act in coordination with the municipality, but with a more direct line to centralized resources that for most of the issues of greater urgency are only available at higher levels of government.

(iii) Local networks and grassroots organizations

The engagement of local grassroots actors is crucial for ensuring that interventions are effective and appropriately targeted. Cash transfers, regulations and public services are clearly the domain of the State. But beyond money and public services there are a number of key actions by non-state actors that are a crucial part of the daily lives of the poor and vulnerable. These include ensuring access to food and clothing, providing medical and educational assistance and emotional support, and protecting the vulnerable from abuse and violence, to name but a few. If this sounds as a rather heterogeneous list, that is exactly right! Many local level organizations such as churches and NGOs as well as individual local social leaders do act as these multidimensional providers (similar to parents with their children) for many vulnerable families and individuals in these contexts. That is the case in normal times, and even more so during lockdowns and social distancing. These local networks are the first point of contact for battered women, children who lack connectivity to access homework assignments, and people who are stressed out by the current situation.¹²

In order to distribute available resources effectively and efficiently, state agencies must rely on these local actors, who are the only ones aware of the specific needs of each individual child, teenage mother, at-risk youth, or battered woman, at the time in which essential help is needed.

These truly local networks on the ground in vulnerable neighbourhoods are one crucial example of a broader principle that should be taken into consideration in this and similar situations: people to people social protection.

(iv) People to people social protection

Governments are implementing new, emergency programs of social protection, but the traditional approach will —most likely— not be enough and cannot happen quickly enough in most countries for most people. The pandemic calls for new thinking about social protection, beyond what governments can do. Large corporations, large foundations and affluent individual philanthropists have an opportunity to show how they can make a difference in ways unseen before.

But it is not just the richest of the world who can make a difference. The lockdowns throughout the world are creating a new type of stark inequality: between those who continue to have a steady source of income and those who do not. People-to-people social protection can also help finance the needs of the poorest and most vulnerable and compensate the losers in the "lockdown divide." Examples include, continuing to pay for domestic service, even without using them. In nonprofits, small businesses, or cooperatives, managers can negotiate transitional pay cuts or reductions in working hours to keep sources of work intact for everyone, or at least for lower-income employees. Similarly, landlords who have tenants who lost their jobs might relax repayment terms and even consider giving them an interest-free loan.

Help can come in ways different from just money. Young people could offer their help in making purchases for the elderly. Those who have extra time on their hands could offer to virtually mentor other households' children. In cities, people might leave nonperishable foods at the door of their buildings for people living in the street. Those who have extra protective gear can give it to people who deliver packages, to the postman and to those who pick up the trash. And the list can go on.

¹² The longer version of this paper narrates specific episodes and provides references on this point.

5.3. Budget: setting priorities and how to finance them

Most of the actions to protect the poor and vulnerable that we suggest here have some budgetary implications. Our view in terms of the resources to accomplish these objectives can be summarized in five points:

- (1) We need to allocate more resources to protect the lives, livelihoods, and human capital of the poorest and most vulnerable.
- (2) The way money is spent should take into consideration the institutional recommendations described in the previous section: that is,
 - » Allocating more resources to governmental units that focus on the most vulnerable.
 - » Channelling part of the distribution of support and services through NGOs and grassroots social organizations, and allocating the necessary budget to them.
- (3) Part of the required resources are not financial.

Even though budgetary resources are needed, part of these objectives can be fulfilled with political decision and institutional focus. Doing part of this well is less expensive than it looks. It requires determined political action to change some bureaucratic incentives as well as intelligence in channelling the resources for better focus.¹³

- (4) The required additional resources should not come at the expense of cutting down on compensating the losers whose income was affected by the policies designed to contain the pandemic (even if they are not the chronic poor).
- (5) The combination of sources to finance spending on the poor and vulnerable and compensating the losers will depend on various aspects of the countries' situation.

Regarding the last item, the financial resources needed to provide support to the poor and vulnerable (and on those highly affected by the pandemic more generally) will need to come from a variety sources: international financial organizations, bilateral aid, international and domestic credit, domestic government revenues and reallocation of government spending.¹⁴ The combination will depend on the countries' specific situation. Inevitably, part of the funding will need to come from the future: during the current crisis running debt-financed fiscal deficits has become acceptable.¹⁵

However, part of the funding should also come from temporary as well as permanent changes in sources of government revenues and the allocation of government budgets. The emergency created by the pandemic calls for cutting down on waste; eliminating inefficient programs and investment projects; reducing spending on items that benefit disproportionately the nonpoor;¹⁶ and aggressively fighting corruption. Whenever appropriate, salaries of non-essential public servants could be temporarily cut. In countries with a small state and low social spending, a permanent increase in taxes on wealthy individuals should be considered. Countries should also consider a pandemic-relief wealth tax.

Admittedly, many of these suggestions, such as taxing the rich, reducing government waste, or reducing some benefits to the upper middle classes, are likely to face strong political resistance. However, the extraordinary

¹³ The remark does not apply, obviously, to things such as cash transfers; but it does apply to various other interventions, such as protecting women from domestic violence, or focalizing well to avoid child malnutrition.

¹⁴ As stated above, part of the relief might come from voluntary social protection across people. This might include voluntary agreements lead by the government by which the richest individuals and companies finance specific initiatives necessary at this point.

¹⁵ Clearly, countries with a dire fiscal position previous to the shock or countries whose currency is the dollar, for example, will be more constrained.

¹⁶ These include subsidies to rich firms and individuals, but in some cases also spending favoring the middle and upper middle classes.

circumstances created by the pandemic present us with a unique opportunity to work towards a fairer and more efficient social contract.

5.4. Specific recommendations

In this section, we present a series of specific recommendations organized in two broad categories: 1) reducing exposure to the epidemiological risk of getting sick and death and 2) protecting livelihoods, human capital, and the provision of basic services. The list of measures is not meant to be exhaustive, but we hope they address a wide range of the multidimensional deprivations and challenges faced by the poor and the vulnerable especially during the pandemic.

We are aware that many of these measures are already being implemented in the region. An analysis of the challenges that governments face and the success and effectiveness in accomplishing what these measures are designed to attain is beyond the scope of this paper. A natural sequel to the framework presented in this document should identify good and bad practices in shielding the poor and the vulnerable from the multiple painful shocks that the pandemic befell them.

(i) Reducing exposure to the epidemiological risk of getting sick and death

During the state of emergency

- » Design suitable communication strategies. Information campaigns should be as transparent as possible and match their audience's realities. It is important to bear in mind that each community has a different compliance level with regards to lockdown measures.
- » Plan strategies that involve marginalized groups in urban areas and indigenous communities. Authorities should prevent the virus from spreading, while avoiding any sort of discrimination along the way.
- » Guarantee access to clean water, soap and other essential products –such as masks– that are needed for prevention.
- » Guarantee access to income, food and first-necessity products. This is crucial for making the stay-at-home restrictions viable.
- » Insure connectivity in marginalized areas. This is imperative to be able to communicate with support networks in real time, to report violence or crime, to provide alternative activities for children and youth, and, in some cases, might facilitate some income generating activities. This might include providing some equipment to key spokespersons within the community.
- » Utilize spaces other than hospitals, such as schools or hotels, in order to successfully isolate COVID-19 patients, or those exhibiting similar symptoms.
- » Design strategies to safely move patients who are in need of special medical care from one medical facility to another. This means that additional funds should be invested in transport, such as ambulances, particularly in rural areas.

After the state of emergency:

- » Give free access to COVID-19 tests to the poorest and most vulnerable groups of society.
- » Keep opening new isolation centers to allow people who may be infected to be secluded.
- » Guarantee access to safe drinking water.
- » Make sure that marginalised groups own technology devices that allow them to be tracked. This will help avoid a new COVID-19 upsurge, as well as improve all-around communication through connectivity.
- » ICT-based financial inclusion. Granting access to bank services and debit cards will not only make transfer deliveries more efficient but will also give authorities an inside view of the economic impact of the virus outbreak.

(ii) Protecting livelihoods, human capital, and the provision of basic services

- » Access to income, food, and services:
- » Transfers. We recommend providing monetary transfers that allow the poor to reach a minimum consumption level, especially those not covered by previous programs. Another complementary alternative is the use of food coupons (more recently, debit cards, to be used for purchasing food), an important challenge for governments in the current circumstances is how to quickly expand coverage to include among beneficiaries the poor who were previously excluded as well as the new poor given that both groups are not part of the administrative registries of existing cash transfers programs.
- » Temporary employment programs. We recommend hiring the currently unemployed workforce to do tasks requiring similar skills in the sectors that have high demand today, such as sanitizing transport vehicles or public spaces, guarding and providing various services to hospitals and doctors, or working on food distribution.
- » Direct food distribution. Attention should be given to optimizing the protocols and materials to minimize human contact. This should be done by supporting existing grassroots organizations.
- » Tax cuts or deferrals. For instance: Taxes on international transfers or remittances (below a certain amount) should be temporarily eliminated.
- » Prevent cutting of basic services like water, electricity and Wi-Fi to vulnerable households.

Mitigation of domestic violence: Additional policies to deal with domestic violence should be quickly designed and executed. Standard procedures should be implemented to identify and stop violent episodes from happening. For instance, victims must be guaranteed access to confidential spaces to alert authorities. Here again, grassroots organizations and local networks should be key players, and local government officials should be made accountable for implementing quick solutions.¹⁷

Keep on educating: Education must be continued through online courses whenever possible. Communication companies should begin to offer special packages as part of their services in order to allow free or subsidized Wi-Fi services for educational use. If internet-based education is not an option, using more "old-fashioned" technology such as TV or even the radio should be explored. As part of the people-to-people social protection initiatives described above, retired teachers and other individuals could volunteer their time to offer coaching and mentoring to disadvantaged children and youth.

Insure access to health and medication beyond COVID-19: Healthcare services and medicines should continue to be provided. Adequate protocols to "separate" patients with symptoms that might be related to COVID-19 are essential, but much of health care cannot be postponed, especially for these populations. These vital health care services include vaccination, treatment of infectious diseases, care of sexual and reproductive issues (including anticonception), dispensation of medicines for chronic and mental illness, emergency surgery, and care for victims of violence and accidents. For these populations, and especially during quarantines, proximity is of essence. The services offered by existing neighborhood primary health care units should be enhanced, including the extension of operating hours.

Attention to especially vulnerable groups: The impact of crises such as this one are twice as devastating for groups who, on top of being poor, suffer from special problems or risks, such as children, at-risk youth, undocumented migrants, or transgender, homeless, or imprisoned people. In some of these cases, all around Latin America, non-profit organizations play a key role in easing and addressing their difficulties. Those efforts should be supported and promoted.

¹⁷ Case studies buttressing the last point are provided in the longer version.

6. Main messages

- **1.** The COVID-19 pandemic is disproportionately affecting the poor and vulnerable in terms of their health risks and life conditions.
- 2. These people suffer not only from income poverty, but from many other deprivations.
- 3. The utmost priority should be given to mitigating the impacts of COVID-19 on
- i. the health and lives,
- ii. the livelihoods,
- iii. and the human capital of the poorer and most vulnerable members of society.
- 4. This should be a priority:
- i. For ethical reasons
- ii. Given the pandemic's potentially irreversible effects on human capital
- iii. Given the epidemiological externalities. During a pandemic, universal social protection becomes a precondition to achieve success in combatting the spread of the disease.
- 5. This will require allocating adequate amounts of resources to fund income support and other key interventions.
- 6. Not only budgetary, but also political and institutional priority should be given to these tasks to ensure their energetic and resolute implementation.
- 7. A large part of this targeted and decisive interventions should take place at the local level.
- 8. Although governments are crucial actors on all of these fronts, they must collaborate with grassroots organizations in the field in order to truly and effectively reach the poor and vulnerable.

Lessons from COVID-19 for a Sustainability Agenda in Latin America and the Caribbean

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Abstract

This document explores the challenges for the region in terms of a possible sustainability agenda that could emerge as lessons from the COVID-19 pandemic. Economic recovery after the ravages of the virus will be one of the greatest challenges that humanity has ever faced. However, we have an opportunity in front of us of a throbbing economic recovery in a more sustainable path. The document is divided into three sections. The first section includes a compilation of the immediate impacts that the pandemic and government measures have had on household and firms behavior, and how they have been reflected in some environmental indicators that are observable today. Building on that pre-pandemic baseline, and reflecting on the lessons associated with these shocks, we focus on a series of public policy recommendations that might be explored to take as much as possible advantage of this sudden disruption. This window of opportunity for reconfiguring economic and social activities might be supported by eventual changes in individual preferences and by the ways in which production factors are organized to generate goods and services that have had environmental impacts on the wellbeing of the population and ecosystems. This is an opportunity to take advantage of this crisis, given that we have already had to endure the costs of seeing the pandemic's impact on economic activities affecting the environment, by exploring the possibility of doing things differently when reactivating the economy. By following a more sustainable path, we will be able to reap the social benefits of continuing with better preferences, consumption patterns, and better technologies that can keep environmental costs low.

¹ This document is complemented by another one prepared by the authors, entitled "Latin America and the Caribbean: Natural Wealth and Environmental Degradation in 21st Century", where we examine recent history and the current state of the region's principal indicators associated with its natural capital and its environmental degradation processes.

Part 1. Introduction

"Whatever it is, coronavirus has made the mighty kneel and brought the world to a halt like nothing else could. Our minds are still racing back and forth, longing for a return to "normality", trying to stitch our future to our past and refusing to acknowledge the rupture. But the rupture exists. And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it."

Arundhati Roy, "The Pandemic is a Portal". Financial Times, April 3, 2020.

The SARS-CoV-2 virus made its public debut in the province of Wuhan (China) in December 2019, and four months later it had already spread across the globe (WHO, 2020). This pandemic has provoked unprecedented economic and social costs in a very short time, including its obvious cost in human lives. The UNDP "COVID-19 Policy Documents Series – Proposals of solutions for the crisis" aims to contribute to the debate with proposals to guide the region into taking a path of inclusive progress and wellbeing. The current document seeks to propose a series of reflections and paths of action that also open up opportunities during the recovery phase of the economies in Latin America and the Caribbean, taking into account the environmental sustainability of such paths.

Part of the economic recovery after the pandemic will need to include strategies that take into account the environmental threats that we have been facing, from the local aspects of life in urban and rural households to the challenges of climate change that the region cannot avoid. In this document, we believe that, as the adage goes, no crisis should go to waste, and we offer a light of careful optimism that we will be able to reorient our path toward a new normality.

We can take advantage of this pandemic to take decisions with a structural response to the region's sustainability challenges in various aspects of the public sphere. In this document, we want to go one step beyond any euphoria or skepticism about what SARS-CoV-2 may be generating in the environmental dimension. The feeling that the planet is taking a breather may lead us to stray from the central purpose of the public policy discussion on a sustainability agenda. First of all, we must beware about over-interpreting anecdotal mentions of apparently more frequent visits from wildlife in public areas and urban parks that were previously dominated by humans, although these general perception have helped to remind us that we share urban and rural ecosystems with a biodiversity that has undergone the pressures of transformations generated by material economic progress. Secondly, we must also be cautious of this favorable conditions to environmental degradation process due to the necessary redirection of public resources and governmental action towards health care because the pandemic. Illegal mining and deforestation processes are threatening protected areas and valuable ecosystems throughout many territories in the region, and especially in tropical forests. The FCDS estimates that, as of April 15, nearly 75,000 hectares had been lost in the Colombian Amazon, in contrast with a reduction in such loss in 2019. Legal mining also is threating the ecological integrity of some valuable ecosystems, especially in high mountain territories with an important hydrological role in the tropical Andes or, in tropical rainforest areas with adverse effects on indigenous populations and biodiversity with high levels of endemism. The sudden reduction in eco-tourism activities in many protected areas creates a pressure on local communities in favor of extractive activities in order to find some kind of sustenance and cope with the economic crisis. In the midst of these extremes of euphoria (e.g., apparently bluer skies or wildlife visiting environments visible to humans) and

 $^{{\}color{red}1} \quad \underline{\text{fcds.org.co/reporte-deforestacion-amazonia-colombiana-2020}}$

pessimism (e.g., increased deforestation and arson or extractive activities), we also observe clear processes of the impacts reduction of economic activities over air or water quality, due to the sudden drop in transport and industrial activities that have reduced emissions into the atmosphere and water bodies.

The decisions made during this third decade of the twenty-first century are critical for the future of the planet (IPCC, 2018) and the pandemic should not postpone that urgency. If anything, it should speed up proactive climate and environmental actions. Although many governments have made efforts to legislate policies in line with the goals of the Paris agreement (Nachmany, 2019), we are still far away from the path that would lead us to achieving them. However, the rapid spread of this new virus and its effects on health have led to the implementation of prevention and containment policies that generate an unprecedented disruption that is affecting behavior, economies as we know them, and our impact on the environment. We see a window of opportunity as a result of this disruption, since it has allowed us time to reflect and also to see that changes in behavior and technology can generate different positive impacts on ecosystems. We can achieve a planetary impact to the extent that the recovery of the economy is redesigned with strategies to achieve changes in consumption patterns and technological processes, that consume resources and energy, and generate impacts on the environment. The International Monetary Fund itself is encouraging a greener economic recovery, based on government actions to limit emissions, right carbon pricing schemes, and generate financing mechanisms for infrastructure and relief for more sustainable activities.² The report of the Global Commission on the Economy and Climate, entitled "The New Climate Economy", calls for accelerating the pace of change in the economy with substantive decisions about carbon pricing, investment in more sustainable infrastructure, reducing pollution, and creating green jobs, continuing with the idea of generating sustained growth.3 A recent study, with the participation of Cameron Hepburn, Nicholas Stern, and Joseph Stiglitz, asks whether fiscal economic recovery strategies are going to slow down or speed up a possible change in economic models, based on interviews with economic teams and central banks around the world, suggesting that investment strategies in green infrastructure, technological transition, and investment in natural and human capital, with education and training, will be essential for a sustainable recovery (Cameron et al., 2020). The most affluent societies, and the most affluent groups in society inside emerging economies, have a responsibility to see the effects of their consumption patterns on the rest of society. Such emulation, legitimized from the perspective of people's freedom to choose consumption patterns for their way of life, cannot be ignored the responsibility of their market decisions' impact on the rest of society and the spillover role of these patterns on other society groups when their incomes grow. The great achievements in reducing poverty in the world, whose the Latin American and Caribbean is a great example, bring with them this emulation process of those who lifted out poverty to consumption patterns, and hence results in industrial production to supply those needs, with direct environmental consequences. The consumption patterns of the most affluent not only have an impact of their own, they also affect, through emulation and social norms, the consumption patterns of those who aspire to these levels of material prosperity, adding to the pressure on ecosystems (Wiedmann et al., 2020).

This pandemic has brought a sudden halt to many of these consumption and production activities and it is giving us time for reflection. Times of economic slowdown and recession usually result in a drop in CO₂ global emissions (Peters, G; Marland, G; Lé Queré, C; et al, 2012) and a different pattern is not expected in this pandemic. In fact, the Climate Action Tracker (2020) estimates a drop in CO₂ emissions of 4%–11% for 2020 and 1%–9% for 2021, compared to emissions in 2019. However, the trends in previous post-crisis periods show a rebound in GHG emissions and other environmental impacts can be a result of economic recovery (Jotzo et al., 2012).

However, several aspects of the SARS-CoV-2 crisis are different from the last 21st century's economic crises. In particular, this pandemic has significant and unprecedented changes in society, opening up new opportunities for structural change as part of recovery strategies that avoid a returning to the old model of economic growth.

² For more, see IMF (2020)

³ For more, see New Climate Economy (2020)

In other words, taking advantage of these changes and making them part of health and economic stabilization measures in order to create a new, more sustainable normality can result in development paths for the region that respond to the challenges of the new century. Goldberg (2020) suggests that this pandemic has already generated technological and cultural disruptions due to isolation that we should take advantage of. Air and land transportation, e-work, and e-learning have forced us to reevaluate how we will be able to operate in the future. Some will adapt better than others, and public policy, as Goldberg suggests, will have to act to protect those who most affected.

In the next section (Part II), we present the disruption's changes caused by the pandemic in some environmental indicators for which we have empirical evidence. In Part III, we propose a serie of window of opportunity for the region and, based on the current situation⁴ and learning from this "natural experiment" with COVID-19 (Part II), policies for cultural technological, and economic change might be implemented that make it possible to redirect economies towards a more sustainable path.

Part II. What disruptions did COVID-19 provoke in environmental terms?

Pandemic prevention and containment measures taken by governments have produced drastic changes in the behavior of the world's population. In particular, this is due to confinement and social distancing measures that have paralyzed 'non-essential' activities, which represent up to 50% or more of economic activity (Ocampo, 2020). With the halt to these activities and compulsory social distance significant reductions in emissions have been achieved in just a short period of time, especially from cities. With more than 80% of the Latin American and the Caribbean population living in urban centers, the consequences of changes in economic and social activities in the cities can have significant impacts on the consumption of certain goods, the use of private and public transport, emissions to water bodies, energy consumption in commercial and industrial sectors, waste production, air pollution, and greenhouse gases emissions.

Changes in air quality

Air quality has become one of the symbolic aspects of the "respite" that the COVID-19 has provided in people's daily lives. During this last century, the region's demographic transition process has also implied an increase in economic activities in these areas, which generates pressure on air quality and the need to provide public services, such as drinking water and power, in the cities.

Figure 1. Air in downtown Bogotá before and after the pandemic



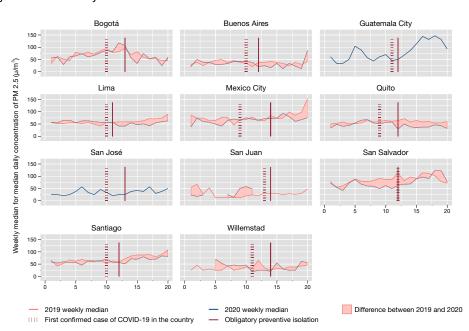


⁴ See Leon & Cardenas (2020) "Latin America and the Caribbean: Natural Weatlh and Environmental Degradation in XXI Century." UNDP.

This Bogotá picture with its pollution strip on the horizon, days before the beginning of quarantine measures in the city, is just an example of many other cities in the region, with an increased urbanization and use of cargo and passenger transport (the main source of emissions), have seen a cleaner air views after lockdown measures. On the right side, there is a picture of the same place in the city at the same time, but after almost a hundred days of confinement. The data that we will show later on shows the changes in air quality in this and other cities in the region.

Based on high-frequency data such as the Google mobility report and data from air quality sensor networks in different cities, we have been able to estimate some sudden changes in activity in these cities and their effects on some environmental indicators. We start with air quality data to get an initial idea of the measurements that have been collected by public and citizen networks monitoring air quality in Latin American cities. We will use the averages of the medians in the same weeks of the previous year as a counterfactual, but we will also compare data for the weeks before and after the first cases of the virus were reported and the beginning of the confinement measures.

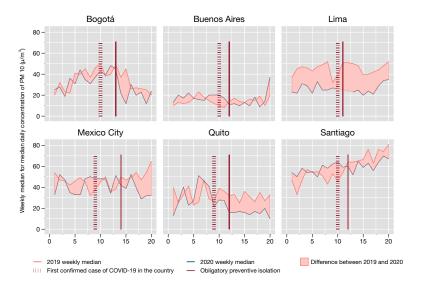
The following figures show, for the cities capable of generating this data,⁵ the measured daily median for median daily concentration of PM2.5 and PM 10, as two of the most significant indicators of air quality and also of health due to its serious consequences. In these cities, we compare the average of the weekly medians for 2020 compared to the same weeks in 2019. The colored areas represent the "gains" in air quality as long as the blue line (2020) is below the area. If it is compared to the weeks prior to when the confinement measures were decreed, it would reflect improvements in air quality attributable to a reduction in the polluting activities being analyzed.



Graphic 2. Weekly median of daily concentrations of PM2.5

Source: World Air Quality Index (2020). Weekly data from Monday to Sunday. PM2.5 air quality data for San Jose and Guatemala City are only available as of December 4, 2019, and December 5, 2019, respectively.

⁵ See Appendix 2



Graphic 3. Weekly median of daily concentrations of PM10

Source: World Air Quality Index (2020). Weekly data from Monday to Sunday. There is no data available for Guatemala City, San Jose, San Juan, San Salvador, and Willemstad.

From this data, we can see that the possible "gains" in air quality associated with confinement vary greatly from city to city, most likely because there are atmospheric and geographic conditions in each city that affect the possibility of changes in air quality due to changes in their citizens' behavior. Similarly, other events than the pandemic can alter air quality, such as in the case of Bogotá, where forest fires in the region to the east of the city gave rise to the presence of particles in the city's air, due to the wind direction.

Changes in mobility and air pollution

Changes in citizens' movement and transportation can be estimated from the information in the Google Mobility Report (2020) by comparing it with the same reference period for the previous year. In the following figure we show, on the vertical axis, the percentage change from the baseline. Positive values represent a greater frequency of citizen travel or reporting from locations in regard to these activities, and negative values mean reductions in such reports. In general terms, there is an evident increase in the amount of time spent at home and a decrease in trips to stores, public parks, workplaces, and transport stations, which is consistent with confinement measures. These measurements are shown below for the capital cities in the region with available information. For each one of these, we have included a dotted line that marks the day when the first positive case of COVID-19 was reported in each country and a solid vertical line that marks the day the lockdown measures ordered by the authorities started in each case.

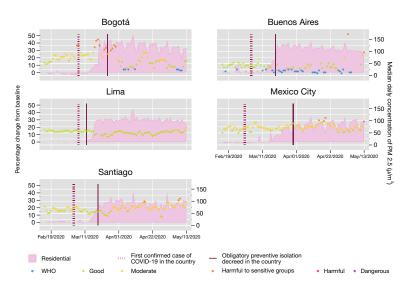
Among the most interesting patterns that we can observe in the data is the shift in mobility towards residential spaces and the reduction in the presence in shopping and public areas, even before the authorities decreed confinement measures.

In the same figure we observe that the change in the air quality reports, based on the daily median concentrations of PM2.5 and PM10, varies greatly from city to city. While in cases such as Bogotá, Buenos Aires, or Lima there have been moderate reductions in pollution since the arrival of COVID in these countries, cases such

⁶ Google Mobility Report (2020) takes as baseline days before February 16th.

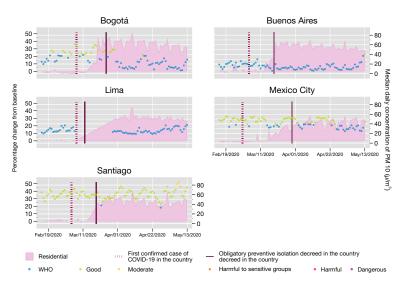
as Santiago and Mexico City –cities with historically worrisome levels of air pollution– seem not to show any changes attributable to the reduction of economic activities as a result of the pandemic.

Figure 4. Residential – PM2.5



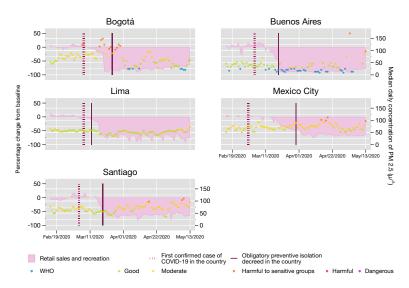
Source: World Air Quality Index (2020) and Google Mobility Report (2020)

Figure 5. Residential – PM10



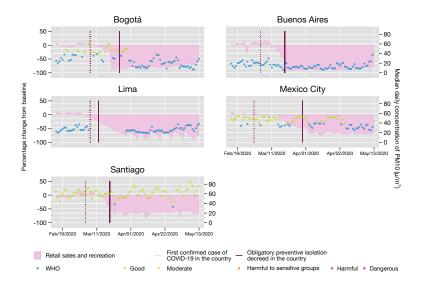
Source: World Air Quality Index (2020) and Google Mobility Report (2020)

Figure 6. Retail sales and recreation – PM 2.5



Source: World Air Quality Index (2020) and Google Mobility Report (2020)

Figure 7. Retail sales and recreation - PM 10



Source: World Air Quality Index (2020) and Google Mobility Report (2020)

Transportation congestion

During 2019, Latin American cities topped the traffic and congestion rankings. Bogotá is the city with the most traffic congestion in the region and the third in the world. It is followed by Lima (7th in the world) and Mexico City (13th worldwide). The confinement measures and the population's fear of contagion have generated a substantial change in the levels of congestion in terms of excess time dedicated to transportation when it is compared to trips during non-congested off-peak hours. The following figures show this drop for all the cities for which information is available.

Bogotá
Buenos Aires

Mexico City

Lima

Mexico City

Lima

Sunday Monday Tuesday Wedneeday Thursday Friday Saturday

Sunday Monday Tuesday Wedneeday Thursday Friday Saturday

Difference 2019-2020

2020 congestion

Figure 8. Traffic congestion⁷ levels in cities for an average day in 2019 compared to congestion during the week of May 10 to May 16, 2020.

Source: Tomtom Traffic Index. Congestion levels are only compared for peak hours in the morning and afternoon. For all cities, the peak hours are 8 am and 6 pm, with the exception of Bogotá, where it is 7 am in the morning.

The available data on changes in behavior and economic activities focuses on what has been observed in the cities. We should remember that not only do a large percentage of people live in urban areas today, but that is also where we find consumption and pollutant expulsion processes that affect the health of urban and rural ecosystems. Having said this, we are not unaware that, associated with these times of the pandemic, there are processes of environmental degradation in rural areas, where the region's wealth of natural capital is associated with activities oriented toward the expansion of the agricultural frontier by means of deforestation, in addition to mining, which is illegal in many cases, taking advantage of the government's attention being concentrated on the health sector crisis.

What we can conclude from this data analysis is that, throughout the period marked by social isolation health measures and people's own fear of exposing themselves to infection, changes have occurred in activities that are associated with processes having a negative environmental impact, including pollutant emissions from the use of transportation, manufacturing production, and power consumption in general. These abrupt changes in day-to-day activities have had an enormous economic impact on employment, production, and companies' income and earnings, and have implied a change in households' daily routine, especially for those who do not have the option of working online or who, due to their degree of informal employment, have lost their means to make a living. However, the reduction of these economic activities may also be having a positive impact on important aspects of the economy, health in particular. Cicala et al. (2020) estimate certain reductions in deaths and respiratory diseases. By making use of cell phone and mobility data, they estimated changes in ground travel between February and April this year in the United States. For electrical power use, they used data on changes in consumption per hour during the same period, and therefore of emissions derived from such consumption. With these emission estimates they were able to calculate reductions in PM2.5 particulate matter and then estimate certain reductions in respiratory diseases associated with these emissions and pollution. With a reduction in mobility of about 40% and a 6% reduction in power consumption, they were able to estimate a reduction of 360 deaths per month associated with exposure to PM2.5, compared to an average of 1,500

⁷ The level of congestion in a city determines the extra time that a journey takes due to congestion. For example, the average level of congestion in Bogotá was 68% in 2019. This means that a 30-minute journey without congestion took an average of 50.4 minutes, due to the level of traffic congestion in the city.

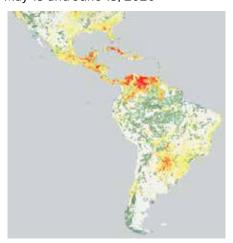
deaths a month in that country. Furthermore, their calculations suggest that the pandemic and associated mobility restriction measures, either self-imposed or regulated by the authorities, might be contributing to a 19% reduction in CO₂ emissions per month, just in relation to driving vehicles and consuming electricity.

Deforestation

Another factor that also influences city air quality is forest fires in rural areas. During the first days of confinement, in countries like Colombia, the improvement in air quality was not immediate because forest fire that began to go off.

Environmentalists have emphasized that preventive isolation and social distancing policies in the region have not stopped deforestation there. Experts point out that the pandemic may halt, or even reverse, government efforts to control deforestation (Open Democracy, 2020). The following map shows the hotspots⁸ in the region between May 13 and June 13 of this year. In particular, northern Colombia and Venezuela show a strong presence of forest fires.

Graphic 9. Fire hotspots between May 13 and June 13, 2020



Source: VIIRS - FIRMS (2020)

An analysis by Open Democracy (2020) indicates that forest fires have grown by more than 200% compared to last year's rates in the same period. The same report pointed out that deforestation in April 2020 increased by 64% in the Brazilian Amazon. Given the season of the year, this growth in forest fires is alarming since the Amazon region is currently experiencing its rainy season and river flooding, which helps prevent the spread of such fires. However, when drought comes to the region, the impact of forest fires will become particularly worrisome due to the spread of uncontrolled fires.

Because of the pandemic, much of the media's attention has been diverted away from environmental issues. As the COVID-19 pandemic continues and without media warnings about deforestation, the decisions made by governments may be perverse⁹ and especially harmful to the environment. Although the pandemic has slowed many economic activities and generated a feeling of overall environmental wellbeing, this relief continues to only be temporary. There are still sectors of the economy that have not shut down, but when the pandemic is over, the lack of intervention during this period may exacerbate the climate crisis.

⁸ A fire "hotspot" is an area of 0.25 x 0.25 degrees where there have been more than 100 forest fires alerts in the previous month.

⁹ On April 22, 2020, a recording video where the Brazilian environmental minister pointed out to President Bolsonaro that he should take advantage of the fact that the media is concerned about the pandemic to make changes to environmental laws that in a normal situation would be highly questioned in court (Globo, 2020).

Land use, changes in land use, and forestry are areas of great importance for climate change mitigation. In contrast to urban areas, extensive areas of forest are usually inhabited by ethnic communities and are designated as protected areas. Such protection and conservation have blocked human access, in one way or another, to such forest ecosystems. These measures have also represented protection for carbon stocks in the forest biomass that, if exploited through deforestation, would accelerate the planet's current climate change process.

Declines in power consumption

Latin America and the Caribbean have played an important role in generating sources of renewable energy. Currently, more than a quarter of primary energy sources in the region are renewable, more than double the world average. However, the halt to normal daily activities implies a slowdown in consumption, and although household activities have increased, this does not compensate for the decline in energy consumption in other sectors, such as transport and industry. The stricter the containment measures and the measures restricting commercial and industrial activities, the greater the impact on energy. The following figure shows the impact on electrical energy consumption in the region, which, although it does not contain information on other uses of energy, may serve as an indicator of their expected behavior.

Uruguay
Mexico
Chile
Dominican Republic
Argentina
Brazil
El Salvador
Guatemala
Colombia
Panama
Peru
-30%
-20%
-10%
Decline in electric power consumption

Figure 10. Declines in electrical consumption in the region

Taken from La República (2020). Data from March 23 to April 26.

Green energy market during COVID-19

Before the COVID-19 outbreak, the IEA (2019) forecast a growth in renewable energy of about 3% in the world, led mainly by the new biofuel policy in Brazil. However, during this pandemic, two of the largest biofuel markets, Argentina and Brazil, have faced a drop in demand and therefore in prices in their domestic and foreign markets. It affects this sector whose technology is relatively expensive. Also, fossil fuel prices have fallen, making biofuels less competitive. It should be noted that this type of energy is a source of economic growth and employment in rural areas. The crisis in the sector strongly affects the region, especially in terms of energy security, emission reductions, and economic development and employment¹⁰ in rural areas dependent on this sector (Berkenwald & Le Feuvre, 2020).

We should not ignore the fact that, although the reduction in economic activities may be contributing to lower environmental and health costs, this is not a stable or sustainable situation given the dependence of

¹⁰ According to the Brazilian sugar industry association (UNICA), this sector provides at least 2.3 million direct and indirect rural jobs.

households on these activities to support their livelihood. However, this change in everyday life has also shown that the relationship between economic activity and environmental impact invites us to reflect on the possibility of generating changes in behavior and production functions that might open windows of opportunity. That will be the purpose of the next and final section of this document.

Part III. Can we generate a post-COVID sustainability agenda?

The challenges ahead for the region are immense, but so are the opportunities for being able to go forward in the right direction (See León and Cardenas, 2020b). The 2019 Sustainable Development Goal (SDG) Index for Latin America and the Caribbean (CODS, 2020) has just been published, making it possible to analyze the current situation, trends, and progress in the 2015–2019 period for most of the region, wherever it was possible to obtain data. In regard to several of these indicators directly associated with our central theme of an environmental agenda, we see opportunities for reinforcing positive trends or altering negative ones. This is the case with SDG 3 (Good Health and Wellbeing), SDG 6 (Clean Water and Sanitation), SDG 7 (Energy), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 15 (Life on Land).

Graphic 11. Trend table by country for the 17 SDGs (Taken from CODS, 2020)



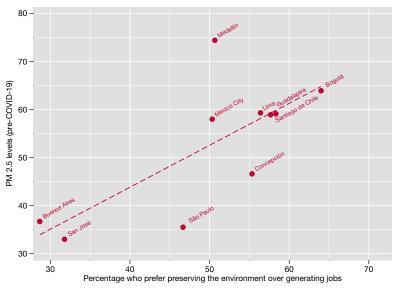
When countries find ways of adapting to the pandemic by managing contagion, physical distancing, and economic reactivation, many consumption, transport, production, and polluting activities will reappear. However, we are learning important lessons from the pandemic. The most important one is that changes in daily behavior

at home, and changes in production or transportation technologies –to mention two examples of great relevance—can generate changes in the impact on the environment that could produce social and economic benefits with possibilities for changing the path of development. In addition, changes in public policies on the part of the authorities will depend on the support they have among the citizenry in terms not only of consumption preferences but also as voters.

In order to promote changes in consumer and voter behavior, citizens who are aware of environmental problems are needed. The Center for Sustainable Development Goals for Latin America and the Caribbean (CODS, the acronym in Spanish) carried out a survey in 2019 of more than four thousand inhabitants of twelve cities in seven countries in the region. We find some clues in this survey about citizens' feelings about the environmental challenge. The data suggests that there is a correlation between the severity of the problem and feelings regarding the severity of the problem that affords us some hope for a possible change in the path of development if it is possible to achieve an alignment of several forces that we will discuss in this section.

To consider citizens' preferences, the horizontal axis of the following figure represents the answers to the question "Do you think that the government should give priority to preserving the environment or generating more employment?", expressed as a percentage in each city that answered in favor of the environment over employment. Since it is a question with only two options for the answer, it is a reflection of priorities regarding a clear dilemma between two very important objectives. On the vertical axis is the most recent measurement, prior to COVID-19, of the air quality for the respective city.

Graphic 12. PM2.5 pollution (pre COVID-19) and preference for preserving the environment over employment (CODS Survey 2019)



Source: World Air Quality Index (2020) and CODS survey (2019)

Given this scenario, we have the possibility of finding political support to implement effective policies to create a more sustainable path for the region, thanks to learning from the shock that SARS-CoV-2 has generated in so many dimensions of society. The lessons about the relationships between economic activity and the health of urban and rural ecosystems and their effects on the quality of life for households are beginning to emerge. Air quality can change in a very short time if the technologies involved in industrial activity and citizen mobility change. Large city water systems are seeing a reduction in their wastewater treatment costs, which shows us the economic benefits of a conversion in treatment technology and industry processing. Urban green areas that have served as habitats for species that find it difficult to adapt to urban life send us signals that euphoric citizens report on through their social networks, as proof of their appreciation for environmental services that could generate wellbeing if significant investments are made in conservation and environmental education.

To the extent that economic activities that have been abruptly halted, and which therefore have had a positive impact on certain environmental indicators, can maintain their low environmental impacts, we will be able to explore structural changes in consumption, technology, and their effects on the environment. The use of more sustainable modes of transportation which may also afford a lower rate of contagion, such as cycling and micro-transport modes (e.g. skateboards), are good examples of this proposal. The economic costs of curbing these activities have been enormous. This unexpected experiment shows us that, with changes in behavior and technology, we can generate a better relationship between economic activity and the environment, to the benefit of society's wellbeing and sustainability.

As more data emerges on changes associated with this natural pandemic experiment, we will learn more about the relationships among the natural environment, individual preferences, and how different technologies improve not only economic efficiency but also ecological effectiveness so as to maintain the capacity of natural capital to sustain life and the economy. New data emerging from these pandemic months will make it possible to calibrate models to estimate the benefits and costs of promoting changes in individual consumption or promoting technological changes for a reconversion of technologies that affect water bodies, the atmosphere, or the air that we breathe.

In this regard, we have identified a series of proposals that might be considered by policymakers at the local and national levels in the countries of the region. Each one of these measures is going to have a different political, legal, economic, cultural, and even geographical context and so we should not be led to infer that all of these measures should be applied as a template for action without considering these particularities in each case and time. We propose that they can be read as windows of opportunity to reflect on the possibilities of not returning to a "normality" that was generating significant environmental and social costs.

An example of taking advantage of these windows of opportunity is the decision by cities like London to encourage increased use of bicycles as a measure representing a combination of strategies to reduce contagion, thanks to social distancing, and therefore reduce congestion in mass transport systems, which in turn reduces emissions and pollution from traditional forms of mobility. With a planned investment of \$2.5 million dollars for the UK's post-COVID transport strategy based on walking and cycling as means of mobility, resources and public areas and roads will be redirected so as to prioritize these forms of mobility, which may also help to facilitate social distancing rules on public transport.

The windows of opportunity that we list below are part of the possibilities arising from the lessons of the disruptions that COVID-19 provoked in both life at households and in firms.

Window of opportunity N°. 1: Rethink transportation in cities

Considering that there is a clear causal relationship between modes of transportation, air quality, and human health, the possibility of generating changes in people's daily transportation practices opens a window to generating structural and sustainable changes over time. Such changes should be promoted through a combination of monetary and non-monetary incentives that complement people's different motivations to satisfy their needs and in turn promote the common good. Changes in modes of transportation may be accompanied by other urban planning measures where the routes between living place, work, social services, and areas for commerce and recreation become shorter and healthier. An example of this idea is what Anne Hidalgo, the Mayor of Paris, has called the "city of a quarter of an hour".

The CODS survey (2019) collected data on modes of transportation from more than four thousand respondents in twelve cities in the region, which we summarize in the following figure. Massive transportation in these cities dominates Latin America's preferred means of transportation, and this will be one of the risk areas for contagion

¹¹ The CODS survey (2019) contains information on 12 cities in the continental (Latin American) region.

that will require health measures and restrictions on the use of space in such means of transportation. Although it varies from city to city, around 16.5% of those surveyed in the 12 cities report walking as their main means of mobility, while 5.8% ride bicycles. Within the framework of this window of opportunity, cities can explore the possibility of reactivating public transportation with a much larger electrification component, both in terms of vehicle engines and the generation of power to drive them.

Medellin (74.40)
Bogotà (63.90)
Lima (59.30)
Santiago (59.10)
Guadalaira (58.89)
Mexico City (58.00)
Concepción (46.60)
Buenos Aires (36.70)
São Paulo (35.56)
San José (33.00)
Arequipa (No data)

Graphic 13. Answers to the question: "Which of the following is your primary form of transportation?"

Source: CODS survey (2019). Median pre-COVID-19 concentration of PM2.5 per city in parentheses.

Public mass transport

If we take into account the traffic problems in our cities (see the table below), congestion means that citizens of several Latin American cities lose an average of 7 to 9 full days per year due high congestion at peak hours. The contribution of a mobility strategy based on walking and riding bicycles, with maneuvering space in many of the region's cities, could generate social benefits by reducing excessive mobility times, reducing emissions, and reducing morbidity and mortality due to respiratory diseases. The physical activity involved also provides considerable improvements in people's health. In addition, benefits for commerce have been documented as a result of an increased flow of cyclists and pedestrians (Carmona et al., 2018; Forbes, 2018).

40%

Taxi, Uber, motorcycle taxi, pedicab

60%

% 80%

Own/private vehicle or motorcycle

Table 1. Traffic reports for 2019

City	World traffic ranking	Extra time per year due to congestion when driving at peak hours
Bogotá	3	9 days, 14 hours.
Lima	7	8 days, 17 hours.
Mexico City	13	8 days, 3 hours.
Rio de Janeiro	20	7 days, 4 hours.
Sao Paulo	24	7 days, 9 hours.
Santiago	26	7 days, 16 hours.
Buenos Aires	66	7 days, 13 hours.

Source: Tomtom Traffic Index (2020)

Planning car-free cities, or at least ones with fewer cars to free them up from congestion, also poses urban challenges to improve the quality of life and lifestyle of their inhabitants. One of them is to guarantee 15–20 minute neighborhoods. That is to say, neighborhoods where all basic needs, except for work, can be found within a quarter of an hour walk. For this, it is necessary to design neighborhood areas where people can engage in social life in safe and clean areas, and encourage the growth of retail sales, entertainment, and other services. Although this may seem utopian, this hyper-locality proposal has been implemented in places like Barcelona, East London, and Portland, and other cities like Paris are putting it on the table for consideration.

Even in a hyperlocal setting, it is necessary to go places in a city that involve going beyond the 15-minute radius. In particular, many jobs require traveling to a workplace on business days. Although 68% of trips in the region's cities are made on public transportation (Estupiñan et al., 2018), the quality offered on these means of transportation has not increased at the same rate as the demand for them (BID, 2013). Offering clean and safe public transportation is necessary when returning to the usual pace of life in the region's cities. This implies a transformation of public transportation services, since they are responsible for a third of the region's emissions and will continue to pose a risk of contagion due to crowding, whenever and to the degree that this persists. Even though the transition in the region seems to be a slow and expensive process, cities like Medellín, Cali, Guayaquil, Santiago, San Jose, and Buenos Aires already have electric buses (NRDC, 2019). In fact, the Santiago urban railway is the first in the world to operate with 60% solar and wind power (20 minutes, 2018).

The COVID-19 pandemic raised an alert about the prevention of contagion not only from the coronavirus but also from other infectious diseases in the population. Along with the region's accelerated urbanization, these moment raise the need to rethink transportation in cities, from 'self-sufficient' neighborhoods to the sustainability of public transportation. Although this transformation of public transportation systems seems to respond more to the needs arising from growing demand than to taking care of their environmental impact, the region has been showing great progress in improving the sustainability of its means of transportation. Reducing pollution in cities also means improving the respiratory and mental health of their inhabitants and alleviating this burden on the health system.

Window of opportunity N°. 2: E-working

E-work possibilities may vary greatly from country to country, sector to sector, and for different income levels. Saltiel (2020) calculates for several countries, including Bolivia and Colombia (see table), the proportion of workers at different levels in organizational hierarchies who could access forms of e-working.

Table 2. Proportion of e-workers by occupation and country

Occupation	Bolivia	Colombia
Managers	0.142	0.338
Professionals	0.283	0.325
Technicians and similar professionals	0.271	0.132
Cleric workers	0.438	0.376
Services and sales	0.044	0.103
Agriculture	0	0
Craft workers/Commerce	0.260	0.056
Machine operators	0.001	0.006
Unskilled labor	0.021	0.020

Source: Taken from Saltiel (2020)

In addition, the following table with ILO data shows sections of workers by type of occupation, organizational level, and salary level for the region.

Table 3. Percentage of workers in each occupation in Latin America and the Caribbean, 2019

Occupation	Total	High Income	Medium-High Income	Medium-Low Income	Low Income
Managers	4.27%	3.8%	3.8%	2.4%	0.3%
Professionals	8.52%	12.4%	9.5%	6.1%	1.9%
Technicians and similar professionals	8.20%	10.4%	8%	5.3%	4.9%
Cleric workers	8.62%	9.3%	8.9%	3.1%	1.7%
Services and sales	20.22%	17.3%	22.9%	22.4%	23.8%
Craft workers/Commerce	12.64%	12.7%	12.6%	14.9%	11%
Machine operators	8.32%	8.7%	8.6%	7%	2%
Unskilled labor	29.21%	24.5%	25.6%	38.8%	54.4%

Source: ILO estimates.

These tables suggest that a significant fraction of employees who are in middle and higher positions in organizations may find an opportunity for e-work to reduce their mobility between home and work. Although it is a smaller fraction of the total number of workers in organizations, we must keep in mind that it may be a group that makes greater use of private cars and individual forms of transport (their own car, taxi, or Uber), thereby reducing the use of roads and the level of emissions from combustion engines in a proportionally greater way. Industries where e-working may be an option for reducing environmental impacts might also consider reducing their carbon footprint from traveling to meetings, conferences, and academic and occupational events that constitute a considerable addition to mobility emissions and involve additional consumption during these events. Industries that are able to promote e-work can find opportunities to redesign the use of office space and the power and space consumption that this involves.

E-work in Colombia

Certain non-priority occupations¹² in Colombia may be more easily adapted to e-working, at least during confinement (Fernández, 2020). These occupations include professionals, directors and managers, and administrative support. All of these workers taken together make up 18.09% of the Colombian labor force employed in 2019, but only a little less than half a million of them say that they do not need to travel to get to their workplace. The following table shows the means of transportation used by potential e-workers to get to their workplaces.

Table 4. Principal means of transportation used by potential e-worker to get to their workplaces in Colombia, 2019

Means of transportation	% of potential e-worker occupations	
Walking	20.08%	
Motorcycle	15.11%	
Private automobile	14.98%	

¹² These occupations are based on the national classification of occupations and the GEIH report (2019).

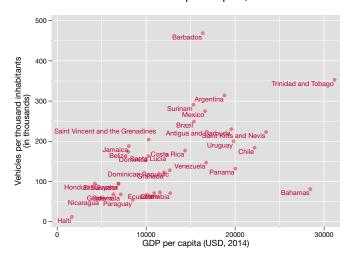
Urban bus	12.38%
Does not travel	12.05%
Interconnected transportation (Transmilenio rapid transit, etc.)	10.55%
Bicycle	3.05%
Intermunicipal bus	2.70%
Company transportation	2.36%
Motorcycle taxi	2.33%
Subway	1.98%
Taxi	1.76%
Other	0.53%
Boat, ferry, canoe	0.13%
Horse	0.01%

Source: Own calculations based on the GEIH 2019- DANE

According to Table 4, 27.62% of potential e-work occupations travel to work using public transport services and 32.44% use private means of transportation.

The number of private vehicles owned per inhabitant varies quite a bit in the region, as can be seen from the following graph. Based on this data, priority could be given to the cities in the region that have the highest proportion of private cars and work on these cases to explore the possibilities for e-working, along with the use of cleaner means of transportation and less exposure to contagion.

Graphic 14. Vehicles per thousand inhabitants and GDP per capita, 2014

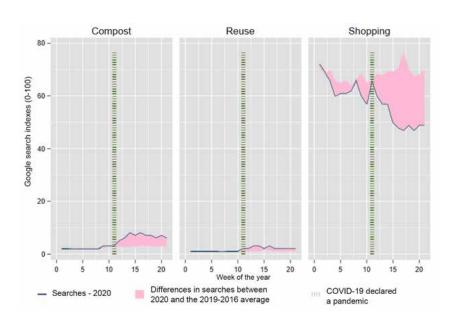


Source: World Bank

Window of opportunity N° . 3: Sustainable consumption and practices

The pandemic has slowed consumption rates with retail sales establishments closing and people undergoing confinement, even self-imposed confinement due to the fear of contagion. It is difficult to predict what consumption patterns will be like once commerce reopens, and while some companies are already starting to launch their marketing strategies to invite consumers to "come back" from confinement, other voices are calling for reconsideration of whether it is necessary to return to the consumption patterns to which we used

to be accustomed (Wiedmann, et al., (2020). In either case, confinement has forced people to engage in patterns of consumption for certain products that, given that they are less friendly to the environment, may become less necessary if consumer preferences change. Second, the vastly greater time spent at home has sparked individuals' curiosity about certain activities that can reduce the ecological footprint of their actions. An example of this is composting, which has apparently aroused the curiosity of many people at home. Search data for terms such as *compost, reusing*, and *repurpose* soared this year when compared to searches during the same periods in recent years, while the word 'shopping' saw a decline in the same period. The graphic shows Google search indexes from 0 to 100, with pink areas and lines for the average between 2016 and 2019, and the same data with dotted lines for the current year, taking into account that the WHO declared COVID-19 to be a pandemic on March 11, when changes in searches for these terms are observed.



Graphic 15. Google searches (2016–2019 average vs 2020)

The data from the CODS survey (2019) can give us some clues about the behavior reported in the 12 cities in the sample, which is summarized in the following figure. In general terms, it can be seen that there is a greater frequency of practices such as limiting the use of water, turning off lights, disconnecting household appliances, and using reusable bags for shopping, if we compare these with the lower levels for recycling, shopping, or using products that reduce harm to the environment or certify environmental or social actions. Measures such as taxes on plastic bags have had positive effects in many of these cases. In this regard, there are opportunities for creating campaigns that promote more sustainable consumption, which could be combined with the concerns that seem to be reflected by internet searches.

One of the aspects where changes in consumption behavior can occur with a lasting impact on sustainability is in the demand for meat. When we analyze the case of Latin America and the Caribbean, we find that it is one of the regions with the highest consumption of meat per capita, with increasing rates in recent decades, and it is much more similar to industrialized countries than to regions with lower incomes (see table). We have already described the direct relationship between meat consumption, the agricultural sector, and the particular role that cattle play in deforestation, with 60% of greenhouse gas emissions coming from the agricultural sector. Changes in individual consumption of bovine meat could have a considerable impact on the pressure for large tracts of land for breeding and feeding livestock and also conserve forests.

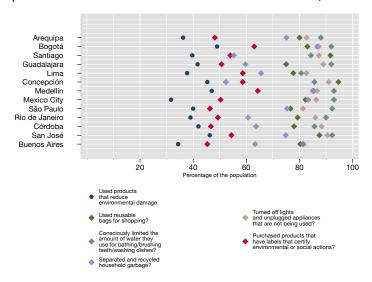
Table 5. Meat consumption by region (kg/person/year, carcass weight equivalent)

Region	1964/66	1974/76	1984/86	1994/96	1997/99	2015*
World	24.2	27.4	30.7	34.6	36.4	41.3
Developing countries	10.2	11.4	15.5	22.7	25.5	31.6
Sub-Saharan Africa	9.9	9.6	10.2	9.3	9.4	10.9
Mideast and North Africa	11.9	13.8	20.4	19.7	21.2	28.6
Latin America and the Caribbean	31.7	35.6	39.7	50.1	53.8	65.3
South Asia	3.9	3.9	4.4	5.4	5.3	7.6
East Asia	8.7	10.0	16.9	31.7	37.7	50.0
Industrial countries	61.5	73.5	80.7	86.2	88.2	95.7
Countries in transition	42.5	60.0	65.8	50.5	46.2	53.8

Source: FAO (2012). *Projections

If we look again at the data from the CODS Survey, we see bright lights of hope in a series of environmental behaviors that are in line with the possibility of designing mechanisms to exploit this window of opportunity based on more sustainable consumption patterns.

Graphic 16. Green consumption attitudes of individuals in Latin American cities, 2019

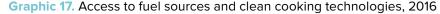


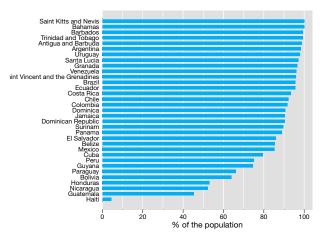
Source: CODS survey (2020)

The high percentage of use of reusable bags may be linked to regulatory policies that seek to reduce pollution. The pioneers of such policies in the region are the islands of Antigua and Barbuda in 2016. Soon after that, countries like Colombia began to implement policies to tax plastic bags or to completely ban single-use plastics, as has been done by the governments of the Bahamas, Belize, Bermuda, Chile, Uruguay, or as municipalities of other countries in the region have done independently (UNEP, 2019). Although there are no regulations of this kind to stimulate other green consumption attitudes, the cities of the region show a preference for paying attention to water and energy consumption.

In the case of energy consumption, access to clean sources will be important for taking advantage of the room for improvement in the case of the countries at the lowest levels, as shown in the following graph. Several

countries in Central and South America have the opportunity to seek out cleaner energies that can reduce emissions caused by the use of charcoal and firewood and, incidentally, have fewer health impacts given the respiratory consequences of these cooking fuels.





Source: World Bank (2020)

Nature-based tourism and conservation-oriented employment represent another possibility for new forms of consumption and for fair and green production chains in the context of this window of opportunity. When the pandemic has been controlled and opportunities for tourism based on non-material consumption to enjoy landscapes have reopened, the potential for Latin America and the Caribbean will be immense, for all the reasons described in the document accompanying this one (León and Cardenas, 2020b). Protected-area systems in these countries will be able to reactivate and promote tourist services that could absorb a significant amount of young labor that, with adequate training, could participate in this way in linking cities and rural areas where there is great tourism potential for bird watching and hiking. These enjoyment-based tourism industries will also require jobs to respond to the conservation needs of these ecosystems.

Window of opportunity N°. 4: E-commerce and fair and sustainable trade chains

In the face of the pandemic and the closing of conventional establishments, digital commerce and electronic payments have found an opportunity to expand their presence among consumers and firms that are beginning to explore the possibility of digital transactions in order to provide home services. Participation in digital banking on the part of a significant number of people from the most vulnerable groups in order to access to government aid through unconditional transfers is also expanding the possibilities of creating the means for growing direct trade between producers and final consumers, reducing the need for intermediation. Through these strategies for encouraging banking participation on the part of lower income groups, it will not only be possible to provide support through government transfers, but it will also be easier to access more agile credit markets for recovery after the pandemic and facilitate saving mechanisms to soften consumption against shocks. The financial system and the regulators will have a major challenge here in maintaining the potential for these strategies among the most vulnerable groups.

In this area of conditional transfers, there is an important opportunity to pay for environmental services or to condition transfers on supporting sustainable consumption activities that in turn meet basic needs. Orienting conditional transfers to populations that directly contribute to conservation, or in order to avoid activities that provoke environmental damage that are carried out due to urgent needs (illegal miners, land settlers, etc.) could help to increase interest in tackling poverty and also contribute to sustainability objectives at the

same time. UNDP has had experience supporting conditional transfer programs to indigenous populations, including the Socio-Bosque program in Ecuador, Floresta+ in Brazil, and a PES program in Costa Rica. Ferraro and Simorangkir (2020) have evaluated a conditional transfer program in Indonesia that, without intending to, generated a reduction in deforestation of between 10 and 50% in different areas with direct impact on reducing emissions.

Many producers of green-label consumer goods or farm products who saw their conventional intermediation channels evaporate because of the pandemic began to search through social networks for ways to reach end consumers who appreciate more sustainable forms of production and fairer trade. As a result of the pandemic, there has also been a greater interest in accessing goods that directly support the needs of vulnerable groups that have been hit by the crisis. With the expansion of digital payment platforms for consumers and companies, the market for green products and fair trade could expand to also address the possible change in preferences and awareness for more responsible consumption.

The changes in consumption associated with agricultural-food chains will play an important role in the coming months. Sanitary control measures will greatly reduce import and export of agricultural products, creating a more closed economy, at least in the short term, which will provide us with opportunities to rethink the role that the agricultural sector can play in serving the domestic markets of the countries in the region. With such great agricultural potential, and with consumers who might reflect the possibility of preferences more associated with green consumption, very interesting opportunities open up for sustainable product chains and fair trade in the region. At this point, it will be important to ensure that this fair and sustainable trade meets both the supply and demand needs of the most vulnerable groups. These chains can take advantage of integrating small agricultural producers whose production has a smaller ecological footprint and who can benefit from these innovations.

COVID-19 is forcing many governments to accelerate electronic banking and mobile payments in particular, opening up enormous opportunities for facilitating financial flows and aligning them with more sustainable production and consumption objectives.

Window of opportunity N° 5: Green taxes and fair prices

It is possible to explore mechanisms for generating behavioral changes and at the same time raise fiscal resources for environmental action through taxes on activities that cause environmental damage. In the CODS survey (2019), data was collected in this regard that could shed light on these possibilities. In one of the questions, the respondents' willingness to pay more for coffee that guarantees better care of the environment is asked. Out of the total sample, 24% of those surveyed stated that they were not interested in paying extra for such a product, but the remaining 76% said that they were willing to do so, and 10.3% were even willing to pay more than a 15% surcharge. These numbers vary from city to city as shown in the following table.

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Table 9. Willing 1633 to bay a	premium for coffee to guarantee	

City	Would not pay	5–15% more	more than 15%
Bogotá	15.4%	72.8%	11.7%
Medellin	20.5%	65.9%	13.7%
Buenos Aires	22.3%	64.5%	13.2%
Córdoba	20.9%	66.1%	13.0%
Sao Paulo	23.8%	66.3%	9.9%
Rio de Janeiro	26.3%	55.6%	18.1%
Mexico City	28.7%	64.2%	7.2%
Guadalajara	31.3%	62.9%	5.8%
San Jose	22.8%	65.8%	11.4%

Santiago de Chile	37.7%	57.2%	5.1%
Concepción	30.7%	62.5%	6.8%
Lima	15.9%	74.1%	10.0%
Arequipa	17.9%	74.7%	7.4%
Total	24.0%	65.6%	10.3%

Source: CODS survey (2019)

Another question of a similar situation was asked, but in this case, in regard to a gasoline tax that would be used to reduce pollution, with the same response options. In this case, the percentage of those surveyed rises considerably, to 44.5%. The variation from city to city also reveals interesting patterns: Santiago is once again the city with the least willingness to pay this green surcharge, and Lima is among the most willing to contribute.

Table 7. Willingness to pay a green gas tax to reduce pollution

City	Would not pay	5-15% more	more than 15%
Bogotá	52.2%	43.8%	4.0%
Medellin	42.7%	50.8%	6.4%
Buenos Aires	36.0%	53.4%	10.6%
Córdoba	35.2%	55.4%	9.4%
Sao Paulo	44.1%	48.5%	7.4%
Rio de Janeiro	48.5%	40.8%	10.7%
Mexico City	50.8%	44.1%	5.1%
Guadalajara	58.0%	36.5%	5.5%
San Jose	39.4%	50.7%	9.9%
Santiago de Chile	60.1%	35.9%	4.0%
Concepción	50.0%	47.6%	2.4%
Lima	29.8%	62.9%	7.3%
Arequipa	36.9%	58.9%	4.2%
Total	44.5%	48.6%	6.9%

Source: CODS survey (2019)

This difference in terms of willingness to pay a surcharge to support environmental causes give us clues about how incentives can be generated for changes in the supply of and demand for more sustainable goods or those related to fairer trade. Either way, a majority of people express a willingness to pay a premium to support sustainable production or preserve the environment. Concrete examples to explore may include taxes on tobacco, sugary beverages, or bovine meat, all with considerable consequences for health and the environment. Therefore, opportunities are opening up for local and national governments to continue delving into tax and incentive strategies that capture these benefits for the common welfare, learning from experiences such as taxes on plastic bags, always aiming to induce changes in technology and consumption while generating tax revenue oriented toward supporting governmental actions on environmental matters.

Taxes on fossil fuels and incentives for green technologies

Although some countries in Latin America and the Caribbean are beginning to use carbon price mechanisms, the price is still too low to be able to meet climate goals. The IMF (2019) notes that the average global carbon

price is \$2 USD/tCO₂ which is well below the estimated average price¹³ that is needed to limit global warming to below 2 degrees Celsius. One of the challenges that the region faces is to take measures to recover from the pandemic without abandoning its climate pledges and goals and in some cases, increasing the firmness of these pledges.¹⁴ But, at the same time, governments are faced with a scenario where the efforts during recent decades to alleviate poverty are going to be dissipated, which is not a favorable scenario to the use of instruments that raise the prices of goods and services in the economy. One possible way of generating income which can also reconcile the need to serve the population affected by the pandemic and the fulfillment of environmental objectives is to increase taxes on sources of carbon such as fossil fuels.

The call from experts to start taxing fossil fuel activities is based on current low market prices of them. But it is also important to highlight the impact that this instrument can have on stimulating clean technologies. In comparison to the past, a huge progress has been made on the prices for clean and/or renewable technologies, such as wind and solar energy, which have decreased while their efficiency and productivity have increased. Taking advantage of the region's advantage in energy efficiency from primary renewable sources and the leadership of countries in the region in the production of biofuels, a push to achieve comparative advantages in clean sectors could be decisive for ensuring, for example, the future of biofuels in the region, energy transition and new cleaner growth path.

How can these changes be achieved?

The global scale impact of SARS-CoV-2 is inviting humanity to build a more sustainable path, with greater attention to the risks associated to a fragile and co-dependent relationship between the economy and nature. The biological capacity of this microorganism to break into all the social and economic dynamics in the world, that we believed to be "normal", in such a short time invites us to look more humbly at our dependence on nature. As we face the pandemic, we are more often realize that returning to the previous "normality" is an increasingly less desirable scenario for a sustainable future for the planet. The new development path must incorporate, on the one hand, a better understanding of the relationship between the economy and the natural environment. This greater interdependence and fragility are the result of globalization and the expansion of economic activities that, by generating greater pressure on natural capital and ecosystem services, have also generated a greater impact on local and global risks, where extreme events such as pandemics or natural disasters can proliferate and they will become more frequent in the immediate future (WEF, 2020).

To advance along a path toward an economic system that is better adapted to face these risks, it is necessary to build governance and financial systems with better responses to science recommendations, as well as better informed policies, where governments, companies, and investors can bias their resources to rebuilding the economy's interactions with natural capital where these risks are reduced and, medium and long-term resilience is strengthened with better adaptation measures (Cardenas, Guzmán, and Hernandez, 2020). Empirical evidence of a positive relationship between more sustainable and inclusive practices and corporations' financial performance is found in a meta-analysis of more than 2,200 studies analyzed by Friede et al. (2015).

The role of civil society in general, either as voters, consumers, or investors, may complement the price mechanisms of the market or the regulatory role of the state. Social networks, the media, and forums for deliberation can play a fundamental role in changing behavior in a long-lasting way and contribute to this new post-COVID path. The new bias of preferences and the social technologies that have been discussed in regard to these windows of opportunity cannot arise from top-down public policies that sometimes ignore individuals' ability to evade or adapt without achieving the objectives sought. It is essential to understand human behavior in spheres of action in the household, the market, the polling place, or communities. The evidence we have

¹³ The IMF estimates that the average carbon price that would achieve the climate goals of the Paris agreement for a reduction of 1.5 degrees, would be around \$75 USD/tCO2

¹⁴ See more in León and Cardenas (2020b).

presented here suggests that citizens, upon entering these somewhat strange and uncomfortable times, have also adapted their actions to this difficult situation, reducing their presence in commerce or at work and increasing their activities at home, even before the confinement health measures began. These changes in behavior led to a chain of economic consequences that have hit the most vulnerable and, at the same time, these changes have generated positive effects on some variables such as congestion, pollution, and the consumption of goods and services that usually affect the environment.

Some of these changes in economic activity will be only temporary, but some of them could also generate a rethinking of preferences for some activities, for example, modes of transportation, or the consumption of certain goods and services that might replace others, with more lasting consequences for the environment.

Robert Frank (2020) has just published his book "Under the Influence: Putting Peer Pressure to Work," where he tells the multiple cultural, social, and economic changes that have marked recent history, where social pressure and the right mechanisms or signals have generated lasting changes in behavior. Examples such as reduced smoking, support for same-sex marriage, or trust in the government and the luxury spending paths are part of the phenomena where social pressure and available information can determine how individuals evaluate and decide on their consumption or activity patterns.

An interesting example of lasting behavior change has occurred with taxes on plastic bags. In particular, the example of the "PlasTax" in Ireland is in line with the proposals suggested in this document. The success of this tax, which managed to reduce the consumption of plastic bags by 90% in a very short time and with an operating cost of just 3% of the income generated, should not just be seen as a pecuniary mechanism, since, at cost of 15 cents per bag. Its success cannot be explained simply by substitution effects and consumer income. The Irish experience was accompanied by a process of consultation with the main actors involved, the creation of new social norms, and peer pressure in supermarkets. The case of plastic bags shares much in common with what Frank (2020) documents in the case of smoking, where the increase in taxes cannot fully explain the lasting effects on consumption, if it is not understood within a context of cultural changes in social norms.

Understanding how humans use available information and how they interpret the framework within which options are shown to them will be decisive for the success of programs or policies that seek to take advantage of these windows of opportunity. We have already seen how the same price increase, framed as a tax or a price premium, can generate different levels of support from the population. Better information can influence people's beliefs about the importance of taking action in favor of a laudable goal, such as sustainability. This does not mean that providing information also does not have risks, as reported by Sustein et al (2016) on people's changing positions in response to information about climate change.

A possible next stage on these proposals would be to design pilot interventions, hopefully with experimental methods, to explore how individuals' behavior and preferences change as they go through the difficult times of this pandemic and as economic activities retake their dynamism. The possibilities for not returning to the same "normality" have been discussed throughout this document. A new, fairer, and more sustainable normality in relation to ecosystems and the common goods depends on how much we take advantage of the windows of opportunity that are open today, some of which we present in this document, with the aim of inviting policymakers to adapt them to their particular contexts.

Corollary

The natural sciences have been alerting humanity to the growing threat to the human race from infectious diseases, mainly due to the way in which economic activity has brought pressure on different areas of nature and regarding to the possibilities for the survival of the planet's biological diversity. About 75% of the infectious diseases that have affected humans have started in other organisms carrying them. The loss of biodiversity and of the associated ecosystems greatly increases this threat. One example in our region is the case of the transformation of Argentine's pampa region in order to use large tracts of land to corn monoculture during the

1950s, where nearly 777,000 km² were affected. This new form of land use favored a native mouse species (*Calomys musculinus*) and substantially reduced the presence of other species of fauna that maintained a more diverse balance of prey and predators. This mouse was the out breaker vector of Argentine hemorrhagic fever (AHF) caused by the Junin virus, with case fatality rates close to 15% (Molyneux et al, 2008). The lost balance, as a result of transforming an entire region to devote it to a monoculture with high financial profitability, created the ecological conditions for the outbreak of the Junin virus, which had considerable human impact while therapeutic measures and a vaccine were being developed to treat it.

The SARS-CoV-2 pandemic can be read as an invitation to recognize the fragile relationship between the economy and nature, and the power that a small microorganism to affect humans by altering their health and their means of making a living. The alteration of natural ecosystems and the ways in which agricultural and industrial activities are carried out, as well as the growth of cities, are changing the way in which humanity is exposed to risks where natural or geological cycles start different dynamics that we have very little knowledge and very little power to control. This happens for epidemics as for natural disasters. More and more scientific evidence is emerging that supports the idea that the frequency of these events will increase because planetary changes that we generated. Preserving forms of lives' diversity to have a more resilient economy will also depends on consumption and production behaviors that are more compatible with such biological diversity. This new global scale event is opening up several windows of opportunity for us to take a look, with greater humility, better science, and through cultural change, we can rethink how we relate to the natural environment that surrounds us.

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Appendices

1. Source of information on air pollution.

City	Source
Bogotá	Observatorio Ambiental de Bogotá (OAB)
Buenos Aires	Control and monitoring by the Autoridad de Cuenca Matanza Riachuelo (Acumar)
Mexico City	Instituto Nacional de Ecología y Cambio Climático (INECC)
Guatemala City	US Embassy Air Quality Monitor, Guatemala City
El Salvador	Ministerio de Medio Ambiente y Recursos Naturales (MARN)
San Jose	US Embassy Air Quality Monitor, San Jose
Santiago	Sistema Nacional de Calidad del Aire, Chile
Lima	Sistema de Gestión de Calidad del Aire, Peru
Sao Paulo	Instituto Estadual de Meio Ambiente e Recursos Hídricos
Willemstad	US Embassy Air Quality Monitor, Curacao

2. Standards for particle concentrations in the air.

Quality level	Range for PM 2.5 µg/m3 hourly average	Range for PM 10 µg/m3 hourly average
Good	<27	<40
Moderate	27-62	40-80
Harmful	62-97	80-120
Very harmful	97-370	120-240
Dangerous	more than 370	more than 240

Source: EPA (2020a) and EPA (2020b)

Latin America and the Caribbean: Natural Wealth and Environmental Degradation in the XXI Century

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Abstract

The Latin American and Caribbean region has exceptional natural wealth compared to other continents on the planet. At the same time, the social and economic processes of the region have also brought about processes of degradation of that natural capital that may put at risk, the possibility of a path of sustainable development for their countries. This document reports the situation of the most relevant indicators in terms of the wealth of existing ecosystems and their degradation processes. Alluding to the ancient taxonomy of the four elements, our review will take a tour of the land, water, air and energy in the region. We will compile the most up-to-date information to date on the state of terrestrial ecosystems and land uses, inland and coastal water resources, and air quality. Next, we will analyze the energy issue and its relationship with the emissions of gases associated with climate change, given the relevance of the issue for the future of the region and its contribution to global change. Finally, we conclude with a discussion on the possible ways forward in terms of public policy.

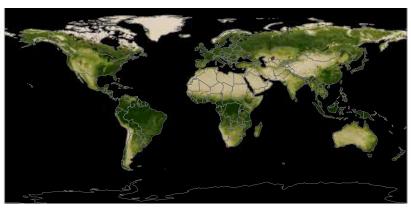
Parte 1.

Some relevant indicators on the state and change in ecosystems:

1. Land, Forests and Biodiversity

Latin America and the Caribbean host almost 60% of terrestrial life on the planet, along with a diverse marine and freshwater flora and fauna (UNEP, 2016). Figure 1 shows this clear and disproportionate concentration of natural coverage in this region, conformed by biomes ranging from wetlands and desert ecosystems to coastal, to tropical forests, and savanna grasslands.

Figure 1. Vegetation



Source: Normalized Difference Vegetation Index-Terra/MODIS (mayo, 2020)

This first image shows the relatively high level of forest density in the region in Central and South America and the Caribbean. The great Amazon basin is discernible, but this should not divert attention from the fact that another important part of the region has forest cover that, in contrast to the rest of the planet, accounts for green wealth and, therefore, of the multiple environmental services derived from it, in terms of water regulation, biodiversity conservation, and carbon capture and storage, among others.

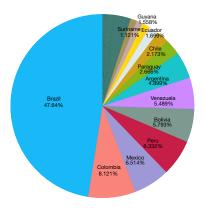
Although large areas of the region remain in their natural state, there are also habitats that have been transformed in service to the needs of local, regional and global economies. A report from UNEP (2016) indicates that the main challenges in the region regarding biodiversity and the pressures it faces are:

- » The decrease in species and the high risks of extinction.
- » Although the rate of loss of habitats in Latin America and the Caribbean has decreased, this degradation continues to be high.
- » Accelerated economic growth and high rates of social inequality are putting pressure on the natural resources of the region.
- » Extensive livestock farming has been one of the most important drivers of this degradation.
- » The extraction of mineral and hydrocarbon resources has led to local devastation due to reduced coverage
- » of forests, and water and land pollution.
- » Air pollution, both local and transboundary, affect human and other species' health.
- » The impacts of climate change such as ocean acidification accelerates the loss of life in coral reefs.

47.6% of the region's forest cover is in Brazil, followed by Colombia (8.1%) and Mexico (6.5%). Although the Amazon basin is of great importance in the forested area of the region, Paraguay, Chile and Argentina have almost 10% of the forest cover. The Andean forest of Patagonia, is found in the latter two countries, mainly in Chile.

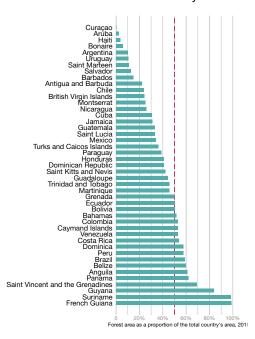
A look into the interior of the region also shows that a large part of the countries, both in the continental and insular areas of the region, are mainly forest areas. The great protectors of the Amazon basin, Brazil, Peru, Venezuela, Colombia, Bolivia, Ecuador, Suriname, Guyana and French Guiana, generally show a large percentage of forest area within their territory. The islands of the Caribbean and Central America do not share a large percentage of the forest area of the region relative to other countries, considering size. Even so, in many of these countries, a great part of their territory is forested area, and therefore the importance of their conservation, to provide ecosystem services in these smaller countries.

Figure 2. Distribution of forest cover in the region, 2017



Source: FAOSTATS (2020).

Figure 3. Forest area as a proportion of the total area in each country of Latin America and the Caribbean, 2015



Source: Our World in Data.

Unfortunately, the trends in terms of the percentage change in forest area do not display the best news for the region when compared to the rest of the world. Using 1990 as the base year, the strongest rate of forest-cover loss in the negative range is in Latin America and the Caribbean, followed by Sub-Saharan Africa.¹

¹ The Middle East and North Africa region stands out for its positive change in that period, but we are talking about a forest cover that would be equivalent to 2% of the coverage of Latin America and the Caribbean. The countries of the Middle East and North African region have historically had very low forest cover.

Table 1. Changes in forest area between 1990 and 2016 by region

Region	Forest Area in 1990 (km²)	Change in 2016
East Asia and the Pacific	6,280,253	2.24%
Europe and Central Asia	10,199,848	2.34%
Latin America and the Caribbean	10,242,342	-9.68%
Middle east and North Africa	199,293	16.47%
North America	6,507,240	1.02%
South Asia	789,187	5.84%
Sub-Saharan Africa	6,515,615	-6.14%

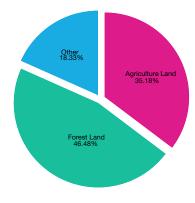
Source: Authors' calculation based on World Bank (2020).

Uses and Land Cover

57% of the world's primary forests are found in Latin America and the Caribbean, which play an important role in the care of biodiversity and conservation. In countries like Ecuador, French Guiana and Venezuela, more than 80% of its forest area is primary forests. In fact, the vast majority of forests in the region are primary and/or have been naturally regenerated. As is well known, a significant fraction of greenhouse gas emissions in the region come from activities associated with land use (deforestation, livestock, agriculture, and the production and consumption of inputs to maintain them as fertilizers, agrochemicals, and fuels). According to FAO, the region contributes 17% of the total greenhouse gas emissions produced worldwide by agriculture, mainly due to emissions from the digestive systems of livestock (60%), manure (25%) and other chemical input activities associated with production, in addition to reducing forest cover that operate as carbon sequestrators.

Within the post-Covid-19 scenarios, it is plausible to think that, in the face of short-term limitations to international trade, due to greater sanitary controls and the reduction of different economic activities, the countries of the region will resort to the domestic market to meet the demand for primary goods in agricultural chains and the internal demand for food. In this sense, pressure on the agricultural frontier can threaten forested areas, unless measures are taken in this regard.

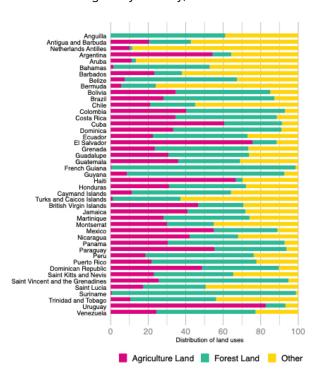
Figure 4. Distribution of land uses in Latin America and the Caribbean, 2017



Source: FAOSTATS (2020).

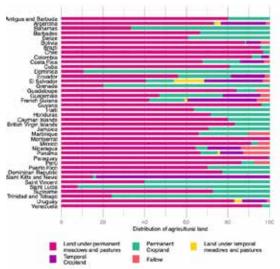
Land use in the region is mainly agricultural. However, given the growth of the urban population in the region, the expansion of cities can accelerate the change in land use and increase the climatic consequences mainly due to deforestation. The following figures show the distribution of land uses in each of the countries, as well as the distribution in each of the uses, both forest and agricultural, during 2017.

Figure 5. Distribution of land uses in the region by country, 2017



Source: FAOSTATS (2020).

Figure 6. Distribution of agricultural land by country, 2017

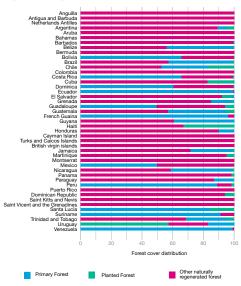


Source: FAOSTATS (2020).

The importance of land use in forests derives from the ecosystem services that these offer by being the habitat of species, regulators of water cycles, carbon sequestration and storage, generators of pollinating processes, among others. Sustaining these services for the economy requires that the processes of recovery of forested areas are aimed at planting and reforestation of native species, in addition to the protection and conservation of existing primary forests. A significant part of these forest areas has had very low levels of human intervention, which allows them to host one of the greatest biological riches in the world. As aforementioned, the region has the most extensive primary forest on planet Earth, in the Amazon. However, only a fifth of this jungle still

remains intact (Greenpeace, 2015). The following figures shows the distribution of forest area in each country according to the type of forests they have.



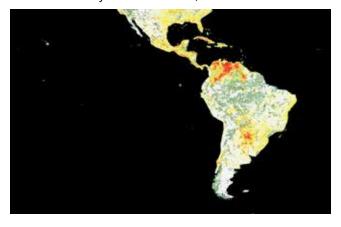


Source: FAOSTATS (2020).

The biological wealth of primary forests has been rapidly and irreversibly affected due to human intervention. In Latin America and the Caribbean, almost 9.68% of forested area in the region was lost in 1990. This depletion of forested area is linked to changes in land use, for activities related to the extractive industries, agriculture, livestock and urbanization.

Forest fires represent one of the main causes of deforestation concern. Between 2001 and 2018, 92 million hectares of forest cover were lost in the region. Of these, only 59% of deforestation occurred due to the exploitation of raw materials (GFW, 2018). The following map shows the wildfire alerts for the past month before the COVID-19 pandemic was declared. Unfortunately, the year 2020 has seen an increase in forest fires, mainly in the Amazon, due to the pressure of expansion activities of agriculture and logging, as we can see in the most recent sources of alerts on the following map.

Figure 8. Fire Hotspots,² between February 9 and March 11, 2020



Source: VIIRS 375m - FIRMS (2020).

² Fire hotspots are points where more than 100 fire alerts have been filed in the last month.

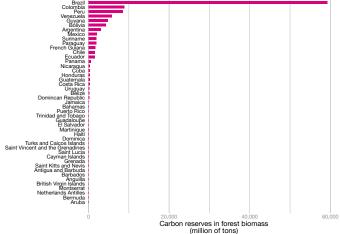
It is important to highlight that, during this first quarter of 2020, the region was in its wet season, which has prevented the fires from spreading on a large scale. However, in August 2019, forest fires in the Brazilian Amazon devastated an area equivalent to 4.2 million soccer stadiums (Semana Sostenible, 2019). These fires increase greenhouse gas emissions and affect rainfall patterns, extending dry seasons, affecting biodiversity, agriculture, and human health (Greenpeace, 2019). In particular, it has a high impact on ethnic communities, mainly indigenous ones, who not only protect and subsist from forests, but have a cultural, religious and social attachment to many of these spaces.

Emissions from Land Use

Land use, land use change and forestry is a sector of great importance for climate change mitigation. Given the growth of the region and the land use discussed above, greenhouse gas (GHG) emissions from this sector are a challenge for the region. In contrast to urbanization, broad forest areas are usually inhabited by ethnic communities that protect the area to which access by humans has been limited beyond the borders of each forested ecosystem. This care has also represented protection to carbon reserves within the forest biomass that, if exploited through deforestation, would accelerate the current climate change process on the planet. The following figure shows the carbon reserve stock in the forest biomass in each country, demonstrating the uneven distribution of those carbon reserves in very few countries.

Colongua Colongua Vengzuela

Figure 9. Carbon reserves in forest biomass by country, 2017



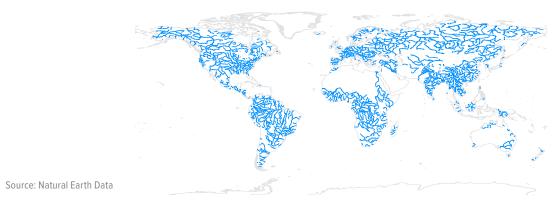
Source: FAOSTATS.

Thanks to the fact that a large proportion of the primary forests of the Amazon jungle and other forest areas in the region have remained intact, Latin America and the Caribbean have carbon sinks of global importance, in addition to the regulation and supply of water, and the conservation of biodiversity.

2. Water

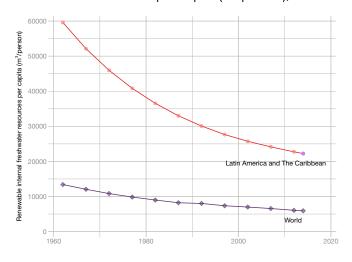
The case of water, as a renewable resource and highly dependent on the state of conservation of ecosystems, is one of the contrasts in the region. Once again, there is a natural wealth higher than the average for the rest of the world, if we consider the water network in figure 10, and in turn, the most worrying trends associated with the pressure of economic activities on natural resources and the increasing migration to cities.

Figure 10. Map of the main rivers of the world



The following figure summarizes the estimates of freshwater stocks available in recent decades per inhabitant. The rate of savings, substantially higher for the region compared to the rest of the planet, raises concerns, taking into account the trend towards urbanization and the growing needs for drinking water for consumption, industry and agriculture. It is not a coincidence that this accelerated reduction in freshwater stock is associated with the accelerated growth of the population living in urban centers (see figure 14).

Figure 11. Renewable internal freshwater resources per capita (m³/person), 1962-2017.



Source: Our World in Data.

The demand for water for different human activities is closely related to other factors that we have mentioned. The case of agriculture and livestock is one of them. On the one hand, the production of meat and products for fattening animals generate a significant demand for water, in a region with a high supply and demand for these products.

The provision of potable water for the population is vital, in order to be able to attack the health challenges of the most vulnerable populations. Paradoxically, the abundance of water available in the region contrasts with challenges still to be resolved in terms of quality. Deaths from diseases associated with non-potable water, although they have been decreasing worldwide, continue to be a challenge, especially in the Caribbean region where high morbidity and mortality rates continue to occur due to lack of access to potable water.

The Caribbean

The Caribbean

Topial

Latin America

Andean

Tropial

Latin America

Latin America

Latin America

Latin America

Andean

Topial

Latin America

Latin America

Latin America

Andean

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Latin America

Latin Ame

Figure 12. Deaths per 100,000 inhabitants attributed to non-potable water sources

Source: Our World in Data.

Coastal Systems

The oceans that surround the region provide great ecological benefits, but at the same time they represent great economic gains either from food or eco-tourism (UNEP, 2018). Marine protected areas are one of the best ways to protect the health of the oceans from overfishing, pollution and acidification, in addition to providing sustenance to the human populations that live on the coasts. The region has a coastline along the Caribbean, Atlantic, and Pacific that makes it privileged to benefit from the great marine currents. According to Guarderas et.al (2008) the region has more than 700 marine protected areas that cover about 1.5% of the coastal waters and coastal platform in more than 300,000 square kilometers. When evaluating the distribution of these, the authors highlight a very low representativeness of the marine ecosystems of the Pacific and South Atlantic in South America. According to goal 11–ACHI³ (CBD, 2018), by 2020, 10% of coastal and marine areas must have equitable and efficient conservation mechanisms in ecosystem terms. In particular, those of greater importance for biodiversity and ecological services. In 2018, countries such as Brazil, Colombia, Mexico, and Peru had already met their national goal, while other countries such as Suriname, Panama, Guatemala, and Saint Lucia had insufficient conservation goals (CBD, 2018).

Coastal systems are experiencing the consequences of climate change. According to the IPCC (2007), the main impacts of this phenomenon on the coasts are related to the acidification of the oceans, the increase in sea temperature and sea level. The oceans are a source of food, they regulate the climate, they produce most of the oxygen consumed on the planet and they absorb a third of the carbon dioxide that we generate (UNEP, 2018). Although several countries in the region are legislating the protection of these, it is still necessary that several follow this path and that the restrictions and protection measures implemented are working effectively.

Some of these irreversible impacts can already be seen in the largest and most complex coral reefs on the continent, the Abrolhos archipelagos in Brazil; the archipelagos of the Rosario Islands, San Bernando, San Andrés, Providencia and Santa Marta in Colombia, and the archipelagos of Blanquilla Island, Los Roques National Park, Morrocoy National Park and Mochima National Park in Venezuela (NOAA, 2005).

³ Goal 11 – ACHI also includes that 17% of inland waters must have these protection mechanisms.

Plastic Pollution

Although the mass production of plastic begins in the 1950s, today more than nine million tons of plastic waste ends up in the oceans every year. The use of plastic has become normalized in the lifestyle of human beings, which seems unrecognizable to a life before the Second World War where they were not so widely used. During their production, chemical substances are added to plastics, to improve their functionality but at the same time making them endure without being biodegraded for hundreds of years.

In 2010, countries such as Guyana, Saint Lucia, Saint Kitts and Nevis, Antigua and Barbuda and Barbados, produced more than 0.5kg per capita of plastic waste per year. In that same year, Latin America and the Caribbean produced a little more than 7.2% of the plastic that was not properly managed. A plastic management policy, in particular for single-use plastic, is necessary for the region since the Caribbean Sea is the second most plastic-contaminated sea in the world. Being pioneers in the region, the islands of Antigua and Barbuda have set the standard for various countries such as Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Granada, Guyana, Honduras, Panama, Peru, Santa Lucia and Uruguay to be a part of the Clean Oceans strategy and have mechanisms to limit their plastic waste with policies that prohibit them completely or tax their use (UNEP, 2018).

3. Air

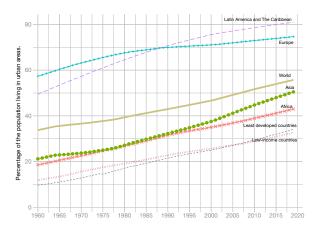
Air quality has become one of the symbolic aspects of the "respite" that the Covid-19 has given to people's daily lives. This image of Bogotá with its strip of pollution, days before the beginning of the quarantine in this city, is just an example of many other cities in the region that, with the increase in urbanization and the use of cargo and passenger transport – main source of emissions, have seen new images of cleaner air.

Figure 13. Air in downtown Bogotá, February 5, 2020 at 10am



In this last century, the process of economic and demographic transition in the region led to 80% of the region's population moving to live in urban areas. This process has been much more accelerated in Latin America and the Caribbean than in other regions of the world. This movement from the countryside to the city also implies that economic activities in these areas also increase, creating pressure on air quality due to the need to provide public services, such as mass transportation, drinking water and energy, in cities.

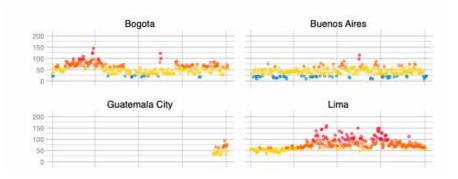
Figure 14. Percentage of the population living in urban areas



Source: Our World in Data

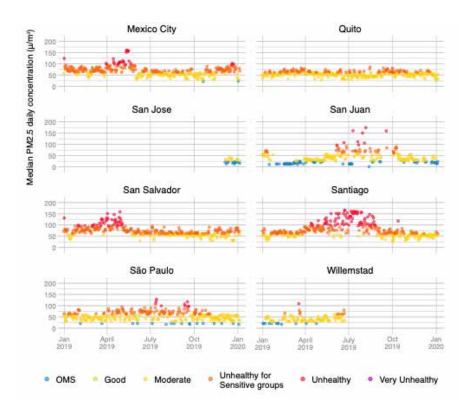
The air quality monitoring systems in these cities today allow measurements to be made day by day and to assess what happens throughout the year, given that different climatic and geographical aspects make each city have its own history and conditions that determine the presence of pollutants. One of the most common indicators is the concentration of particulate matter (PM2.5 and PM 10). Based on these sources of daily monitoring of PM2.5, we constructed these time series from the medians of all daily measurements for capital cities where measurement systems exist and compared the time series between 2019 and 2020. We see that, based on public health criteria, during an important part of the year these cities⁴ present "harmful" air quality conditions to sensitive groups and "very harmful" to the entire population according to parameters of the Environmental Protection Agency⁵ (EPA, 2020) and the WHO. This data, as can be seen in the following figures, is especially worrying in the case of PM2.5, this being even more important to respiratory problems than PM10. Thanks to the possibility of obtaining daily measurement data during the pandemic, in section III we will be able to analyze the changes in these levels of pollution attributable to the change in the activities of the economy and citizens.

Figure 15. Median PM2.5 daily concentration during 2019 and early 2020



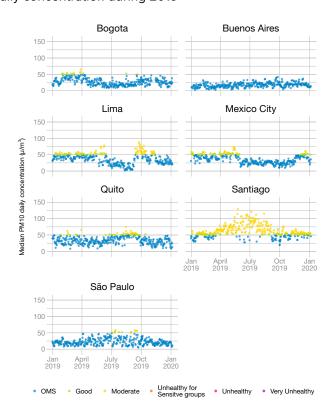
⁴ The data for Guatemala City and San José are only available as of December 4 and 5, 2019 respectively. For Willemstad there is no information available as of July 2019.

⁵ See appendix 2



Source: Authors, from the World Air Quality Index.

Figure 16. Median PM10 daily concentration during 2019



Source: World Air Quality Index.

Air pollution is one of the challenges in the region. Regionally, the transportation of merchandise and urban passengers are based on primary solutions. In addition, the growth of landfills in cities, absent from public policies, are a source of methane emissions and large amounts of fine particles due to fires, accidental or intentional. These two factors are the main sources of air pollution in urban areas. Together with the burning of crops and forests in areas other than urban areas, that due to the winds ultimately reach the cities.

As aforementioned, transportation is one of the main causes of air pollution. Most countries in the region do not have a regulation on fuel efficiency standards, vehicle emissions or fuel quality (NRDC, 2014), which is necessary for a clean transportation sector. In a region with growth of urban areas and the automotive fleet, it is necessary to control atmospheric pollution, both for the quality of life of city dwellers and to ease the burden on the health system

4. Energy and Climate Change

Latin America and the Caribbean is the most efficient region in the world when it comes to the use of energy. The vast majority of countries in the region have a low level of energy intensity⁶ from primary sources. In the region, 1.06 kWh is needed to produce one dollar of GDP. In fact, it has an advantage of 0.36 kWh/GDP⁷ with respect to the world average. As the following figure shows, most countries in the region have a low level of energy intensity.

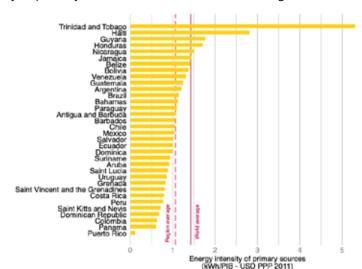


Figure 17. Energy intensity of primary sources in the countries of the region

Source: Our World in Data.

Puerto Rico is the world leader in energy efficiency and, along with 12 other countries in the region, needs less than 1 kWh to produce a dollar of wealth. The region's energy efficiency is such that just over 80% of countries are below the world average in energy intensity. However, two of the countries at the extremes of the distribution of per capita income in the region, Haiti and Trinidad and Tobago, manage to far exceed the energy intensity rate of the region and the world.

On the other hand, the total energy supply in the region by primary sources has grown 94% between 1990 and 2015, largely driven by orientation strategies of these economies during the end of the last century and its beginning towards primary sectors, while deindustrialization occurred.

⁶ Energy intensity is an indicator of energy efficiency. This indicator captures the amount of energy required to produce one dollar of GDP. The higher the indicator, the more expensive the conversion of energy into wealth.

⁷ GDP is calculated at 2011 USD PPP.

800000

600000

400000

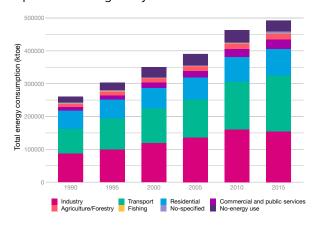
1990
1995
2000
2005
2010
2015
Wind, solar, etc
Biofuels and waste
Oil

Figure 18. Energy intensity of primary sources in the countries of the region

Source: IEA (2020).

On the other hand, Latin America and the Caribbean have played an important role in the generation of renewable energy sources. Currently, more than a quarter of its primary energy sources are renewable, more than double the world average. According to the IRENA report (2019), more than 200 GWh are produced in the region by renewable sources, mainly large-scale hydroelectric and biomass, and 10 GWh by solar, wind and geothermal energy. Likewise, the report also indicates that the region has made large investments, especially in the diversification of renewable⁸ energy sources. This managed to position two countries in the region among the ten largest renewable energy markets in the world.

Figure 19. Total energy consumption in the region by sector between 1990 and 2015



Source: IEA (2020). No energy use refers to other uses for petroleum products such as white gasoline, paraffin, lubricants, and bitumen, as well as other uses for coal products.

The sector that uses energy the most in the region is transportation (34.61%), followed by industry (31.40%) and residential (16.36%). These three sectors represent more than 80% of the region's energy consumption and is around 405 thousand Ktoe. While the commercial and public services sector represents only 5.91% of energy consumption, in 2015 it is the sector whose consumption rate has grown the most, being 2.6 times larger than

⁸ Between 2010 and 2015, total investment in renewable energy generation in the region reached nearly USD 120 billion. Only in the latter, 6% of the world's renewable energy investments was made in Latin America and the Caribbean (IRENA, 2019)

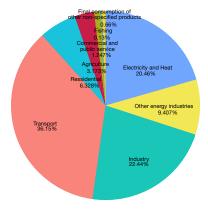
in 1990. Likewise, the transport sector has duplicated, having a growth rate of almost 130% from the 1990s to 2015. In fact, energy consumption in the region grew at a rate of 175.8% while the population growth rate of the region has been 45.35%.

According to IDB calculations (2013), the region's energy potential is 22 times the estimated energy demand for 2050. Though hydroelectric energy will continue to lead energy production, by 2050 16% would come from wind energy, terrestrial and mainly marine; 46% of photovoltaic solar energy, and 21% of CSP solar energy. Although the region has a high potential for renewable energy generation, wind, solar and water resources are variable with natural and, above all, seasonal phenomena. In addition to water reservoirs, there are still no technologies that store large amounts of solar heat or electricity at costs that justify the technological transition. This means that these renewable sources cannot supply the region's demand throughout the year. Sources such as bioenergy are a complementary alternative for the region's energy supply. Countries like Brazil have been pioneers in the production of biofuels for the transport sector, made from sugar cane. Bioenergy is not only produced from sugarcane, but also from other agricultural products, such as soybeans and corn, and from waste residues and crops. This sector could represent a profitable source of caloric energy and contribute to leveling out other variable renewable sources as well as being a generation of employment in rural areas of Latin America.

Emissions from Energy Consumption

During 2015, the energy consumption in the region produced 1208 Mt CO_2 (IEA, 2020). Of which 36.15% came from the transport sector, 22.44% from industry and 20.46% from electricity and heating production. The following figure shows the distribution of CO_2 emissions in energy consumption by sector in Latin America and the Caribbean.

Figure 20. CO₂ emissions in energy consumption by sector, 2015



Source: IEA (2020).

Emissions from energy consumption have grown by 107% compared to 1990. This growth has been led mainly by the electricity and heating (224.5%) and transport (116.6%) sectors, which implies a huge challenge in the transition of energy sources to achieve global goals related to climate change.

Currently, technological progress has meant that the prices of clean and/or renewable technologies, such as wind and solar energy, have decreased while their efficiency and productivity have increased. As aforementioned, the region has an advantage in energy efficiency from primary sources and, some countries are world-leaders on the production of biofuels. This is why a push that achieves a comparative advantage over clean sectors can be decisive, for example, to ensure the future of biofuels in the region and achieve the energy transition.¹⁰

⁹ Today there are energy accumulators or batteries that store chemical energy but their storage capacity was limited to small amounts of energy.

¹⁰ See more in León y Cárdenas (2020).

Other Energy Alternatives

The world and the region are moving in search of clean energy, one of them being geothermal energy with high potentials at lower emission levels. This type of energy is obtained through the heat of the interior of the earth (IRENA, 2019) and can generate a reliable base load for 24 hours a day, seven days a week, during the twelve months of the year (ESMAP, 2016). This is a more viable option for generating electricity at a lower cost than fossil fuels, particularly if environmental impacts are taken into account. Furthermore, its production function helps stabilize the cost of energy since it is not subject to the volatility of international prices of raw materials such as oil and coal (ESMAP, 2016).

According to the Association for the Development of Geothermal Energy, Latin America and the Caribbean has the potential to produce 70GW of this type of energy (IDB, 2014). Basically, every country on the Pacific coast of the region, from Mexico to Chile, has enough potential resources to develop geothermal projects. In fact, Mexico is in the top 5 producers of this type of energy worldwide (IRENA, 2019) and several Central American countries, such as El Salvador and Costa Rica, cover a large part of their electricity demands thanks to geothermal energy (ESMPA, 2016). Currently, the island of Guadalupe currently produces 15MW and in South America, there is only one project in Argentina that produces 0.67MW.

Despite its advantages, geothermal energy has encountered several obstacles, while trying to be implemented. According to ESMAP (2016), only 15% of known global geothermal reserves are being exploited. One of the reasons for this is the high risk perceived during the initial stages of development of these resources. Well, during the exploration phase and the commencement of drilling, the uncertainty regarding the capacity of the resource is very high, which is not very attractive for the mobilization of private capital (ESMAP, 2016). In particular, the exploratory phase is even more delicate since most of the suitable areas for geothermal development are Green Fields, that is, virgin fields that need more investment to be developed from scratch (ESMAP, 2016).

Although geothermal energy appears to be a very attractive renewable energy source for Latin America and the Caribbean, there are a few considerations to keep in mind. In particular, mega works such as hydroelectric projects in the region have represented high environmental costs that are neither taken into account when being formulated, nor are they compensated when they produce and drastically affect the environment and its surrounding communities (Moran et al., 2018). Geothermal plants can represent a high environmental cost if their management is not suitable. These costs include micro-earthquakes, sulfuric acid emission, contamination of water sources, deterioration of the landscape and even an increase in the accidental emission of greenhouse gases that are contained below the earth's surface (UCUSA, 2013).

Another important alternative is nuclear energy. One percent of electricity consumption in Latin America and the Caribbean is supplied by this type of energy (IDB, 2013). Despite the fact that this source presents an opportunity to supply the growing consumption of electricity by reducing greenhouse gas emissions, there is a controversy around the use or not of this energy source based on the safety of nuclear power plants, the management of radioactive waste generated and the increase in nuclear weapons. These two production alternatives in the region follow the recommendations of the IPCC (2007) on the need to use low-carbon energy sources, such as renewable energy and nuclear energy.

Greenhouse Gas (GHG) Emissions and Climate Change

On April 16, 2020, the concentration of CO₂ in the atmosphere reached 413 particles per million. Exceeding 450 ppm can lead to a warming of the Earth's surface of at least 2 degrees Celsius (Stern, 2005), an anomaly that can trigger harmful and irreversible changes in the planet's climate (IPCC, 2014). Faced with this threat, the United Nations Framework Convention on Climate Change established the objective of "stabilizing GHG

concentrations (...) to achieve a sufficient period of time for ecosystems to adapt naturally to climate change"¹¹ (UNFCC, 1994). In search of this time frame, 96 countries committed to reducing their GHG emissions to achieve these global goals.

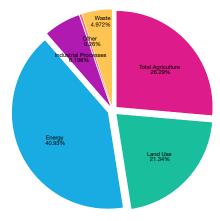
Table 2. Global CO₂ emissions by region, 2017

Region	% of world population	% of CO ₂ emissions by production	% of CO ₂ emissions by consumption
North America	5%	17%	19%
Europe	10%	16%	18%
Latin America and The Caribbean	9%	6%	6%
Asia	60%	56%	52%
Africa	16%	4%	3%
Oceania	0,50%	1,30%	1,30%

Source: Our World in Data.

The participation of Latin America and the Caribbean seems not to be very alarming compared to that of other regions of the world, but given the growth processes and the sectors of the region, it is expected that the growth of GHG emissions will increase in the coming years, especially with accelerated urbanization trends, on the one hand, and pressure on forest reserves, especially in the Amazon. Although the participation of the region is low, in order to achieve the climate goals, a drastic change is needed in the current path of emissions of all the regions. Most of the region's emissions come from the energy sector, followed by agriculture and land use, and industrial processes. Figure 22 shows the distribution of GHG emissions in the region by sector.

Figure 21. Distribution of GHG emissions by sector in Latin America and the Caribbean, 2017



Source: FAOSTAT, 2017.

In contrast to the rest of the world, in Latin America and the Caribbean, GHG emissions are mainly produced by the agricultural sector, land uses. Although CO₂ is the most produced gas in the region, it is important to make efforts to reduce methane emissions since its impact on global warming is greater. The following figure shows the GHG emissions in each of the countries in the region where the greatest challenges in reducing emissions are in countries such as Brazil, Mexico, Argentina, Venezuela and Paraguay.

¹¹ Authors' translation.

Mexico
Argentina
Venezuela
Paraguay
Peru
Bolivia
Colombia
Ecuador
Chile
Trinidad and Tobago
Honduras
Cuba
Guatemala
Guyana
Costa Rica
Panama
Dominican Republic
Nicaragua
Uruguay
El Salvador
Jamaica
Suriname
Belize
Haiti
Bahamas
French Gulana
Barbados
Aruba
Antigua and Barbuda
Saint Lucia
Grenadia
Saint Kitts and Nevis
Dominica
Puerto Rico
Saint Vincent and the Grenadines
Trurks and Caicos
British virgin islands
Anguilla
Guadaloupe
Montserrat
Cayman Island
Bermuda

O 200 400 600 800 1000
GHG emissions
(thousand CO₂eq)

Figure 22. Emissions in Latin America and the Caribbean defined by gases and country, 2017

Source: FAOSTAT, 2020.

Unless immediate drastic actions are taken, a global warming of 2°C seems inevitable following the current trajectory. According to Vergara et al. (2013), this increase in the temperature of the Earth's surface represents physical risks that affect the region mainly in the following ways:

- » Agricultural activities by affecting soil moisture and changes in rainfall patterns.
- » The coastal and marine areas given the increase in sea levels, the warming of the surface temperature and the increase in the frequency of extreme weather events.
- » Areas with high exposure to tropical vector diseases given the increase in temperature and the increase in the weather.
- » The Andean glaciers given the warming.
- » Hydrological basins due to changes in rainfall patterns.
- » The rainforest.
- » The integrity of ecosystems and biodiversity.

Without adaptation measures, these impacts will have a significant economic and social impact. By 2050, the main impacts of global warming may cost between 1.8 and 2.4% of the region's GDP. The following table shows the estimated annual costs of the main damages and impacts of climate change in the region.

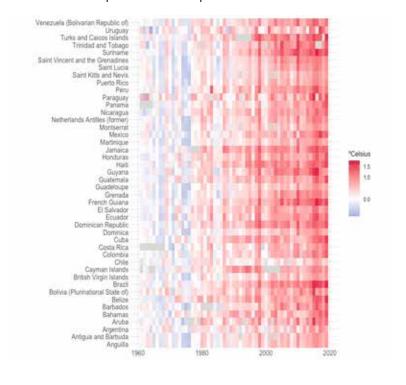
Table 3. Estimated annual costs of major damages and impacts of climate change after 2050 for the region

Impact	Region mainly impacted	Estimated annual costs (US \$ trillion in 2005 prices)
Loss due to decrease in net exports of agricultural products.	Latin America and the Caribbean	26–44
Sea level rise (1 meter)	Latin America and the Caribbean	22
Coral bleaching	The Caribbean	8–11
Increases in the intensity and frequency of extreme weather events	CARICOM Gulf Coast of Mexico, Central America and the Caribbean	5
Increases in the incidence of diarrhea and malnutrition	Latin America and the Caribbean	1
Loss of the Amazon	Latin America	4–8
Glacier retreat	Peru	1
Water power generation	Brazil	18
Estimated total annual cos	85–110 (1.8–2.4% of GDP)	

Source: Vergara et al. (2013).

In 2019, the temperature of the Earth's surface had reached 0.98°C above pre-industrial levels. Following patterns, the average temperature on the land surface of all countries in the region during 2019 was above pre-industrial levels. It is worth highlighting the case of countries such as Brazil, Belize, Cuba, Haiti, French Guiana and, the Turks and Caicos are closer to the 2°C limit and, probably the closer you get, the faster the aforementioned impacts will be felt. The following figure shows this change in temperature from pre-industrial levels for each of the countries in the region in 1990 and 2019.

Figure 23. Change in land surface temperature above pre-industrial levels between 1961 and 2019



Source: FAOSTATS (2020).

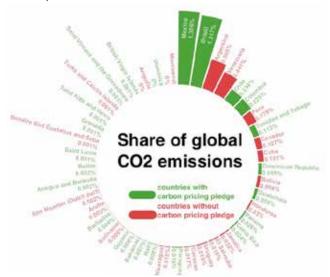
The social and environmental costs of a 2°C rise in land surface temperature above pre-industrial levels will be very high. Many countries in the region have already exceeded 1°C. Although several of the impacts of climate change are already manifesting, preventing the temperature from continuing to rise is crucial for the region. This is why Latin America and the Caribbean are part of the agreements that seek to limit this warming. The following section outlines the region's participation in the Paris Agreement and the current status of some of the actions taken by countries to mitigate climate change.

Carbon pricing

In the Paris Agreement, the signatory parties committed to transform their growth and development paths in order to reduce GHG emissions and thus limit global warming. This agreement asks countries to communicate and outlines their contributions to the climate crisis. One of the instruments that was most emphasized during the COP21 was the price of carbon. This tool seeks to put a price on the externalities caused by GHG emissions.

The following figure shows the participation of each of the countries in the region, in terms of total global CO₂ emissions and their commitment to use a carbon price mechanism to reduce their impact.

Figure 24. Share of global CO₂ emissions by country in Latin America and the Caribbean according to their commitment to the price of carbon, 2017



Source: Our World in Data (2017) and NDC Registry (2020).

In 2017, the region produced 5.047% of the world's CO₂ emissions. According to the Intended Nationally Determined Contributions Register (INDC), 68.75% of the countries in the region had indicated their intention to use a carbon price market instrument to decrease their GHG emissions. On the other hand, 10 countries in the region did not commit to using a market instrument such as the carbon price to achieve a reduction in their emissions. These countries include Argentina and Venezuela, which together sum up to just over 1% of global emissions. However, five years after the Agreement was signed, only 4 countries in the region have a price mechanism. The following is a brief description of the state of carbon prices in the region.

Argentina:

- » GHG emissions (2016): 482.08 MtCO2e.
- » Policies implemented: Impuesto al dioxide de carbono (carbon dioxide tax)¹² on January 1, 2019 on most fossil fuels
- » Percentage of emissions covered by the jurisdiction: 20%.
- » Price: 6 USD¹³/tCO₂.
- » Others:
 - » As stated in its INDC (2015), Argentina had not committed to implement a carbon price instrument.
 - » The resources collected from this tax are not destined neither totally ,nor partially, to finance funds or incentives that promote clean technologies or that counteract the negative environmental externalities of the use of fossil fuels.
 - » The carbon tax rate is based on the local currency. At the time it was implemented it was equivalent to USD 10/tCO₂. Given the devaluation of the Argentine currency, the rate is equivalent to USD 6/tCO₂.

Chile:

- » GHG emissions (2016): 3.74 MtCO2e.
- » Policies implemented: Impuesto destinado a gravar las emisiones del aire de compuestos contaminantes (tax intended to tax air emissions of polluting compounds)14 from 2017 on all fossil fuels mainly in the industry and energy sectors.
 - » Percentage of emissions covered by the jurisdiction: 39%.
 - » Carbon price: USD 5/tCO₂.

Colombia:

- » GHG emissions (2016): 232 MtCO2e.
- » Policies implemented: Impuesto nacional al carbon (national carbon tax)15 on all fossil fuels in all sectors except for natural gas consumers who are not in the petrochemicals and refineries sector, and carbon-neutral fossil fuel consumers.
 - » Percentage of emissions covered by the jurisdiction: 24%.
- » Carbon price: USD 5/tCO₂.

Mexico:

- » GHG emissions (2016): 688.38 MtCO2e.
- » Policies implemented: (i) Tax16 on additional CO₂ emissions from all fossil fuels on the production of natural gas emissions.
 - » Percentage of emissions covered by the jurisdiction: 46%.
 - » Carbon price: 3% on the price of fossil fuels. So, the carbon price is between 0.38 and 3 USD/tCO₂.
- » Policies implemented: (ii) Pilot of the emissions trading system17 that began to operate from January 1, 2020. This pilot covers the energy, industry, oil and gas sectors. Mexico expects its thorough application by 2023.
 - » Percentage of emissions covered by the jurisdiction: 37%.
 - » GHG limit: 271 MtCO2e.

Comparably, French Guiana, Martinique, Guadeloupe and Saint Bartholomew are covered under the European Union's emissions trading system and carbon taxes. In addition to the aforementioned policies, Colombia is developing the National Greenhouse Gas Emissions Transactional Quotas Program (PNCTE its abbreviation in

¹² Official name according to Law 27430 of 2017 (Ministry of Justice of human rights in Argentina, 2017).

¹³ Price as of April 1, 2019 (World Bank, 2020).

¹⁴ Official name according to Law 20780 (Ministry of Finance of Chile, 2014).

¹⁵ Official name according to Law 1819 of 2016. (Congress of the Republic of Colombia, 2016).

¹⁶ See more Secretary of the Government of Mexico (2016).

¹⁷ See more in Secretary of the Government of Mexico (2019).

spanish), and Chile and Brazil are considering implementing similar projects. Likewise, Brazil's flagship policy, RenovaBio, was developed to meet the country's goals, in its NDC, of a 10% reduction in transportation GHG emissions by 2028 and an 18% share of biofuels in the region's energy matrix (IEA, 2020).

The Carbon Price

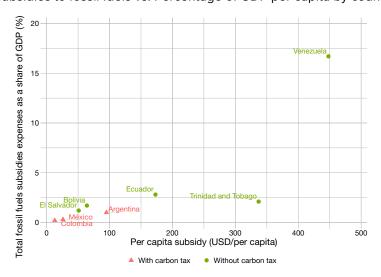
The price of carbon or pollution is one of the most efficient economic mechanisms to change the behavior and, consumption and production patterns of households and firms. Although taxing pollution can have regressive distributional impacts in several countries (IPCC, 2014), the tax collection of these taxes can be distributed in such a way, as to reduce the economic inequality that exists in the countries of the region.

Fossil Fuel Subsidies in the Energy Sector

One of the central axes in the Paris Agreement is the reduction of GHG emissions, particularly those produced by the exploitation and consumption of fossil fuels. Likewise, this exploitation and use also have a dangerous impact on the health and well-being of the population since, air quality frequently exceeds the standards of the World Health Organization, to a large extent because of fossil fuels.

For these reasons, there is a global need to reform fossil fuel prices, especially to make them more expensive and less attractive than clean alternatives. One way to do this, is through carbon taxes, which are not only easy to implement in an already implemented tax collection system, but also have a wide reach to the 'taxable' base of polluting goods and services. However, in many countries there are subsidies on these fuels which can blur the disincentive of the carbon tax. The following figure shows the total subsidies per capita on fossil fuels and the percentage of GDP of each country that these subsidies represent.

Figure 25. Per capita subsidies to fossil fuels vs. Percentage of GDP per capita by country, 2019



Source: IEA (2020).

In the region, the total subsidies per capita is on average USD 151 per person. During 2019, the countries in the figure, in total, spent a little more than USD 25.5 billion in subsidies for all fossil fuels. Led by Venezuela that spends 16.7% of its GDP on these subsidies, the region spent a total of USD 25,520.7 million in fossil fuel subsidies. Within each country the distribution of these is different and following the IEA classification (2020), the following table shows the resources assigned by each country to each classification.

Table 4. Distribution of fossil fuel subsidies by subsector in the countries of the region during 2019, real prices in millions of dollars

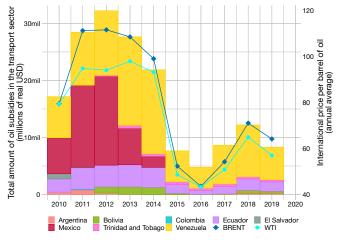
Country	Oil	Electricity	Gasoline	Coal
Argentina	3163.9 (74.24%)	133.6 (3.14%)	962.6 (22.59%)	1.4 (0.03%)
Bolivia	686.3 (93.54%)	-	47.4 (6.46%)	-
Colombia	661.7 (-100%)	-		-
Ecuador	3003.3 (-100%)	-	-	-
El Salvador	17.2 (5.2%)	313.2 (94.8%)	-	-
Mexico	21.0 (0.64%)	3262.8 (99.36%)		-
Trinidad and Tobago	3163.9 (74.24%)	67.1 (14.28%)		-
Venezuela	3163.9 (74.24%)	4533.1 (35.48%)	1136.3 (8.89%)	-

Source: IEA (2020). In parentheses, the percentage of total fossil fuel subsidies by country.

With the exception of Mexico and El Salvador, the largest budget, of the countries of the region, in fossil fuel subsidies is used in oil. In fact, in countries like Colombia and Ecuador it is the only fuel that is subsidized in the energy sector, and for Argentina, Bolivia and Trinidad and Tobago it represents more than 70% of the subsidies. In total, oil received subsidies of more than USD 15 billion in 2019. Two other energy sub-sectors whose fossil fuels also received subsidies are, natural gas and coal, which took a total of just over USD 2 billion. Finally, for the generation of electricity, only Venezuela and Mexico invested almost USD 8 billion to subsidize fossil fuels. It is important to highlight this subsidy since it may be part of the interests of governments to guarantee access to electricity by households and/or firms. However, instead of subsidizing the use of fossil fuels for the production of this public service, these resources can be used in other sources of primary renewable or nuclear energy, and in this way, encourage the use of these cleaner alternatives.

Within the energy sector, the oil subsidy in the transportation sector plays an important role. In fact, these subsidies represent 55.36% of the oil subsidies in the region. At the beginning of the decade, the countries managed to spend a total of more than USD 30 billion, led mainly by Venezuela and Mexico. Although, today, the amount of subsidies is a little more than half that in 2012, they still have an important fraction for countries like Venezuela and Ecuador. The following figure shows the total amount of oil subsidies in the transport sector from 2010 to 2019 by country and the annual average of international prices per barrel of oil (axis 2).

Figure 26. Oil subsidies in the transportation sector by country



Source: IEA (2020) and Statista (2020).

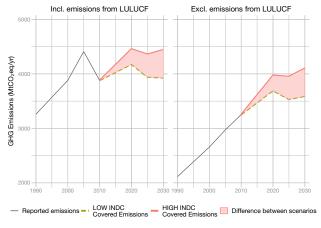
The removal of fossil fuel subsidies can not only lead to reductions in GHG emissions in the region, but can have fiscal and budgetary benefits for each country. In particular, there is the case of Venezuela where more than 15% of its GDP is dedicated to these subsidies. Another benefit of this cut is that it can help the transition to clean energy since fossil fuels will no longer be 'cheap' and the other alternatives will be more attractive. It is important to keep in mind that the total amount subsidized in the transportation sector moves positively with international prices per barrel of oil, which shows a bit of the degree of volatility dependence on these prices, which can be transferred to the countries' fiscal budgets.

Part II. Latin America and the Caribbean in 2030 and beyond: Policies to achieve environmental and climate goals

Latin America and the Caribbean are home to great natural wealth, but population and economic growth are putting biodiversity, the quality of life of its inhabitants and even the future of biomes on which the regulation of CO₂ and climate change affecting the planet depends on, at risk. Throughout this document, we touched on some of the main environmental indicators in the region to outline the potential in environmental terms, but at the same time show the tangent threats it faces with climate change.

The countries of the region are part of the most important international agreement for climate change mitigation, the Paris Agreement. For this agreement, each of the countries of the region reported in their NDC goals on the expected emissions and their mitigation and adaptation commitments. Although it continues to be a growing region, the climate commitments of the signatory countries of Latin America and the Caribbean intend that their participation in global emissions does not do so at the same rate. In fact, the region's emissions will grow by 26.2% between 2010 and 2030 according to INDC commitments, but will continue to be just over 7% of global emissions. The following figure shows emissions in two scenarios: (i) low, which includes conditional and unconditional environmental commitments, and (ii) high, which includes conditional and unconditional commitments.

Figure 27. Emissions projections according to INDC commitments of the countries of the region¹⁸



Source: Climate and Energy College (2016).

¹⁸ LULUCFs are emissions produced by Land Use and Changes in Land and Soil Use.

As figure 27 shows, in the region there will be growth in GHG emissions by 2030. But this growth will be mainly linked to other sectors, other than land use. However, land use continues to play a significant role in the emissions produced in the region, since they represent at least 12.5% of the emissions from other sectors. To achieve these goals, the region's natural and economic potential must be used by attacking different fronts, including land.

The COVID-19 pandemic has been a natural experiment that has changed, at least temporarily, human behavior and, above all, has highlighted our impact on the planet. León and Cárdenas (2020) point out environmental eruptions that the pandemic has generated in the region, as well as, a series of windows of opportunity that have been opened during this crisis. Although attention to the pandemic has become the priority, climate change will continue to be a threat to the future. The IPCC has repeatedly called for a drastic change in "business as usual" in order to mitigate the climate crisis, and that we are at the right time to do so. Following the recommendations of the IPCC (2014) and the windows of opportunity opened by the pandemic in the region (León and Cárdenas, 2020), below, we outline some of the policy mechanisms that the region can use to change its path and thus, achieve its climatic goals.

Economic instruments that seek to put a price on pollution are important to discourage polluting activities in economies. One of the most commented on is, carbon taxes. Currently, only four countries in the region have this tax, despite the fact that its operation and applicability are relatively easier than other mechanisms. Likewise, the amounts of these taxes are still too low to meet climate goals. Among the recovery policies of the impact of the COVID-19, these taxes should be taken into account, since they can represent a high margin of tax collection, which can be used to reduce the impacts caused by the isolation policies and the drop in daily activities. In this scenario, inconsistency and redundancy of policies should be avoided. For example, countries should not tax pollution and, at the same time, subsidize fossil fuels. Dismantling fossil fuel subsidies would not only alleviate government portfolio, but would result in a significant reduction in GHG emissions (Burniuax and Chateau, 2011).

Another mechanism in the region to discuss, may include tradable emissions rights systems. Although their operation and application are not as simple as creating a carbon tax within current tax regimes, several countries have begun to implement these systems in the region since they face less economic and political interest than the carbon tax. Finally, using subsidies to promote clean alternatives can speed up the change in households and firms that is needed. A set of subsidies that includes a scheme of "Feed-in-tariffs" for renewable energies, subsidies for biofuels, "feebates" programs, tax incentives for investments in their use, consumption and modernization of clean technologies, and even lines of credit that stimulate sustainable agricultural practices.

Putting a price on pollution has not been used by many countries, but instead, policies that impose regulatory approaches. However, according to air quality reports, there is still a lack of requirements in the standards used. To begin with, environmental and efficiency standards must be imposed in the energy sector, including renewable energy. Although the latter are cleaner alternatives than fossil fuels, it is important to monitor and ensure that accidents, with the worst environmental consequences, do not occur.

Likewise, in the region there is a need for regulations on the transportation sector, in particular on fuel quality standards. During 2019 and early 2020, Latin American cities had concentrations of articulated material much higher than the standards imposed by the WHO. Although on some occasions this may be due to meteorological phenomena, the vast majority of the year was related to pollution produced in cities or by forest fires. It is necessary to increase transport regulations, both public and private, it can mean relief in the health system, thanks to the impacts generated on the population, such as respiratory diseases. Air quality is also affected by industry and land use sectors. This is why regulations and cross-cutting policies must be proposed, to all sectors of Latin American economies, so as to promote the right to clean air and protect the region's population.

Taking advantage of the concern and attitudes in Latin American cities on environmental issues¹⁹, one policy mechanism that can be implemented is the information programs on the environmental impacts of goods and services. These information programs can allow consumers to be aware of the emissions produced by their demand. A set of policies for fuel labeling, vehicle efficiency, energy sector auditing and even certification schemes for sustainable forest practices.

Particular attention should be paid to the land sector. This sector is not only the largest source of emissions in the region, but it also needs transformation and conservation that protects the communities that live within and subsist in rural areas. By adding credit lines under clean development schemes, taxes can also be used in the land sector that reduce the use of nitrous oxide and other fertilizers that harm the soil and produce GHG, forest laws that reduce deforestation. National policies are also necessary that guarantee monitoring, reporting and verification of effective compliance with REDD+ goals and regulations on planning and governance of land use.

Government provision of goods and services is also crucial to mitigation goals. State investments in investment and development are necessary, especially to improve the installed capacity of renewable energy production, as well as investments in the renovation of infrastructure for transportation services and other fuel alternatives. In this set of direct state actions, it is also necessary and important to include, the role of the state to manage laws to protect local and national forest areas.

Achieving a sustainable recovery is one of the greatest challenges that current world governments will face. Although much of the impact caused is irreversible, the call is to make policy decisions that do not produce a rebound when returning to 'normal' the world was at before 2020. Latin America and the Caribbean have a set of social, economic and natural characteristics that gives them a comparative advantage to reverse and change current trends. All these advantages together with the appropriate policies, can generate a path of green growth that allows the countries of the region to recover from the COVID-19 crisis and in turn strengthen their ability to sustain the fundamental role that their natural wealth has to sustain life and the economy.

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Appendix.

1. Source of information on air pollution.

City	Source
Bogotá	El Observatorio Ambiental de Bogotá (OAB)
Buenos Aires	Control y monitoreo de la autoridad de cuenca Matanza Riachuelo (acumar)
Mexico City	Instituto Nacional de Ecología y Cambio Climático (INECC)
Guatemala City	US Embassy Air Quality Monitor, Guatemala City
El Salvador	Ministerio de Medio Ambiente y Recursos Naturales (MARN)
San José	US Embassy Air Quality Monitor, San José
Santiago	Sistema Nacional de Calidad del Aire en Chile
Lima	Sistema de gestión de Calidad del Aire en Perú
São Paulo	Instituto Estadual de Meio Ambiente e Recursos Hídricos
Willemstad	US Embassy Air Quality Monitor, Curacao

2. Standards for the concentration of particles in the air.

Air quality category	PM2.5 µg/m³ averaged over 1 hour	PM10 μg/m³ averaged over 1 hour
Good	Less than 27	Less than 40
Moderate	27–62	40–80
Poor	62–97	80–120
Very poor	97–370	120–240
Hazardous	More than 370	More than 240

Source: EPA (2020a) and EPA (2020b).

The Coronavirus and the Challenges for Women's Work in Latin America

By Diana Gutiérrez, Guillermina Martin, Hugo Ñopo*

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Abstract

The Coronavirus pandemic has spread throughout the world and Latin America has not been able to escape from its health, economic and social impacts. The economic shutdown as a result of a combination of stringent measures (self-quarantines, mandatory quarantines, limited capacity of people in commercial stores, factories and offices, border closures, etc.), is generating profound economic and social impacts. In the labor market this means shocks to both supply and demand. Within households, this means an increase in the unpaid workload that falls disproportionately on women, further limiting their availability of time to carry out productive activities. The impacts and deepness of the crisis are different for women and men, so generalized formulas must be avoided as they can widen gender gaps. In this paper we explore the impacts of the crisis on employment in sixteen countries of the region. Additionally, we analyze gender impacts with four lenses: young people, people living in poverty, rural people and heads of household. We present a set of policy options aimed at integrating the gender approach in all the cycle of the socio-economic response to the pandemic and in the post-pandemic. Emphasizing that solutions must be cross-cutting, we propose policies in three main areas: homes, work and the spaces between work and home. Thus, socio-economic recovery policies will not only help to ease the impact in the short term, but also to make progress in equal opportunities for women and men in the medium and long term.

Introduction

The COVID-19 pandemic has already affected multiple dimensions of people's lifestyle from their income levels, accumulation of human capital, their consumption patterns, lifestyle, their mental health and their emotional well-being. Without a doubt, among the most important is work, where three-quarters of the income of Latin American households is generated (the rest comes from income and transfers) (ILO, 2019b). In this document we will focus precisely on the labor dimensions of the impacts, emphasizing the links that these have with the dynamics within households.

The current conditions of confinement of people in their homes, and closing conditions of multiple services, including schools, place serious limitations on the possibility of working. Added to this are the structural barriers that women constantly face, at home and in the labor market, accentuating the challenges due to this crisis. Meanwhile, in household's confinement impose an extra burden associated with unpaid care and domestic work, which is unevenly distributed, especially overburdening women and girls. Special mention should be made of domestic violence, that runs the risk of being exacerbated. Never before has the relationship between work life and home life been so evident.

The productive fabric as a whole, due to the breakdown of the global supply chains, the closure of borders and the operational closures of non-essential industries, has had a cross-cutting impact on all sectors. It is estimated that two thirds of the companies in the world have already suffered a moderate impact and a quarter of them a negative impact on labor productivity due to this crisis. For Latin America, the figures follow the same trend (Mercer, 2020). By the end of the confinements, a good number of work centers will have had to close, and others will have to cut staff, consequently impacting on household income.

Here we present some estimates of the immediate impacts of the COVID-19 pandemic on employment and salaries, based on household surveys for the 2018–2019 period in 16 countries in the region.¹ We have found that as a result of the voluntary and mandatory confinements, 33% of women and 30% of men, who worked before the pandemic, were unable to go out to work. Some of these people went unemployed, others left the economically active population. In the aggregate, this translated into a 22% loss of employment income for women and 26% for men. We also find that intersectionality is very important to understand the differentiated impacts of the crisis. Women in poverty, youth, heads of households with dependent minors and those living in rural areas face shocks with stronger impacts than those of their male peers, both in terms of employment and labor income.

Everything indicates that by the time these restrictions on mobility are lifted, economies will have entered a recession such that the availability of jobs will have been significantly reduced. Estimates from various multilateral organizations and international agencies reveal impacts that will transcend for a few years, generating profound changes in the productive structure.

Indicators of female employment show greater vulnerability than male before the pandemic: higher informality, higher incidence of part-time work, lower salaries, lower social protection and greater volatility in the face of fluctuations in the economy. Several of these factors, in turn, are linked to the reduced availability of women's time due to the burdens of unpaid care work. This situation could exacerbate gender gaps in employment and salaries if the necessary measures to protect the employment and income of women in greater vulnerability are not taken. In this document we explore to what extent that could be the case, proposing a set of policies that could alleviate and create conditions for the resilience and economic recovery of women in Latin America and the Caribbean in the context of the pandemic and the post-pandemic.

¹ Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Peru, Paraguay, Dominican Republic, and Uruguay.

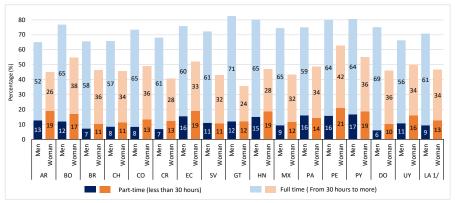
The COVID-19 pandemic demands a lot of care work by households and this reduces the possibilities of working and looking for work. As is well known, these care tasks are disproportionately overloaded in women. For this reason, paying attention to care tasks and their distribution is key in the design and implementation of relief policies for households. That is why we propose a set of policies that, in addition to generating equity in the world of work, also do so outside of it.

In this document, we first present a brief overview of the conditions of female employment in the region prior to the arrival of the pandemic. Then we present estimates of the short-term impacts, both on jobs and people's salaries. Third, we explore some intersectionalities, presenting the differentiated impacts for women and men under four lenses (low-income, youth, rural, and heads of households with minors). Finally, the document closes with a set of recommendations, and clues for the way forward, both for public policy, as well as for the business sector and households. The estimates in the first sections of this document are based on household or employment surveys of 16 Latin American countries with the most recent information available, between 2018 and 2019. See Appendix 1 for details of the corresponding year and period in each country.

Pre-pandemic conditions

Although in Latin America and the Caribbean female labor insertion has been increasing for several decades, but with some heterogeneities, it is still lower than labor insertion of men (ILO, 2019b). About half of the women are working, while this is the case with three out of four men. Added to this gender gap in employment is a very important gap in the use of time and its consequent availability for paid work. In this sense, part-time work (30 hours or less of weekly work) is higher in women than in men. In the region one in four women who work, does so part-time, while this happens only with one in eight men (Figure 1).

Figure 1. Latin America (16 countries): Employment rate by weekly working time according to countries – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The Economically Active Population (EAP) is considered occupied from 15 years or more.

AR: Argentina, BO: Bolivia, BR: Brazil, CH: Chile, CO: Colombia, CR: Costa Rica, EC: Ecuador, SV: El Salvador, GT: Guatemala, HN: Honduras, MX: Mexico, PA: Panama, PE: Peru, PY: Paraguay, DO: Dominican Republic and UY: Uruguay.

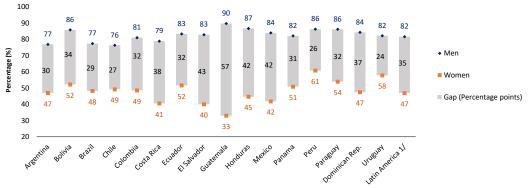
1/LA: Latin America. Weighted average. The weighting in household surveys corresponds to the local expansion factor in each

In the region, women spend most of their time in unpaid work and men in paid work (ILO, 2019a). Thus, the gender gaps in the employment rate and the greater female dedication to part-time work are correlated with decisions that take place within households, outside the labor markets (but with implications there). These decisions are related with unpaid domestic and care work (particularly of minors, the elderly, and people with disabilities, among others), which largely occurs in households.

For this reason, for a better understanding of the possibilities of labor insertion of women it is essential to pay attention to the composition of households. In Latin America and the Caribbean, 39% of households are headed by a woman and 26% are single-parent households headed by women. In contrast, 12% of single-parent households have a man as the head of the household. Therefore, the condition of women in the home, and especially the presence of minors who require care, are key determinants of the active insertion and permanence of women in the labor markets.

In Figure 1 we saw that the difference between the female and male employment rate is 24 percentage points. This gap in all households in the region begins to widen as other variables related to the life cycle are added, such as the presence of minors (6 years old or less) in the household. Households with at least one girl or boy under 6 years old, the gap reaches 35 percentage points. This can be explained by several factors, but mainly because the proportion of men in the employed labor force is increasing (Figure 2). In households where there are no girls or boys, the gender gap in employment rates is smaller, reaching up to 20 percentage points (Appendix 2). Such increase in the gaps in the employment rate associated with the presence of girls and boys under 6 years old is greater in Central American countries, especially in Guatemala, El Salvador, Honduras and Mexico.

Figure 2. Latin America (16 countries): Employment rate with the presence of girls and boys under 6 years of age in the home by sex, by country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The occupied EAP from 15 years and older and young children from 6 to less years old are considered at home.

1/ Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with quarterly surveys, the simple average is considered to obtain annual data.

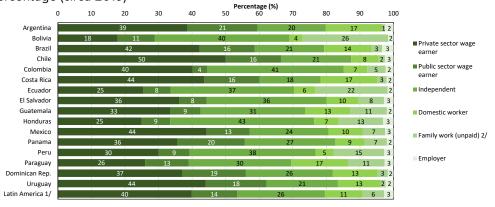
Looking at this deepness in the employment gaps that affect to a greater extent to women, it is worth asking why and in what situation are women in the labor market.

Women in the employed labor force are mostly salaried in the private sector (40%), as self-employed (26%), in the public sector (14%), as domestic workers (11%), unpaid family workers (6%) and as employers (3%) (Figure 3). Men, in contrast, are employed mainly in the private sector (53%) and are in a higher proportion employer (5%) but are employed less in the public sector (8%) and much less as domestic workers (1%). This already provides initial structural barriers that women face in relation to the enjoyment of the benefits of health insurance or social protection, which are part of formal employment in the private sector.

Salaried employment is predominant in half the countries of the region (Chile, Uruguay, Costa Rica, Argentina, Brazil, Mexico, Panama and Dominican Republic). Independent work is the livelihood for 4 of 10 women in Honduras, Colombia, Peru and El Salvador. While women with unpaid family work in Bolivia are a quarter of the employed female population and a fifth in Ecuador (Figure 3).

An important dimension of the quality of employment is access to social protection in old-age pensions. This grants autonomy and economic security, so women have a decent income that reduce the risk of falling into poverty (ILO, 2019a). In our estimates we find that only half of the women contribute to pension insurance. But they also do not have access to other rights, such as maternity leave, unemployment insurance or in some countries access to health, as they do not have a formal employment contract. We estimate that half of salaried women in the private sector have a written contract. But even there, important differences can be found between fixed-term and indefinite term contracts. In the context of this crisis, short-term fixed-term loans will probably come to an end and will not be renewed. Therefore, the depth of the impacts of labor informality on the quality of employment, particularly of women, are multiple and are closely linked to a greater exposure to risk or greater vulnerability to the occurrence of a crisis, such as the one we are experiencing as a result of the COVID-19 pandemic.

Figure 3. Latin America (16 countries): Female employed population by occupational category according to countries - in percentage (circa 2019)

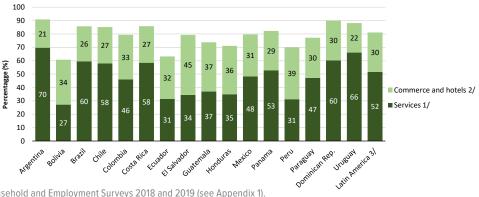


Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more.

The degree of vulnerability increases when we incorporate other variables, such as the industry where female employment is concentrated. The health and economic crisis associated with the stringent measures to control the spread of the outbreak have profoundly affected the commerce and services sectors, where a very high proportion of women is concentrated, resulting in a high risk of losing their strength of work (ILO, 2020a; ILO, 2020b). This particularly affects women in Latin America, where 8 out of 10 work in the service, commercial and hotel sectors (Figure 4). In Argentina, Dominican Republic and Uruguay 9 out of 10 women work in these sectors, mainly in the service sector.

Figure 4. Latin America (16 countries): Female employed population in the service and trade sectors by country - in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more.

^{1/}Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with quarterly surveys, the simple average is considered to obtain annual data.

^{2 /} Includes other categories not defined in Bolivia, Colombia, Honduras, Panama and Uruguay.

^{1/} Includes activities: electricity, gas and water; transportation, storage and communications; financial services to companies; community, social and personal services, and unspecified service activities

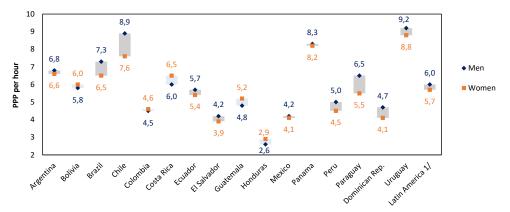
^{2 /} Includes restaurants activity.

^{3 /} Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with guarterly surveys, the simple average is considered to obtain annual data.

In this pandemic, occupational segregation also takes its toll. Two segments of the labor market in which the demand for labor is notably increasing are health and paid domestic and care work. Both are predominantly for female. Our estimates indicate that seven out of ten workers in the health and social care sector are women. They are in the front line of pandemic care mainly as nurses, nursing assistants, reception staff and developing other activities that expose them to a greater extent to a risk of contagion from exposure to fluids. However, this segment only represents 4% of the Economically Active Population (EAP) employed. Something similar happens with housework. In this case, nine out of ten employed persons are women, but this segment represents only 5% of the employed EAP in the countries of the region.

In addition to the marked gaps in full-time and part-time labor participation, as well as occupational segregation, there are also persistent gaps in pay. Because women spend fewer hours per week in paid work, the gap in hourly earnings is smaller than the gap in monthly earnings. While the first is around 5%, the second reaches 19% (Figure 5). It is important to note that these gaps do not take into account the job characteristics that make people productive. When this is taken into consideration, the gaps are much higher. For a more detailed analysis of this, see (ILO 2019a) which concludes that a part of the pending work is in households throughout the entire income distribution.

Figure 5. Latin America (16 countries): Hourly labor income of the Employed Population by sex, according to country –constant international dollars 2011– PPP (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1); IMF; 2020a.

Notes: The EAP is considered occupied from 15 years or more. The monthly labor income by main activity of the employed EAP is considered excluding unpaid family workers and the employed EAP without income. The PPP conversion factor and average inflation per country are considered.

1 / Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with quarterly surveys, the simple average is considered to obtain annual data.

The widest gaps are experienced by women in Chile, Paraguay and Brazil. In contrast, the smallest gender differences in hourly salaries are in Colombia, Mexico and Panama. However, as explained above, gender pay gaps are largely explained by the lower dedication of time by women to paid work. This opens the discussion of the importance of quantifying, recognizing and revaluing the unpaid care work that happens in households, since it is an enabler for both men and women to go out into the world of paid work. Either way, if this social organization of care does not exist, someone has to pay for it.

This section on pre-existing conditions cannot close without mentioning a serious problem in the lives of Latin American women: domestic violence. In regular times, in Latin America and the Caribbean, one in eight women who have ever had a partner claims to have experienced physical or sexual violence in the last 12 months, these are 19.2 million women between 15 and 49 years old. In 2019, more than 3,800 women were murdered simply because they were women (UN Women, 2020b). Furthermore, one in twenty claims to have experienced sexual violence by their current or former partner in the same period (UNDP, 2017). During quarantines, with confined homes, this domestic violence already shows worrying signs of its exacerbation. Some preliminary statistics account for this. For example, in Argentina the average number of inquiries to the hotline for gender violence in March 2020 increased 39%, in Brazil a 50% increase in complaints was reported in Rio de Janeiro, in Bolivia more than 1,200 cases of violence against women had been reported in April 2020, in Colombia 12 women

were murdered in a period of only 16 days between March 20 and April 4, 2020, where complaints increased by 51% in the first days after the quarantine, while in Mexico only in the state of Nuevo León there was an increase of 30% in reports of cases of family violence (UN Women, 2020b). After the emergency, the magnitude of this problem can be analyzed, but in the meantime, this requires concrete and urgent actions to preserve the lives and well-being of women.

Possible impacts on employment and salaries as a result of the pandemic

Impacts of confinement on people and households

Between mid-March and June 2020, the governments of the region adopted different confinement measures with consequent restrictions on people's mobility and social interaction, in order to slow down the spread of COVID-19. These measures, which have varied from country to country, and which have been applied in a differentiated way, combine voluntary quarantines, curfews, mandatory confinements, operational closures of non-essential industries, shutdown of public works, among others.

In circumstances like this, temporary contracts are the first to fade. The cost of dismissal is lower, and even in some cases, non-existent (ILO, 2019b), especially in the context of economic emergency decreed by governments. In most countries, the continuity of the employment relationship has required salary adjustments. To compensate, at least partially for the impacts of the loss of salaries, alternatives to labor income were established, such as: i) access to unemployment insurance, in countries where such an instrument exists, ii) payment for early vacations, iii) expansion of cash transfer programs, iv) fiscal and financial relief such as deferred payments of social security contributions or staggered tax payments, v) government cash transfers to pay formal workers and SMEs, and vi) payment relief of essential public services such as freezing of electricity rates or subsidized drinking water rate (UNDP, 2020).

Among the measures to contain the epidemic, governments urged citizens to stay at home and the business sector to accompany these efforts, especially those in non-essential activities. Non-essential economic sectors have slowed down their operations, since to a large extent many of them cannot operate with their workforce from home, which has had a deep impact on the conformation of the labor structures associated with these industries. Consequently, companies have been forced either to suspend contracts, grant paid or unpaid early vacations, or lay off the workforce in the worst case.

The sectors most affected by the crisis in the region include i) wholesale and retail trade; repair of motor vehicles and motorcycles; ii) manufacturing industries; iii) hotel and restaurant activities; iv) real estate activities; v) arts, entertainment and recreation, and vi) transportation and storage and communication (ILO, 2020a; ILO, 2020b). The details of the policies implemented until May 2020 can be reviewed in ILO (2020c), as well as in the Global Tracker of Responsive Gender Socioeconomic Policies developed by UNDP with support from UN Women.² In the regional aggregate, in these non-essential activities, just over 4 out of every 10 workers are women (Appendix 3).

Given the adoption of these measures, the key question is how many jobs were lost and how much income from work was lost during the pandemic? Based on the data between 2018 and 2019 for Latin America, we estimate that in the various job categories, there is a lose of jobs, and consequently a loss of incomes. This happens both with dependent work (with or without a contract), and with independent work.³

² See www.undp.org/content/undp/en/home/covid-19-gender-dashboard.html

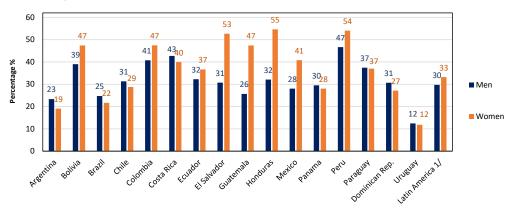
³ In Costa Rica and Honduras there is no information on the type of contract, so the entire workforce is considered in non-essential activities that are unable to work. In Paraguay, in the absence of more detail on the sectors, the non-essential activities considered are: manufacturing industry; commerce, restaurants and hotels; and transportation, storage and communications.

Thus, in the aggregate, those who have lost the possibility of working during the pandemic are people employed with a temporary written contract, people employed without a written contract in non-essential activities and people who work on their own account and in non-family activities.

Our estimate based on household surveys in the countries of the region shows that 43 million men and 35 million women work in non-essential activities. This means that 33% of women and 30% of men in the prepandemic busy EAP are either teleworking or unable to work during the pandemic. This increases the gender gap in the employment rate in the regional aggregate by 6 percentage points. While in some countries the depth of the impact of the crisis on women is greater, particularly in Peru, El Salvador, Guatemala, Bolivia and Colombia, where half of the women are unable to work (Figure 6).

In total, 52 billion dollars constant of 2011 (PPP) were lost, of which 67% are generated by men (35 billion dollars) and 33% by women (17 billion dollars). This means that women stopped generating 22% of what they were getting before the pandemic and men 26%. These differences, as noted above, are partly due to the availability of time for women and men for paid work, which is greater in the case of women. In some countries, women stopped generating income in a higher proportion than men, such as in Bolivia, El Salvador, Guatemala, Mexico and Peru (Figure 7).

Figure 6. Latin America (16 countries): Employed population unable to work due to the pandemic, by sex, by country – in percentage (circa 2019)

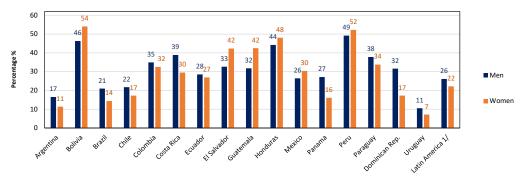


Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more.

1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data.

Figure 7. Latin America (16 countries): Loss of the wage mass of the employed EAP by sex, by country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more. The wage bill considers the monthly labor income by main activity of the EAP employed with income.

1 / Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data. Income is converted into constant 2011 international dollars (PPP) of the year corresponding to the information gathering.

After the confinement, we will return to work. But we will do it in a completely different job market than the pre-pandemic. The pandemic with its impacts on health, the months of confinement and restricted mobility will have wreaked havoc on all social and economic life, with lasting effects that are revolutionizing the world of work. It is clear that in the face of a drop in economic activity, not all jobs will return to their activities and the world of work will have to implement changes to adapt to the crisis, which could be permanent in the long term. For example, the widespread use of time and workspace flexibility measures such as teleworking, the acceleration and transformation of the digital economy and in particular platforms, or the use of new distributed manufacturing methods, which could change for always the concept of large manufacturing factories, among others. Therefore, it is essential to analyze in detail the differentiated impacts between women and men, since changes in the productive matrices of the economies of the region could deepen the gender inequalities that already existed before the pandemic.

Some intersectionalities: low income, youth, rurality and heads of household

Recognizing the heterogeneity of labor markets, below we present the differentiated effects according to four intersectional views: i) low-income women and men, ii) young women and men aged 15 to 24, iii) women and men heads of household with young boys and girls (6 years old or less), and iv) women and men located in rural areas.

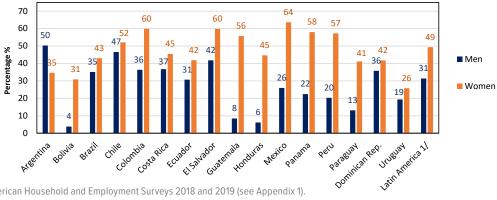
In each intersectional analysis we estimate the percentage of people who have lost their jobs and consequently their income during the pandemic, adding data at the regional level and observing the differences between countries. Then, we estimate post-pandemic job destruction in aggregate for Latin America.

Economic impacts of COVID-19 for low-income women

Before the pandemic, in Latin America and the Caribbean we estimated 10.7 million workers and 14 million women workers in the first decile of labor income in each country. During the pandemic, 49% of low-income women were unable to work compared to 31% of men, which translates into a gender gap of 18 percentage points between the sexes, or 3% if we take as basis the loss of employment of men. In Mexico, El Salvador, Colombia, Panama, Peru and Honduras, 6 out of 10 women living in poverty will have been unable to work, with gaps between women and men that fluctuate between 7 (Argentina) and 48 percentage points (Guatemala)

(Figure 8). It is worth noting that this measurement does not refer to workers living in households below some poverty line (moderate or extreme). To facilitate comparison between countries, these are those that are in the lowest decile of labor income in each country.

Figure 8. Latin America (16 countries): Employed population in income decile 1 unable to work due to the pandemic by sex, according to country – in percentage (circa 2019)

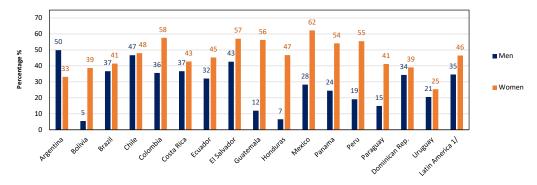


Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more. For the deciles, labor income by main activity is considered without considering workers without income. 1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data.

The impacts on income show the same heterogeneous behavior. The 46% of low-income women stopped receiving their salaries as a result of the crisis, compared to 35% of men, which is equivalent to a gap of 11 percentage points or 2.86% if we take as reference the loss of income of men. In Mexico, Colombia, El Salvador, Peru and Guatemala the figures are higher to the detriment of women with gaps that fluctuate between 44 (Guatemala) and 4 (Uruguay) percentage points (Figure 9).

Figure 9. Latin America (16 countries): Loss in the wage mass of the employed low-income EAP by sex, by country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

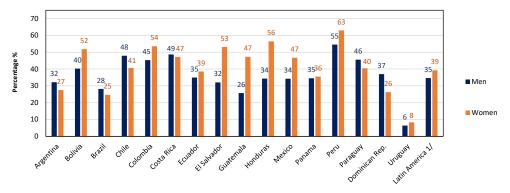
Notes: The EAP is considered occupied from 15 years or more. The wage bill considers the monthly labor income by main activity of the EAP employed with income. For the deciles, labor income by main activity is considered without considering workers without income.

1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data. Income is converted into constant 2011 international dollars (PPP) of the year corresponding to the information gathering.

Economic Impacts of COVID-19 for Young Women

It is estimated that in the region we have 37 million young people (15 to 24 years old) who make up the Latin American labor force, that is, 23 million men and 14 million women. During the COVID-19 crisis, 39% of young women lost their jobs, compared to 34% of men. When observing the differences between countries, we see that young women in Peru, Honduras, Colombia, El Salvador and Bolivia are the most affected in the region (Figure 10), who experience gender gaps associated with job loss between 65% (Honduras) and 20% (Colombia), when the loss of employment of young men in those countries is taken as a basis. This problem is particularly relevant in the case of women of childbearing age, for whom labor insertion is more difficult (Tribin et al., 2019), due to factors associated with the disruption of the labor trajectory, the burden of caring for minors, internal biases in organizations where these women work, among others.

Figure 10. Latin America (16 countries): Youth employed population unable to work due to the pandemic, by sex, by country – in percentage (circa 2019)



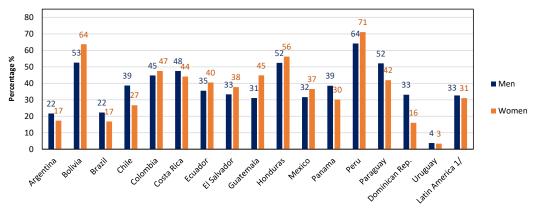
Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years or more.

1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data.

On the other hand, the impacts on income are less intense. During the pandemic, young women stopped generating 30% of the income they obtained before the crisis and men 33%. Some relevant differences are observed between countries, such as Guatemala and Bolivia, where the gender gaps in labor income widened, reaching a gender salary gap of 45% in Guatemala and 21% in Bolivia, based on the loss of salaries of young men (Figure 11).

Figure 11. Latin America (16 countries): Loss in the wage bill of the employed youth EAP by sex, according to country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1)

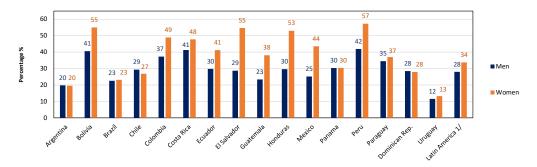
Notes: The EAP is considered employed from 15 years or more. The wage bill considers the monthly labor income by main activity of the EAP employed with income. 1 / Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data. Income is converted into constant 2011 international dollars (PPP) of the year corresponding to the information gathering.

Economic impacts of COVID-19 for women heads of households with minors at home

Being the head of the household with minors under 6 years old is an important characteristic that reveals the structural barriers that women experience as a result of long working hours and the double workload and care at home. It is likely that these women also face greater problems for their labor insertion and permanence (Alon and others, 2020), among other factors due to less time availability, information asymmetries and the inefficiency of their social support networks.

It is estimated that in the region we have 34.3 million heads of households, of which 25.9 million are men and 8.4 million are women heads of households, with young children. Due to the effects of the pandemic it is estimated that 34% of women heads of households lost their jobs, compared to 28% of men heads of households. In Peru, El Salvador, Honduras and Bolivia the dimension of this problem is much deeper, more than half of women heads of households with children under 6 years old have had their ability to work limited (Figure 12).

Figure 12. Latin America (16 countries): Employed population head of household and with young girls and boys unable to work due to the pandemic, by sex, by country – in percentage (circa 2019)



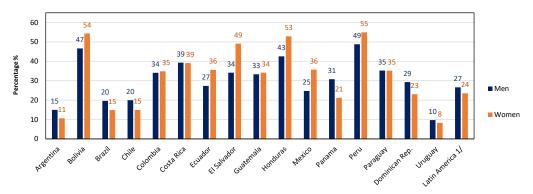
Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The occupied EAP from 15 years of age and older and young children from 6 to less years of age are considered at home.

1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data.

We estimate that women stopped generating 24% of labor income and men 27%, so we can observe a gender pay gap in income loss of three percentage points or -11.11% to the detriment of men. The impacts on income are greater in women in Peru, Bolivia, El Salvador and Honduras, since the gender gaps are between 34% and 36% (Figure 13).

Figure 13. Latin America (16 countries): Loss of the wage bill of the employed EAP as head of household and with young girls and boys by sex, according to country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

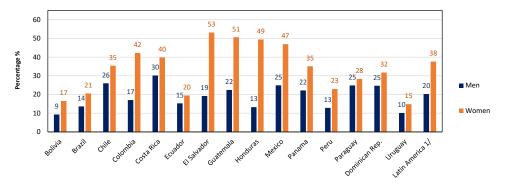
Notes: The occupied EAP from 15 years old and older and young children from 6 to less years old are considered at home. The wage bill considers the monthly labor income by main activity of the EAP employed with income.

1 / Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data. Income is converted into constant 2011 international dollars (PPP) of the year corresponding to the information gathering.

Economic impacts of COVID-19 for women in rural areas

In rural areas of the region, before the pandemic there were an estimated of 40.9 million workers and 22.6 million women workers. During confinement 38% of the women lost the possibility of going out to work compared to 20% of the men. In Central America (El Salvador, Guatemala, Honduras and Mexico) half of the women in rural areas lost their source of employment (Figure 14). This is equivalent to a gender gap in employment of 90% to the detriment of women, when the reference of the loss of employment of men is taken as a basis.

Figure 14. Latin America (15 countries): Rural employed population unable to work due to the pandemic by sex, by country – in percentage (circa 2019)



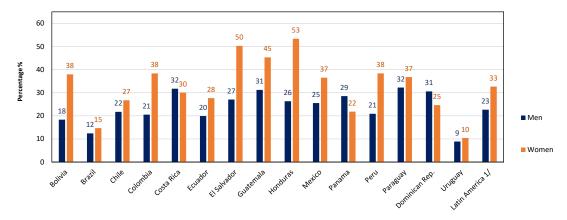
Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The occupied EAP from 15 years old and older and young children from 6 to less years old are considered at home.

1/ Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data.

According to our estimates, women stopped generating 33% of their labor income before the pandemic and men 23%. In Honduras, El Salvador and Guatemala, women stopped generating half of their labor income, which is why urgent policy responses are required to protect income in rural areas (Figure 15). Under this lens, the gender gap in income stands at 43% to the detriment of women, based on the decrease in salaries for men.

Figure 15. Latin America (15 countries): Loss of the wage bill of the rural employed population by sex, according to country – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP from 15 years old and older and young children from 6 to less years old are considered at home. The wage bill considers the monthly labor income by main activity of the EAP employed with income.

1 / Weighted average of the countries considered. The weighting in the household surveys corresponds to the local expansion factor in each country and in the quarterly surveys the simple average is considered for the annual data. Income is converted into constant 2011 international dollars (PPP) of the year corresponding to the information gathering.

Public policy challenges and recommendations

A profound impact of this pandemic is glimpsed on employment and consequently on household income, with a greater depth in poor, rural, single-parent and young households. Although the short-term impacts do not show many gender differences in employment and salaries, it is to be expected that the gaps will later widen as a result of the unequal distribution of domestic responsibilities.

Governments already face various tradeoffs in decision making. In order to make an informed decision, it is necessary to have data and evidence to carry out combining the different variables of the crisis: (i) health, (ii) economic and (iii) social and care (UNDP, 2020). In addition, efforts must be coordinated between the different levels of government (national, provincial and local) in an articulated manner, as well as creating coalitions among all actors (public, private, union and social), to leverage the experiences, resources and capacities to solve the crisis and build a sustainable, resilient and promising future.

The calculations indicate that some segments of women in situations of poverty and vulnerability will experience more accentuated impacts due to the crisis. Firstly, this happens due to the lower availability of work for them and secondly, to the lower availability of time to work. This second factor is linked to the disproportionate burden of unpaid domestic responsibilities, which has increased considerably during the pandemic. This increase occurs mainly for two reasons: (i) due to confinement measures that cause a high proportion of people to work from home or are in suspension of their employment contract, and (ii) due to the impossibility of having care services and of paid domestic workers, who are equally forced to stay at home. This brings with it some challenges that are overlayed on those that already exist, so that the starting structural barriers of gender are a factor that puts women at double or triple risk.

Thus, we organize the challenges into three large groups, according to the area in which they operate: (i) at home (ii) between home, study and work and (iii) at work. In all of them there is both a role and a responsibility for the Governments, as well as for the private sector and trade unions, as well as for households and communities. In this list of recommendations, we try to prioritize those that have some connection with the pandemic, without neglecting some others that in these circumstances are worth continuing to promote, especially in the framework of a new economic reality. In the same way, we have tried to prioritize those for which we have quantitative evidence in the diagnosis of this note, but we have also added some that, experience tells us, should not be neglected. To minimize the potential negative impacts that are envisioned, below we synthesize a series of key recommendations for the design and implementation of public policies for the pandemic and post-pandemic.

(i) In households

We are already spending more time in our homes as a result of mandatory and voluntary confinements, curfews and other measures of physical distancing, with which we seek to contain the expansion of the of COVID-19. This is already followed by a significant increase in the burden of domestic and care work, as well as domestic and intra-family violence. Households now need more frequent cleaning and adaptation of the spaces for new activities, girls and boys need more support with their school life, food purchases for the house (which increased in volume and frequency) must now follow certain protocols health care providers, older people need more care, and a long list of etcetera's adds to the burden of unpaid care work.

In pre-pandemic times, according to ECLAC estimates (2020), women spent more than three times as much time as men in unpaid domestic and care work. In fact, for women without their own income, unpaid work time exceeds between 26% and 55% the unpaid work time dedicated by women who do have their own income. The former dedicates an average of 46 hours per week to unpaid work, compared to the 33 hours on average that the latter dedicate (UN Women, 2017). Although there is still no data that allows us to test the hypothesis of an increase in the burden of unpaid care in times of pandemic, a significant increase is expected based on the starting point and the amount of time that people now dedicate to telework. This could have gender-differentiated impacts that could deepen the structural barriers associated with care that affect women.

In the absence of interventions aimed at promoting co-responsibility of care and a better gender balance in the distribution of domestic tasks, this is most likely to result in more hours of unpaid work for women. The absence of labor policies that make possible to balance family life with work, not only reduces the number of hours that women can work, but it also undermines the productivity that they could have for each hour worked (ILO, 2019).

An increase of about 30% in cases of domestic and partner violence is also estimated, as recorded in some countries, according to the report of cases in state hotlines for the protection of victims of violence compared to the reporting statistics. in the pre-pandemic (UN, 2020). The confinement situation creates a perfect setting for women to find it virtually impossible to break the cycles of violence, having to live with their aggressor 24 hours a day, without the daily life allowing to temporarily break the dynamics, coupled with a minor access to public or private support networks as effects of sanitary measures. This has direct repercussions in many areas ranging from physical and mental health to labor productivity, limiting the possibilities of preserving economic autonomy.

Taking these considerations into account, we recommend a combination or basket of policies aimed at:

Promote cash transfer programs (CTP) and social protection policies to guarantee the availability of household income. One of the main strategies to mitigate the impacts of the socio-economic crisis produced by the COVID-19 Pandemic have been the Cash Transfer Programs. It should be noted that almost all the countries in the region have implemented this type of policy. From a gender perspective, it is recommended: (i) suspend all conditionalities of the cash transfer programs, (ii) ensure the inclusion of women in situations of greater vulnerability as beneficiaries, (iii) ensure alternative mechanisms that minimize displacement

and avoid agglomerations, (iv) promote complementary programs of income generation for women, and (v) promote the participation of women's organizations in the design and implementation of CTPs and other measures (UN Women, 2020)4.

- » Promote co-responsibility for caregiving and the redistribution of roles at home with a view to achieving a more equal balance of domestic responsibilities. This is a recommendation whose statement is simple, but its content not so much. The unequal distribution of domestic and care tasks has a very long history. To a large extent, it is rooted within the customs of the Latin American peoples, the social norms and patriarchal patterns that still prevail in the region's societies, and as such it will not be eradicated overnight. In addition, to the tasks assigned almost automatically to women in pre-pandemic times, are added those of the new normal within homes (such as caring for babies and toddlers, tutoring girls and boys who study from home, the need to clean the house more frequently and a long list of etcetera's). However, it would be worth taking advantage of this opportunity in which people are confined to their homes to make visible, quantify and revalue domestic and care work that is usually invisible. An essential first step to make this possible is awareness of inequalities in the distribution of the burden of care. A massive communicational and educational work that points to such awareness and that encourages changes in the in management of the households could be very useful. Along the same lines as domestic and care tasks, it is important not to fail to recognize the contributions of paid domestic workers, that in many countries they are mostly migrants, many of them in an irregular situation, which is why they suffer greater precarious employment conditions. Here it is necessary to advance in the regulation and protection of paid domestic work and care.
- » Provide households with sanitary tools to face care tasks more safely. Health care equipment and medicines, for their part, have begun to become scarce and more expensive in some countries, so it makes sense to propose a policy to supply basic health and cleaning equipment to treat people at home, especially the sick, and thus prevent contagion for women who are more involved in care work during the crisis. A longer-term task is to improve household infrastructure, since the overcrowded conditions of households, especially those living in poverty and those in peri-urban and rural areas, make it virtually impossible to meet the fundamentals of prevention, social distance and wash hands regularly.
- Ensure access to essential basic services, especially for women, and particularly those in situations of greater vulnerability. This includes various types of services. First, the guarantee of the supply of essential services such as drinking water, energy and gas, necessary to ensure compliance with sanitary measures and to ensure subsistence. Second, the delivery of food products to households, following the sanitary protocols. Third, reliable access to the Internet, which is progressively becoming an essential enabling service for the world of work and the search for relevant information to face the pandemic. Last but not least, within the basic services must also be the products that allow the full exercise of sexual and reproductive rights, such as pre and postnatal care, the supply of menstrual products, and contraceptives. For this, it is necessary to strengthen public services and health insurance coverage that serve to the specific needs of women. And particularly to women and men with HIV, for whom it is necessary to guarantee the supply in safe conditions of health services and the supply of prophylactic kits that guarantee adequate protection of their health.
- » Protect women, girls and boys and other high-risk groups from exposure to intimate partner and domestic violence. On days of confinement at home, violence can be exacerbated, as seen above, so LGBTI women, girls and boys, lesbians, gays, transsexuals and bisexuals are at high risk. For this, it is necessary to redouble efforts to strengthen the surveillance, prevention and protection mechanisms, it is recommended: (i) keep the telephone and online hotlines active, (ii) strengthen the care and protection

⁴ As the rate of new COVID-19 cases accelerates, it exposes the potentially devastating costs of job and income loss. Unconditional emergency cash transfers can mitigate the immediate worst effects of the COVID-19 crisis on poor or vulnerable households with no access to social protection. UNDP produced the following document and provides estimates for a Temporary Basic Income (TBI), a guaranteed minimum income above the poverty line for vulnerable people in 132 developing countries. UNDP: www.undp.org/content/undp/en/home/librarypage/transitions-series/temporary-basic-income--tbi--for-developing-countries.html

centers to help victims of gender-based violence, (iii) keep police and medical personnel trained to deal with situations appropriately, (iv) transmit safe reporting mechanisms and build clear service routes to which victims can go, including articulation with services provided by social organizations, and (v) strengthening community surveillance mechanisms in neighborhoods and remote rural areas, especially in foster homes and hotels for migrant persons. Therefore, it is crucial to promote community approaches in the prevention and detection of violence. This may include the strengthening of shelters and other care measures, such as prioritizing cash transfers and active employment policies that promote the labor insertion of violence, as well as the provision of essential services, to the extent that women victims of violence require a safe space and economic support outside the home. (UNDP 2020).

- Make the protection of women, adolescents and girls a task for everyone. It is important to make the safety of women, young people, adolescents and girls in risk of acts of violence a task for everyone. To achieve this, it may be useful to increase access to information, communication campaigns and other contact points of these services to improve their access and thus motivate victims of violence to report their cases. But in addition to this, it is important to mobilize communities so that community surveillance mechanisms generate early warnings with which the victim protection mechanisms can be more easily activated. In cases where the victim is not in a position to report, the community should secure their integrity and communicate to the authorities. It is also important to pay attention to signs of school dropout and changes in behavior, especially of girls, boys, adolescents and young people. At this time when girls and adolescents dedicate more time to domestic tasks, it is possible that they neglect their school responsibilities, which in the medium term could lead to dropouts.
- Promote the integration of households in their communities, but always following health and safety protocols. The activation of social and community mechanisms that alleviate the burden of care and, as mentioned above, reinforce the protection of women, adolescents and girls in situations of risk of violence is imperative. Social and care infrastructures, networks of community mothers, and early warning systems for gender violence are all mechanisms that must be strengthened locally, both in urban and rural settings. This brings a return to the neighborhood activities of a few decades ago. This, in addition to requiring adjustments in the mobility policies of the cities, will require a broad promotion of community care and local arrangements between public and private care service providers.
- » Make the invisible visible, with objective and verifiable evidence. To the extent that domestic work is invisible, it is necessary that national statistical systems continue to contribute to making it visible. To do this, it is necessary to continue collecting information and data disaggregated by sex on the situation of women at home, collecting the diversity of existing family arrangements. Time use surveys and national accounts with a gender perspective are increasingly necessary. In the short term, it is also necessary to estimate the impacts of the pandemic on the distribution of tasks within households. This will help in the design of interventions, both public and private, to address the differentiated impacts.
- Quantify and integrate the value and dimension of the care economy in the national accounts. Unpaid domestic work has been systematically made invisible from national accounts systems, because it seems that there is a magic or invisible hand doing it. The pandemic creates a scenario in which now that we are at home, women and men feel the burden of unpaid domestic work. This creates an opportunity to open a dialogue with the statistical institutes and the ministries of production and economy, for the quantification, revaluation and integration of its value in the national accounts. Because care work enables people to integrate into the labor market, even if the contributions of housewives to the economy are not traditionally perceived. It is clear that this work does have a value and that someone pays for it, so the revaluation of it, accompanied by the appreciation of the experiences acquired by women when developing it, is also an enabler for the productive and labor inclusion of women. Certification schemes of labor competencies for time management, home economy management, cleaning and disinfection, cooking and gastronomy, among others, are a highly valued package of experiences in various industries.

(ii) Between home, study and work

Although the virtuality that is being imposed these days, allows workers an instantaneous transition from home to work and vice versa, this condition is not the same for all people. As well as the reduction in transportation times between home and work due to a reduction in the mass transport systems and particularly, due to mobility restrictions. Furthermore, with the return to normality, there will be an increasing need to make use of means of public and private transport, individual and mass, to go and return to the workplace. But in order to be able to enter the working day, it is necessary to solve ecosystem problems that challenge permanence, such as the care infrastructure, the availability of childcare facilities for minors, care services for the elderly, the schedules of various providers of goods and services (public and private). All this, obviously, with the sanitary measures that are required in the framework of this pandemic. For this reason, it is essential to activate the availability of services that enable households and those who make them up, to better participate in labor markets. For this to be possible we recommend:

- » A reliable and safe public transport in cities, transporting people but not the virus. The vast majority of people in Latin America who live in cities move by public transport, especially women. This is the most costefficient way to do it. But at the same time, the public transport network has also been a way of transmitting the virus in the main cities of the world. For this reason, it is necessary to display logistical measures to reduce the density of users of transport services and respect health protocols. It is worth realizing that the mobility patterns of women are different from those of men, since they move between shorter distances, but take longer on average since they use public transport to a greater extent, instead of means of transportation. private transportation. Therefore, their itineraries are more complex and less direct because the part of their mobility is aimed at solving care responsibilities (shopping for the home, dropping off / picking up children at educational centers, medical visits, etc.). Therefore, it is crucial to incorporate gender analysis in the design of transport, security and city management policies for the pandemic and post-pandemic. A comprehensive list of policies and a combination of them that contribute to these objectives is beyond the scope of this note, but the following considerations should certainly be taken into account: (i)improve the predictability of arrival times at each bus stop, (ii)design smart policies to maintain social distances, (iii) implement express trunk routes with higher frequencies, (iv)improve the integration of various means of transport (not only subways, buses, and feeder cars; but also bicycles and other less congestive means), and (v)promote and adapt infrastructure for the use of bicycles. Finally, mobility patterns have changed significantly compared to those of the pre-pandemic, so it is crucial to work in coordination with the public and private sectors to avoid congestion of transport systems in the cities during the economic reactivation processes by phases or total, and take advantage of more efficiently the combination of blocks and entry and exit times by zones, sectors (productive and educational), among others.
- » A transport network that allows better integration of all territories. Improving transport in cities is not enough, integration with surrounding territories must also be improved. Let us remember that in our region, more than a third of the households live outside the cities and the relationship that exists between the urban and the rural is very fluid. To ensure access to health services or other services in the event of emergencies, it is necessary for the entire network to function reliably.
- Strengthen care services, both for boys and girls, as well as for adults and people with disabilities. Effective female labor participation requires structural solutions to the problem of care. A first line of work in this regard should be the equal distribution of care burdens within households. As we have previously underlined, a more equitable distribution of tasks must take place there but recognizing that this cultural change will not happen overnight, short-term solutions must also be provided outside the home. Therefore, working simultaneously in the construction of a new and renewed model of masculinity, conscious, healthy and positive, is an imperative that will allow progress towards the transformation of the social norms that currently prevail based on patriarchal models, where masculinity and manhood are weakened when men do housework. Additionally, the strengthening of care systems outside the home, which include infrastructure, services, public, private and community providers is absolutely essential as enabling factors for women

in the labor market. The services of nurseries and early childhood care centers, care for the elderly and people with disabilities will be central in the redesign of the social organization of care. For this to be possible, it is necessary, as far as sanitary is possible in the context of the pandemic, to extend the working hours of the existing centers, making them compatible with the working hours of those who use the centers, as well as increasing territorial coverage of the services. This can be done by combining the private and public provision of such services through a Comprehensive Care System that integrates a Network of Care Service Providers, which subsidizes access to their services to those with less income.

» Advance in the reopening of the education system and its training centers to preserve and strengthen the human capital required today and in the future. Measures of physical distancing to preserve health, in combination with low internet connectivity in remote towns and cities and peri-urban areas, along with limited access to computer equipment and tablets that adequately enable online training, plus weak ones Digital abilities of certain population segments beyond the use of smart phones or social networks, are generating a high risk of dis-accumulation of human capital in times of pandemic with lasting effects in the post-pandemic. This dis-accumulation will be more marked in vulnerable groups, deepening the gaps⁵. The public policy baskets must consider several aspects: (i) the necessary universality and democratization of access to internet connectivity with cross-subsidies for the coverage of service rates and access to equipment, (ii) the development of skills as a tool for the development of increased capacities, which must be worked under the life cycle approach from early childhood6 to advanced adulthood (iii) the development of increased capacities, which allow the development of productive activities, among others. Beyond its direct impacts on the benefit of children, adolescents and young people who will be able to continue their academic growth, this will also facilitate the return to work for women, releasing part of their care responsibilities at home. Along the same lines, it will be necessary to adapt school schedules or certain extracurricular programs, and articulate face-to-face and virtual care services, appropriately balancing educational and health objectives (see recommendation on urban public transport, lines above).

(iii) At work

Finally, and in the focus of what this note intends to discuss, in the world of work there are many policy options. Here we list some that have the potential to facilitate a better participation of women in the world of work, taking advantage, as much as possible, of their productive potential. In this sense, this list can be seen as a set of enablers for the entry and permanence in the labor market of women. Not all the recommendations are relevant to all economic sectors, nor to the companies that comprise them, nor to all sizes. Therefore, it is recommended that governments and companies⁷ adopt these measures in an exploratory way in iterative cycles of human-centered design (prototyping, testing, evaluation and scale), as policy baskets, gradually testing and expanding them according to the successes and learning that they are obtaining. There are no universal recipes, or one-size-fits-all dresses.

For the government:

» Promote that employment policies for the formal sector extend to informal workers in general and paid domestic workers in particular. In this sense, and as the document demonstrates, it is necessary to recognize that the impacts of the COVID-19 crisis are based on a previous and unfair sexual division of labor that deepened an over-representation of women in informality, in precarious and part-time jobs, and in small companies (or self-employment) in most Latin American and Caribbean countries. The insertion of women in this type of job allows them to reconcile paid work with care responsibilities, but it implies, in

⁵ See UNESCO Interactive Map (2020) of the impacts of COVID-19 on education en.unesco.org/covid19/educationresponse

⁶ See the Lego Robots for Kids Program at www.lego.com/en-gb/categories/robots-for-kids

⁷ To support the business sector in this transition, UNDP has developed a set of instruments leveraged on the Seals of Gender Equality in the Workplace. See www.selloigualdadgenero.org and americalatinagenera.org/newsite/index.php/es/iniciativas-destacadas/empresas-por-la-igualdad.

addition to a double working day, greater job insecurity and negative impacts on their work trajectories and professional development. In turn, this results in the majority of women not having contributory social security. The usual benefits of formal employment do not reach a high proportion of women. In the emergency, the fundamental task is to protect those who need it most, ensuring that no woman is left behind, primarily those who do not enjoy the benefits of formality. In the medium term, it is necessary to ensure a universal social protection floor (income, health, pensions and care), regardless of the type and mode of labor insertion. Finally, promoting social protection within a framework of universality rather than access to formal employment, will bring benefits to advance gender equality and the empowerment of women. As well as adopting and implementing ILO Convention 1899 for the regulation of domestic workers, leading to the establishment of necessary measures for the health care of them and their employers.

- Ensure the inclusion of women in policies for the reactivation of employment with the ultimate objective of facing the crisis without leaving anyone behind. In the first place, as has already been documented, and has also been happening in the framework of this pandemic, in periods of crisis female leaderships are effective. In times like the ones we live in, women can be very effective in managing crises, facing uncertainty and addressing a multiplicity of objectives. Second, this will be useful to better capture the specific needs and strategic interests of women, making it possible to estimate gender gaps both in the effects of the crisis, and in the depth of its impacts, as revealed in this paper. To include women effectively, it is recommended to incorporate them in social dialogues with plural representation, as well as to implement initiatives that promote gender equality in the labor market. Additionally, the government, companies and trade unions can collaborate with women's organizations to analyze the dimension of the impact on gender and the search for solutions in their own environments.
- Protect people, their income and their job, regardless of the contractual modality of the workforce. The protection of workers and each job during the pandemic, including those derived from temporary closures of operations is a priority. However, the stressful circumstances on the viability of companies varies from industry to industry, and according to the size of the company. It is a time when the support of the private sector is required to take employment protection measures combining those that can range from reduced working hours, to temporary contract suspensions, to early paid vacations, among others. Several countries in the region have adopted policies to support the private sector with the aim of protecting income with temporary cash transfer schemes that include a gender analysis, as seen above, as a grant or loan to protect households more exposed to the effects of the crisis, including cash transfers to women who are in situations of domestic violence.

For the private sector:

» Develop a Corporate Inclusive and Gender Responsive Framework for Managing the COVID-19 Crisis.¹² (i)Set up a Crisis Committee led by senior management and with the plural participation of staff (including union members if possible), where it is guaranteed that women's voices are incorporated. It can be a new body or an existing one to which crisis management functions are assigned, (ii)Develop a policy framework or strategy for managing the COVID-19 crisis, whose purpose is to adequately navigate the crisis, mitigate its

⁸ When disaggregating the data, the evidence indicates that the women in the higher situation of vulnerability are poor women and older adults, female heads of households, young people, belonging to indigenous or Afro-descendant peoples, and migrant and refugee women.

⁹ Convention 189: www.ilo.org/dyn/normlex/es/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:2551460.

¹⁰ See Avivah Wittenberg-Cox (2020), What Do Countries With The Best Coronavirus Responses Have In Common? Women Leaders. Accessed June 29, 2020 at www.forbes.com/sites/avivahwittenbergcox/2020/04/13/what-do-countries-with-the-best-coronavirus-reponses-have-in-common-women-leaders/#4d3146ed3dec.

¹¹ The Seal of Gender Equality in the Workplace for the Private Sector supported by UNDP, the Principles of Women's Empowerment promoted by UN Women and the United Nations Global Compact # or the We Empower or Win-Win Program in America Latina developed in partnership between the European Union, the ILO and UN Women). See www.empowerwomen.org/en.

¹² See www.businessforsustainabledevelopment.org.

effects especially on the most vulnerable segments linked to the business and its value chain, compensate for the disadvantages suffered by specific segments, and build resilience to future shocks and crises. This should address both impact actions in the workplace, impact actions in the value chain and solutions to share with the community, (iii)Formulate a COVID-19 Crisis Management Action Plan with results, goals, indicators and specific activities associated with each area, with responsible units, times, and assigned budget. For this, it is essential to execute the action plan and implement improvements along the way as required and measure its progress, identifying opportunities for improvement and planning continuous improvement actions.

- » Ensure greater labor flexibility for all working people, not only women. In order to ensure that joint responsibility for household chores, care work and increased domestic work does not disproportionately burden women, they must adopt equal opportunities measures that benefit all staff. Likewise, working on time with men on elements that shape a new, conscious and healthy masculinity, in which they begin to assume their domestic responsibilities are crucial. This will hardly change in the short term, so successful workplaces will be the ones that manage to adapt, and co-create measures focused on the strategic needs and interests of their staff. Some of the recommended measures include the adoption of telework and its regulation, flexibility of time and schedules, redesign and adaptation of workspaces with a biosafety approach that includes the specific needs of women and men and results-oriented work schemes rather than processes-oriented work¹³. The transformation of cultural patterns and social norms is a task that must also concern the business sector, challenging traditional gender roles. Along with these measures, it should take advantage of the opportunity to promote social co-responsibility for care.
- » Offer tools for the development of human capital unable to work from home during mandatory quarantines. This includes the modalities of virtual training and digital skills that contribute to the qualification of the occupational profile of workers who are forced to stay at home. For this, it is recommended to develop alliances with training systems for work, as well as with content providers. For this, it is crucial to develop new human capital development schemes based on training cycles and training for the new economic normality. Beyond proposing training in areas that will have effective demand in the immediate future, it is necessary to take into account, more and more, that jobs will incorporate digital tools in their daily lives, so digital literacy must be central in any business strategy of development of labor competencies. Thus, the need to update knowledge must be conceptualized across the different occupations of people.¹⁴
- » Offer care solutions in the workplace and adopt other measures to facilitate joint responsibility for care. (i) Adopt paid and unpaid leave, both for mothers and fathers, and for various concepts, beyond maternity, paternity and parental leave, (ii) Develop care solutions supported by workers, ¹⁵ directly or through third parties, including special care solutions such as disability or sick leave, and (iii) Develop processes for changing social norms by promoting joint responsibility among staff and conscious and healthy masculinities.

¹³ In this regard, the Agile methodologies may be useful, the Agile Manifesto developed by elaborated by 17 critics of process-based production models, in Utah in 2001, where the term "agile methods" was coined as an alternative to the development of software with formal or traditional methodologies. Consulted at agilemanifesto.org/iso/es/manifesto.html and see OBS Business School (2020), Agile Methodology What are the 12 principles of your model?, consulted on June 29, 2020 at obsbusiness.school/int/blog-project-management/agile-methodologies/agile-methodology-which-are-the-12-principles-of-your-model UNDP has developed a series of alliances with great allies that offer digital content for the development of digital skills, socio-emotional and technical skills (Coursera, HP Life, among others). See IFC (2020), Childcare in the COVID-19 Era: A Guide for Employers, Accessed June 30, 2020 at <a href="www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/resources/childcare+and+covid+guidance+for+employers* and IFC (2019), Guide for Employer-Supported Childcare, developed in partnership with UNDP together with about 30 organizations, Accessed June 30, 2020 at www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/resources/guide+for+employer-supported+childcare

¹⁴ UNDP has developed a series of alliances with great allies that offer digital content for the development of digital skills, socio-emotional and technical skills (Coursera, HP Life, among others).

¹⁵ See IFC (2020), Childcare in the COVID-19 Era: A Guide for Employers, Accessed June 30, 2020 at www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/resources/childcare+and+covid+guidance+for+employers and IFC (2019)

Guide for Employer-Supported Childcare, developed in partnership with UNDP together with about 30 organizations, Accessed June 30, 2020 at www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/resources/guide+for+employer-supported+childcare

- » Transformation of social norms and pay renewed attention to communication channels. The greater flexibility required in the workplace must go hand in hand with a renewal of communication channels with the person and with other central actors in the value chain, including suppliers of goods and services. As has already been widely documented, women use less initiative than men to negotiate for themselves, in fact there is evidence that they negotiate better for a third party than in favor of their own interests. For this reason, it is essential to open multiple channels of communication with management, with the areas of human resources and welfare and other institutional channels. This includes salaries and promotions, but also other working conditions such as flexibility of time and workspace, presented in the previous point, as well as opportunities for professional development, among others.
- » Have information and evidence for proper decision making. Markets work best with information, and labor markets are no exception to this rule. Having greater availability of labor market data disaggregated by sex and other demographic variables is essential. This includes not only information on the organizational policies to guarantee the well-being of the staff in times of the pandemic, but also information on the effects of the crisis on the staff and their family environment, geolocated job vacancies and the prospect of future jobs. among others. It will also have more information on the economic effects, burden of differentiated care, and barriers to accessing resources for work. This will help government workers in charge of designing policies to more clearly identify the segments of the labor markets in which their action is a priority, and so that decision making in the company is more accurate, facilitating the timely implementation of corrective actions.

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Appendix

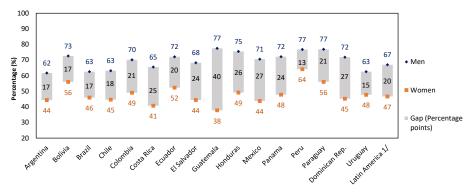
Appendix 1. Latin America (16 countries): Description of the household and employment surveys by country, 2018 and 2019.

Country	Survey	Year and period considered
Argentina	Encuesta Permanente de Hogares	2019, quarters I, II, III y IV
Bolivia	Encuesta de Hogares	2018, annual
Brazil	Encuesta Nacional por Muestreo de Domicilios	2019, quarters I, II, III y IV
Chile	Encuesta Suplementaria de Ingresos de la Encuesta Nacional de Empleo	2018, annual
Colombia	Gran Encuesta Integrada de Hogares	2019, database from January to December
Costa Rica	Encuesta Continua de Empleo	2018, quarters I, II, III y IV
Ecuador	Encuesta Nacional de Empleo, Desempleo y Subempleo	2019, quarters I, II, III y IV

El Salvador	Encuesta de Hogares de Propósitos Múltiples	2018, annual
Guatemala	Encuesta Nacional de Empleo e Ingresos	2019, semesters I
Honduras	Encuesta Permanente de Hogares de Propósitos Múltiples	2018, annual
Mexico	Encuesta Nacional de Ocupación y Empleo	2019, quarters I, II, III y IV
Panama	Encuesta del Mercado Laboral	2018, annual
Peru	Encuesta Nacional de Hogares	2019, annual
Paraguay	Encuesta Permanente de Hogares	2018, annual
Dominican Republic	Encuesta Nacional de Fuerza de Trabajo	2018, annual
Uruguay	Encuesta Continua de Hogares	2019, quarters I, II, III y IV

Source: Latin American Household and Employment Surveys.

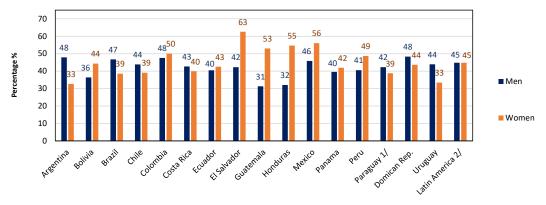
Appendix 2. Latin America (16 countries): Occupancy rate without the presence of young children in the home by sex, according to countries – in percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The employed EAP from 15 years old and older and young children from 6 to less years old are considered at home.

Appendix 3. Latin America (16 countries): EAP employed in non-essential activities by sex, by country – percentage (circa 2019)



Source: Latin American Household and Employment Surveys 2018 and 2019 (see Appendix 1).

Notes: The EAP is considered occupied from 15 years old or more.

^{1/} Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with quarterly surveys, the simple average is considered to obtain annual data.

^{1/} In Paraguay, there is no greater detail by economic activities, therefore the manufacturing industry branches are considered; commerce, restaurants and hotels; and transportation, storage and communications.

^{2 /} Weighted average. The weighting in household surveys corresponds to the local expansion factor in each country. In countries with quarterly surveys, the simple average is considered to obtain annual data.



COVID-19 and Primary and Secondary Education: The Impact of the Crisis and Public Policy Implications for Latin America and the Caribbean

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Abstract

More than 144 million students in Latin America and the Caribbean have missed nearly five months of school due to public health measures taken by governments in response to the COVID-19 pandemic. The health crisis has meant a triple shock for children and adolescents, with the prolonged closure of schools, confinement due to lockdown measures and the loss of economic security in households. This triple shock has both short- and long-term repercussions that put the development of an entire generation at risk. Although governments throughout the region have implemented distance learning strategies intended to maintain a degree of continuity in children's and adolescents' learning and well-being, these solutions have been unevenly implemented and may even further exacerbate the education gaps that existed in the region before the pandemic. Addressing this educational emergency requires governments to focus on guaranteeing children's and adolescents' learning and well-being, working on four priority areas: 1) planning for the urgent reopening of schools; 2) developing a strategy to ensure learning for all students, in the new context where not all instruction will be in person; 3) preserving school's protective role and providing services that have been disrupted; and 4) ensuring the emotional well-being of the educational community (teachers, families and students). Implementing these measures promptly requires the protection of education budgets in the region, promoting cooperation between countries, and coordination between the education sector and other sectors. This crisis could be an opportunity to rethink the current education system and build one that closes existing inequalities and enables all children and adolescents in the region to reach their full potential. Achieving this will require a longterm vision for managing the current emergency, with investment in rebuilding an education system that ensures access to learning for all students, particularly the most vulnerable.

1. Introduction

The COVID-19 pandemic has led governments to make drastic decisions on the operation of various economic and social activities. One of the sectors that has been the most affected since the onset of the health emergency has been pre-primary, primary and secondary education. While some economic activities have started to recommence, at the time of writing most countries in Latin America and the Caribbean (hereafter LAC) have their schools closed. With the exception of Nicaragua and Anguilla, all countries in the region announced national school closures in March. By early August, only Uruguay had reopened schools at the national level, after first reopening schools in rural areas. This means that over 144 million students¹ in the region completed close to five months with no in-person instruction, facing radical changes in their learning process (see Table A1, in annex).

The prolonged closure of schools and educational centres, combined with the shock to the economy and the health of the population, has implications for children's present and future development, particularly those living in more vulnerable households. As a result of the crisis, children are at greater risk of dropping out of school and of lagging behind in their studies, food insecurity, abuse, physical and emotional health problems, and, not least, loss of learning, with potentially devastating consequences for an entire generation.²

Several countries in the region have implemented emergency measures to maintain some continuity in teaching and learning processes while schools remain closed. These range from using radio and television channels to deliver curricula to the use of mobile phones or virtual platforms. At the same time, countries are faced with uncertainty around how the pandemic might develop, which will determine the timings and conditions for reopening schools.

Countries in the region were already facing a learning crisis and large educational gaps before the pandemic. Furthermore, the measures put in place so far to maintain distance learning are not necessarily suitable for all age groups, as they do not adequately address the respective needs of specific groups. For example, younger children require close supervision, which they do not necessarily receive at home. Moreover, these strategies do not serve all students equally, as they depend on access to unevenly distributed resources for studying at home, such as Internet connectivity, electronic devices, space and parental support. In light of this, and with the prolonged closure of schools, it is feared that the gaps in educational continuity and achievement will widen even further.

This document outlines a general diagnosis of the situation in pre-primary, primary and secondary education in the region, the implications of the COVID-19 crisis for school-age children,³ and the strategies that should be considered going forward to address and overcome the crisis. The rest of the document is structured as follows: the following section describes the educational gaps before the pandemic, section three summarizes the potential impacts of the crisis on students and their families, as well as on teachers and education systems. Section four then summarizes the emergency measures taken by governments in LAC to ensure educational

¹ This figure corresponds to the total number of students affected by the school closures as of 10 August 2020 according to the global monitoring of school closures due to COVID-19 conducted by UNESCO (see details in Annex Table A1). This figure differs from the one reported by Unicef as of 9 September (138 million students) when some countries had reopened schools.

² Kaffenberger, M. 'Modeling the Long-Run Learning Impact of the COVID-19 Learning Shock: Actions to (More Than) Mitigate Loss'. RISE Insight, 2020.

³ This document focuses on pre-primary, primary and secondary levels, which corresponds to boys and girls between the ages of 4 and 17 years. Early childhood services have also been affected by the pandemic and ensuring comprehensive care for children under four years of age is critical to their current and future development. Additionally, childcare is essential for ensuring a labour supply, particularly in relation to women. However, an analysis of this age group is beyond the scope of this document.

continuity. Finally, the last section presents a roadmap that outlines the most relevant policy actions that governments should consider to ensure educational provision, prevent the widening of gaps in learning, and build a system that allows all children and young people to reach their full potential going forward.⁴

2. Gaps in education (pre-COVID-19)

2.1. Gaps in learning

Before the pandemic, countries in the region were facing a learning crisis that disproportionately affected the poorest.⁵ On average, 50.8 percent of children under 10 years of age in LAC do not have the necessary reading skills for understanding simple texts. As shown in Figure 1, the learning poverty rate varies between countries, with levels below 36.8 percent in Chile and Costa Rica, but over 74.4 percent in the Dominican Republic, Honduras and Paraguay. Moreover, when looking at levels of achievement within countries, there are marked differences depending on students' socio-economic status or place of residence. For example, data from the Programme for International Student Assessment (PISA) consistently show that students from households in the highest socio-economic quintile obtain higher grades in mathematics, reading and science compared to students in the lowest quintile (see Figure A1, in annex).

The low level of achievement, as well as the gaps, are evident from the first years of preschool. For example, while 83 percent of children aged between 3 and 4 years have an adequate level of cognitive, physical and emotional development, 57 percent of the children with inadequate development come from the poorest households.⁶ On the other hand, only 27 percent of children aged between 3 and 4 years have basic literacy and numeracy skills. This figure, which is already low, conceals a significant gap: it is 30 percent in urban areas and 19 percent in rural areas.⁷

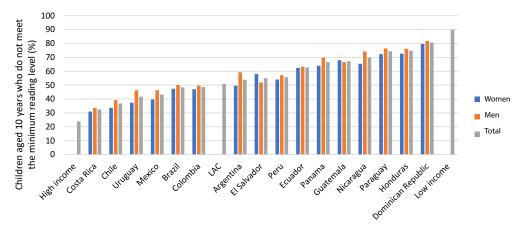


Figure 1. Learning Poverty in Latin America and the Caribbean (2018)

Note: The Learning Poverty Index, developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank, shows the percentage of 10-year-old children who do not meet the minimum reading requirement (being able to read and understand a basic text) weighted by the number of children who have dropped out of school. Source: World Bank www.worldbank.org/en/topic/education/brief/learning-poverty

⁴ The diagnosis presented in this document, as well as the potential impacts of the crisis and the summary of strategies implemented by the countries of the region, are based on the analysis of secondary databases, official information reported by the Ministries of Education of the countries in LAC, and existing bibliographic material. The sources used are cited throughout the document as appropriate. The roadmap presented in the last section was produced from the author's own reflections, drawing on the existing literature and discussions with other experts and policy makers who offered comments and suggestions.

⁵ World Bank. World Development Report 2018: Learning to Realize Education's Promise. Washington, DC: World Bank, 2018.

⁶ UNICEF. 'Identifying the Gap to Act: Early Childhood Development Outcomes and Determinants in Latin America and the Caribbean'. Panama: Latin America and Caribbean Regional Office, 2017.

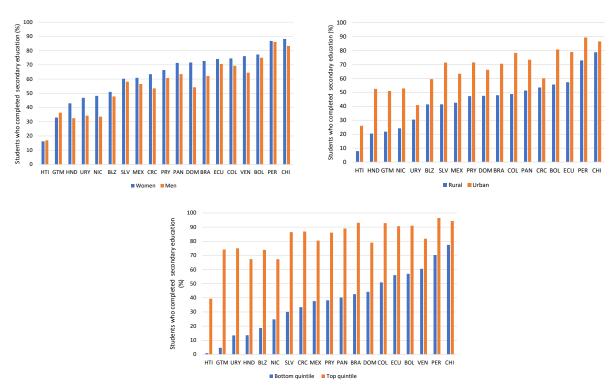
⁷ Ibid.

2.2. Gaps in coverage and continuity

Pre-primary education enrolment is fairly heterogeneous across the region. While in Brazil, Costa Rica and Uruguay preschool enrolment is over 80 percent, in Guatemala, Honduras and Peru it is less than 50 percent (see Figure A2, in annex). In contrast, most countries in the region have achieved primary school enrolment and completion rates close to 100 percent. However, some countries continue to experience significant gaps in terms of completion of primary education between urban and rural areas, as well as between socio-economic status. This is the case, for example, in Guatemala, Honduras and Nicaragua, where the primary school enrolment gap between the top and bottom quintiles is 40, 27 and 23 percentage points respectively (see Figure A3, in annex).

Regarding the transition from primary to secondary education, all countries in the region, were facing the challenge of school dropout and of ensuring completion of lower and upper secondary education, particularly among adolescents from rural areas and households in the poorest quintile, even before the pandemic. The average completion rate in the region is 78.26 percent for lower secondary education and 62.16 percent for upper secondary education. This average of course conceals sizeable differences, both among countries and within countries, between levels of vulnerability. For example, while in Chile and Peru more than 85.75 percent of students complete upper secondary education, in Guatemala and Nicaragua the figure is less than 40.92 percent. Furthermore, for all countries in the region, there are consistently sizable differences in secondary school completion rates depending on students' area of residence and socio-economic status. As Figure 2 shows, the proportion of adolescents who complete secondary school is significantly higher in urban areas and those from the highest socio-economic quintile. In terms of gender differences, the secondary education completion rate is higher for girls than for boys in most countries in the region.

Figure 2. Secondary education completion by gender, area and socio-economic status, 2018



Note: Due to a lack of data, the data reported are from 2017 for Chile and Haiti, 2016 for Belize, 2015 for Guatemala, and 2014 for Nicaragua and Venezuela. Source: Education-UNESCO Institute of Statistics.

2.3. Gaps in availability of learning resources

In the face of school closures, most countries in the region have implemented distance learning strategies. The implementation of these strategies depends heavily on children's and adolescents' access to specific resources that allow them to learn at home: availability of books and educational materials at home, availability of a place to study, access to electronic devices and connectivity, and parental support and involvement in the learning process.⁸ As shown below, LAC faces a strong inequity in the resources that are necessary for creating conditions that are conducive to learning at home.

The PISA data makes it possible to examine the gaps in educational resources reported by students themselves in some of the countries in the region. According to data from 2018, on average 76.1 percent of 15-year-old students have a space to study at home and 67 percent have a desk. Figure 3 shows access to such spaces according to households' socio-economic status. As can be seen, less than 73.6 percent of adolescents from households in the poorest quintile have a space to study at home (compared to more than 86.8 percent in the top quintile), and, with the exception of Mexico and Peru, less than 57.6 percent have access to a desk (compared with 76.6 percent or more in the top quintile).

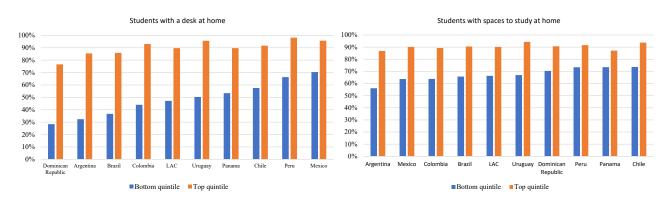


Figure 3. Space at home by socio-economic status

Note: Quintiles are based on an index which measures the possession of assets in students' households. These assets include a private room, Internet connection, television, car, en suite rooms, a mobile phone with Internet access, computer, tablet, digital books, and three wealth assets related to each country. Only countries in LAC are taken into consideration when calculating the quintile to which each household belongs. Data source: PISA 2018.

With regard to access to electronic devices, 62 percent have a computer for study and 45.6 percent have a tablet at home. As with the previous data, there is significant variation between countries, particularly in access to computers: while in Chile, 83 percent of 15-year-old students have a computer for study, in Mexico, Panama and Peru, this percentage is less than 54 percent, and in the Dominican Republic it is 40.5 percent. The socioeconomic differences with regards to access to a computer or tablet for home study are appalling: as shown in Figure 4, for all Latin American countries with available data, the probability that a student belonging to a household in the highest quintile will have a computer for study is 5.5 times greater (or more) than those in the lowest quintile, and the differences in terms of tablet ownership are even greater (8 to 1). However, access to a mobile phone with Internet at home is substantially greater, at over 81.9 percent in all countries, and close to 100 percent in Argentina, Brazil and Uruguay. Although there are differences depending on socio-

⁸ Brossard, M. and others. 'Parental Engagement in Children's Learning: Insights for remote learning response during COVID-19'. Innocenti Research Briefs, No. 2020-09. Florence: UNICEF Office of Research – Innocenti, 2020.

economic status, these are less acute than those observed in access to a computer. However, having a mobile phone with data at home does not guarantee students' access to the Internet for their academic activities. The average Internet coverage in the region is 68 percent, again with high heterogeneity: from coverage of less than 50 percent in Haiti, Honduras and Nicaragua (33 percent, 42 percent and 47 percent respectively), to coverage of more than 80 percent in Saint Kitts and Nevis, Anguilla, Barbados, Chile, the Virgin Islands, and the Bahamas. These figures include access via mobile devices. Bearing in mind that it is preferable to have a computer or tablet to make adequate use of digital educational resources, the percentage of students with Internet access from such devices is even lower (39 percent, on average), and is no higher than 55 percent in any country in the region.

Finally, access to television is close to 100 percent in countries in the region, with the exception of Panama and Peru, where 90.7 percent and 94.3 percent of students, respectively, report having a television at home. Additionally, there are differences in television ownership according to socio-economic status, but these are substantially smaller than those observed for other electronic devices. These inequalities contribute to widening learning gaps, as it is the most vulnerable children and adolescents who have the fewest resources to continue learning at home.

Students with at least one computer at home Students with at least one mobile phone with internet at home 100% 90% 80% 80% 70% 70% 60% 60% 50% 50% 40% 40% 30% 20% Uruguay Mexico Argentina ■ Bottom quintile ■ Top quintile ■ Bottom quintile Top quintile Students with at least one tablet at home Students with a television at home 100% 90% 90% 80% 80% 70% 70% 60% 60% 50% 50% 40% 40% 30% 30% 10% Uruguay ■Bottom quintile ■ Top quintile

Figure 4. Access to electronic devices at home by socio-economic status

■Bottom quintile ■Top quintile

Note: Quintiles are based on an index which measures the possession of assets in students' households. These assets include electronic goods and the number of rooms in the house, among other things. Only countries in LAC are taken into consideration when calculating the quintile to which each household belongs. Data source: PISA 2018.

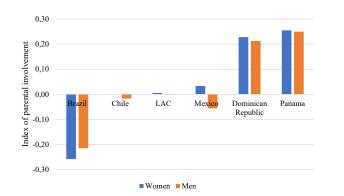
⁹ It is important to clarify that this figure corresponds to students' reports regarding access to a mobile phone with Internet at home. However, this does not factor in the quality of Internet access, either in terms of the stability of the connection or access to a data plan.

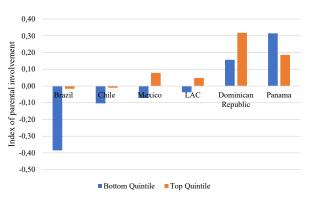
¹⁰ Data Reportal

An environment that facilitates learning at home involves support from caregivers, particularly for younger children. Consolidated UNICEF data show that 75 percent of children aged 3 to 4 years can access some form of learning activity by an adult in the household. However, this is less common among children whose mothers have low educational attainment (60 percent), children in poor households (62 percent) and children in rural areas (65 percent). Furthermore, 48 percent of children in this age range do not have books at home. As for older children, given that we do not have detailed information on parental involvement for all the countries in the region, we can instead use parental level of education as a proxy for the quality of parental involvement and support. As with other learning resources, parental education is unequally distributed: children and adolescents from the poorest households have parents with significantly lower levels of education than those from households in the top quintile (see Figure A4, in annex). This suggests that there are gaps in the type of support that parents can offer their children in their learning process.

The PISA data allow us to measure the gaps in parental involvement for 15-year-old students in some countries in the region. Figure 5 shows the index of parental involvement for some countries in the region in relation to the average for countries in the Organization for Economic Cooperation and Development (OECD) (according to PISA data from 2018). This index measures how often parents enquire about their children's school life, and how much help they offer in the learning process. Two main findings stand out: firstly, in Brazil and Chile levels of parental involvement are below the OECD average, while the Dominican Republic and Panama have above average levels of parental involvement. Secondly, with the exception of Panama, differences in the level of parental involvement according to the household's socio-economic status are enormous: between 10.4 and 22.6 times lower for the poorest quintile compared with the top quintile.

Figure 5. Index of parental involvement in home learning, by gender and socio-economic status





Note: This index contains the frequency with which parents performed the following activities with the student: discussing how the student has done in school, eating with the child at the table, taking time to talk, helping with science homework, asking how the student has performed in science classes, obtaining materials for science classes, discussing how science is used in everyday life, and discussing science-related career pathways. Positive values for this index show that they are above the average for OECD countries. Quintiles are based on an index which measures the possession of resources in students' households. These assets include electronic goods and the number of rooms in the house, among other things. Only countries in LAC are taken into consideration when calculating the quintile to which each household belongs. Data source: PISA 2018.

¹¹ Castro, M. and others. Parental involvement on student academic achievement: A meta-analysis. Educational Research Review, vol. 14, 33–46 (February 2015).

¹² UNICEF. 'Identifying the Gap to Act: Early Childhood Development Outcomes and Determinants in Latin America and the Caribbean'. Panama: Latin America and Caribbean Regional Office, 2017.

¹³ Boonk, L. and others. 'A review of the relationship between parental involvement indicators and academic achievement'. Educational Research Review, vol. 24, 10–30 (June 2018); Kohl, G. O., L. J Lengua, and R. J. McMahon. 'Parent involvement in school: Conceptualizing multiple dimensions and their relations with family and demographic risk factors'. Journal of School Psychology, vol.38, N. 6, 501–523 (November 2000); Li, X., and others. 'Family socioeconomic status and home-based parental involvement: A mediation analysis of parental attitudes and expectations'. Children and Youth Services Review, vol. 116 (September 2020). doi.org/10.1016/j.childyouth.2020.105111.

Finally, the PISA data allow us to measure the level of parental emotional support for a wider group of countries. This index measures to what extent parents support their children emotionally in their school activities. As shown in Figure 6, while Chile, Mexico and Uruguay have above average levels for OECD countries, Argentina, Brazil, Colombia, the Dominican Republic, Panama and Peru are below this average. Looking at gender differences, there is a higher level of support for girls than for boys, and a significantly lower level for adolescents in households belonging to the poorest quintile. In fact, in all the Latin American countries observed, the index is below the OECD average for students in households from the lowest quintile and above the average for students in households from the highest quintile, reflecting once again the profound inequities that children and adolescents face in the region.

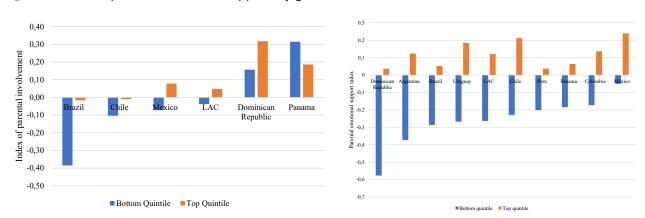


Figure 6. Index of parental emotional support, by gender and socio-economic status

Note: This index contains information about how much parents agree with the following statements: I am interested in my child's school activities, I support his/her efforts and achievements, I offer support when my child has difficulties in school, I try to make my child feel safe. Positive values for this index indicate that they are above the average for OECD countries. Quintiles are based on an index which measures the possession of assets in students' households. These assets include electronic goods and the number of rooms in the house, among other things. Only countries in LAC are taken into consideration when calculating the quintile to which each household belongs.

3. Potential impacts of the crisis on the primary and secondary education system

The COVID-19 pandemic has had three negative effects on children and adolescents: the abrupt closure of schools, confinement due to the lockdown measures taken by most governments, and a global economic recession. These negative effects have short- and long-term repercussions that directly impact children and adolescents, as well as their families, teachers and education systems. As summarized below, these negative effects have an even greater impact on the most vulnerable children and adolescents. It is therefore necessary to take action to prevent the educational gaps that existed prior to the pandemic (as described in the previous section) from becoming even wider.

3.1. On students and families

The first direct impact on students is the disruption and possible learning loss due to prolonged school closures. Prolonged interruptions of classes due to long school breaks or teachers' strikes cause substantial losses in learning, particularly for children and adolescents from more vulnerable households who do not

have the resources to compensate for these interruptions.¹⁴ Moreover, evidence from natural disasters and epidemics has shown that school closures can have long-term negative effects on learning. For example, the 2005 earthquake in Pakistan caused schools to close for an average period of 14 weeks, leading to a learning loss for students equivalent to approximately 1.5 years of schooling.15 This loss was more severe among the most vulnerable students whose mothers had not completed primary education.¹⁶ While in the current crisis students have access to some form of distance learning, access to and the quality of this education depends on the availability of learning resources at home. As shown in the previous section, these resources are unevenly distributed throughout countries in the region, meaning that the most vulnerable children and adolescents are at high risk of learning losses. This was the case in Sierra Leone during the Ebola epidemic, where children in rural areas did not have access to television or radio and were therefore unable to access distance learning strategies.¹⁷ While there are still no estimates on the effect of school closures during the COVID-19 pandemic in LAC, recent evidence from the United States has shown that, following school closures between March and May, students in low-income households lost 36 percent in their math learning, while those in high-income households improved learning by 45.5 percent.¹⁸ A possible explanation for this disparity is that low-income students have lower levels of participation in online courses and receive lower levels of parental support for academic work at home, as described in the previous section.

In addition to being spaces for learning, schools serve as protective spaces for many students. By being in daily contact with students, teachers and school staff play a protective role against possible threats to students' physical and mental safety at home and can alert the authorities in the event of violence or abuse. School closures, combined with children and adolescents being confined to their homes and the pressure the deteriorating economic situation puts on parents, increase the risk of violence and maltreatment.^{19 20} This was the case in Africa during the Ebola epidemic, where rates of child abuse and maltreatment increased significantly. Also, recent evidence from China related to the COVID-19 pandemic showed that reports of domestic violence tripled during quarantine.²¹ For LAC, there is evidence that a third of young people between 13 and 17 years of age reported being the victims of physical assaults during the months following the hurricane that hit Haiti in 2011.²² Additionally, in countries affected by conflict where armed groups are present, such as Colombia,²³ adolescents have been at greater risk of being recruited by these groups.

Evidence from previous humanitarian crises indicates that girls and female adolescents are at greater risk of pregnancy during such crises. The health crisis in Africa caused by the Ebola epidemic increased teenage

¹⁴ Busso, M., and J. Camacho. 'Pandemic and Inequality: How Much Human Capital Is Lost When Schools Close?' Ideas Matter. Inter-American Development Bank, 2020.

¹⁵ This loss was not due solely to school closures, but also to post-return dynamics, with affected students showing lower levels of learning progress in the years following their return to school. The authors suggest that one possible explanation for this is that students were moved up a grade without having satisfied the relevant learning outcomes, and that teaching at a level above students' actual level may cause gaps to increase.

¹⁶ Andrabi, T., B. Daniels, and J. Das. 'Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005'. RISE Working Paper Series, No. 20/039, 2020.

¹⁷ Risso-Gill, I., and L. Finnegan. 'Children's Ebola Recovery Assessment: Sierra Leone'. Save the Children, World Vision International, Plan International and UNICEF, 2015.

¹⁸ This finding, published by Opportunity Insights Economic Tracker, is based on a sample of schools in the United States that use Zearn Math as part of their mathematics curriculum. While not a representative sample, it does give an indication of the potential differential effects the pandemic could have on learning.

¹⁹ Golberstein, E., H. Wen, and B.F. Miller. 'Coronavirus Disease 2019 (COVID-19) and Mental Health for Children and Adolescents'. JAMA Pediatrics, vol. 174, No. 9 (April 2020).

²⁰ Risso-Gill, I., and L. Finnegan. 'Children's Ebola Recovery Assessment: Sierra Leone'. Save the Children, World Vision International, Plan International and UNICEF, 2015.

²¹ Lee, J. 'Mental health effects of school closures during COVID-19'. The Lancet Child & Adolescent Health, vol. 4, No. 6, 421 (April 2020).

²² Flynn-O'Brien, K.T., and others. 'Prevalence of physical violence against children in Haiti: A national population-based cross-sectional survey'. Child abuse & neglect, vol. 51, 154–162 (January 2016).

²³ Bulletin 341 Procuraduría General de la Nación (Attorney General's Office), Bogotá.

pregnancy rates. In Sierra Leone and Liberia, for example, pregnancy rates increased as the epidemic spread.²⁴ ²⁵ These studies suggest some explanations for this increase. On the one hand, mobility restrictions reduced the use of contraceptives.²⁶ It has also been suggested that, as schools served as safe spaces, school closures exposed female adolescents to situations of risk.

A fourth impact of the pandemic on children and adolescents is increased food insecurity. The economic downturn is directly linked to a decrease in household consumption. This decrease puts children's and adolescents' nutritional needs at risk. Additionally, school closures frequently disrupt school feeding programmes. According to FAO, 85 million children in LAC make use of school feeding programmes, and for 10 million of them, school feeding is their main source of food.²⁷

Another negative effect of the current crisis on children and adolescents is the triggering of mental health problems. Previous natural disasters in LAC, such as hurricanes or earthquakes, have affected children's mental health.²⁸ In the context of the COVID-19 pandemic, a survey of secondary school students in Ecuador reported that 16 percent of respondents had symptoms of depression.²⁹ This is consistent with observations from large-scale emergency or disaster situations, where significant increases in depression, stress, anxiety and substance use are just some of the results that have been observed.³⁰ This negative effect on mental health results from various processes triggered by, for example, lockdown measures and school closures. Children can experience stress and anxiety disorders when exposed to long periods of isolation.³¹ Simultaneously, lockdown measures have distanced children from people who can offer them emotional support and from mental health services.³² Additionally, children's usual routines have changed during these school closures, affecting their psychosocial stress levels.³³ Many children have also lost access to care, given that schools are children's main point of access to mental health detection and care, especially for those belonging to the most vulnerable social groups.³⁴

Finally, the pandemic has affected various dimensions of families' well-being, which in turn impacts children's and adolescent's development. The measures taken by governments have forced various economic activities

²⁴ Rothe, D., and others. Ebola: beyond the health emergency. Plan International, 2015.

²⁵ UNECA. 'Socio-economic impacts of Ebola on Africa'. Addis Ababa: United Nations Economic Commission for Africa, 2015.

²⁶ Denney, L., R. Gordon, and A. Ibrahim. 'Teenage Pregnancy after Ebola in Sierra Leone'. Secure Livelihoods Research Consortium Working Paper, No. 39. London: Overseas Development Institute, 2015.

²⁷ FAO. 'FAO Warns of the Impact of COVID-19 on School Feeding in Latin America and the Caribbean'. Rome: Food and Agricultural Organization of the United Nations, 2020.

²⁸ Carreño, M. E., T. A. Zambrano Cobeña, and K. J. Joza Carreño. 'Comprehensive welfare of children who were exposed to the earthquake of April 16th 2016 in Ecuador'. FACSALUD-UNEMI, vol. 3, No. 5, 23–30 (December 2019); Felix, E., and others. 'Family influences on the long term post-disaster recovery of Puerto Rican youth'. Journal of Abnormal Child Psychology, vol. 41, No. 1, 111–124 (January 2013); Santiesteban, Y., and others. 'Impact of Gustav and Ike hurricanes crossing on the psychological health of a group of affected schoolchildren'. Revista cubana de medicina general integral (Cuban Journal of General Comprehensive Medicine), vol. 26, No. 3 (July–September 2010).

²⁹ Asanov, I., and others. 'Remote-learning, Time-Use, and Mental Health of Ecuadorian High-School Students during the COVID-19 Quarantine'. World Bank Policy Research Working Paper, No. 9252. Ecuador: World Bank, 2020.

³⁰ Neria, Y., A. Nandi, and S. Galea. 'Post-traumatic stress disorder following disasters: a systematic review'. Psychological medicine, vol. 38, No. 4, 467–480 (April 2008); Papadatou, D., and others. 'Adolescents' reaction after a wildfire disaster in Greece'. Journal of Traumatic Stress, vol. 25, No. 1, 57–63 (February 2012); Thienkrua, W. and others. 'Symptoms of post-traumatic stress disorder and depression among children in tsunami-affected areas in southern Thailand'. JAMA, vol. 295, No. 5, 549–559 (August 2006).

³¹ Sprang, G., and M. Silman. 'Post-traumatic stress disorder in parents and youth after health-related disasters'. Disaster Medicine Public Health Preparedness, vol. 7, No. 1 (February 2013).

³² Espada, J. P., and others. 'Las Buenas Prácticas en la Atención Psicológica Infanto-juvenil ante el COVID19' (Good practices in psychological care for children and young people in the context of COVID-19). Clínica y Salud, vol. 31, No. 2 (July 2020).

³³ Wang, C., and others. 'Immediate psychological responses and associated factors during the initial stage of the 2019 Coronavirus disease epidemic among the general population in China'. International Journal of Environment, Research and Public Health, vol. 17, No. 5, 1729 (March 2020); Wang, G., and others. 'Mitigate the effects of home confinement on children during the COVID-19 outbreak'. The Lancet, vol. 395, No. 10228, 945–947 (March 2020).

³⁴ Bruns, B., and J. Luque. Great Teachers: How to Raise Student Learning in Latin America and the Caribbean. Washington, DC: World Bank, 2015.

to cease, with job and income losses for millions of families. It is estimated that the poverty rate will increase by at least 14.5 percent in LAC, which would mean a further 28.7 million more people living in poverty.³⁵ This abrupt loss of household income will put pressure on children, especially adolescents, to abandon their studies – not only because of the cost of education, but also due to the need to bring income into the household. In fact, it is estimated that between 109,000 and 326,000 children and adolescents could enter the labour market as a result of the pandemic.³⁶

In addition to the economic impact on households, there is the public health situation. As the COVID-19 case curve drops,³⁷ families are exposed to the possible infection of a household member and face uncertainties regarding their own health. The combination of these two factors (economic and health), added to the uncertainty and lockdown, results in high levels of uncertainty and isolation among caregivers, which can have a negative effect on their parenting practices. For example, parents have to focus their attentions on handling these emergencies, meaning they have less time and mental resources to support their children in their academic work or to offer the emotional support children need to cope with the change in their daily lives.³⁸ Furthermore, the high stress levels at home caused by economic difficulties can trigger levels of toxic stress that jeopardize children's and adolescents' cognitive and emotional development.³⁹

To summarize, without immediate intervention, the triple combination of school closures, economic recession and extended lockdown may have negative effects on children's and adolescents' physical, cognitive and emotional development. These negative effects on learning, nutrition and emotional health may have medium-and long-term consequences, 40 which could jeopardize a generation's full development.

While the extent of the loss in human development, in all its dimensions, is still uncertain, recent estimates suggest that there will be a significant decline not only in the cumulative years of education but also in learning achievements. Simulations for LAC show that the percentage of secondary education students with reading levels below the minimum proficiency could increase from 53 percent to 68 percent if schools remain closed for seven months. If the risk of dropping out of school is added to the learning gap, it is estimated that, on average, between 0.6 and 0.9 years of schooling (adjusted for quality) will be lost as a result of closures of five or seven months respectively. This equates to a reduction in income of between US\$9,750 and \$15,229 per student. Without strategies for catching up on missed learning and preventing dropouts, these losses equate to between \$0.8 trillion and \$1 trillion for LAC.⁴¹

Unequal access to essential learning resources and to high-quality distance learning methods means that losses in human capital are concentrated in the most vulnerable groups: children and young people in rural areas

³⁵ ECLAC. 'Measuring the impact of COVID-19 with a view to reactivation'. COVID-19 Special Report, No. 2. Santiago de Chile: Economic Commission for Latin America and the Caribbean, 2020.

³⁶ ECLAC and ILO. 'The COVID-19 pandemic could increase child labour in Latin America and the Caribbean'. Technical Note, No. 1. Santiago de Chile: Economic Commission for Latin America and the Caribbean and the International Labour Organization, 2020.

³⁷ At the time of writing, as of 22 July 2020, Latin America is the epicentre of the pandemic, with more than 4 million confirmed cases.

³⁸ Golberstein, E., H. Wen, and B. F. Miller. 'Coronavirus Disease 2019 (COVID-19) and Mental Health for Children and Adolescents'. JAMA Pediatrics, vol. 174, No. 9 (April 2020).

³⁹ Shonkoff, J. P., and P. Levitt. 'Neuroscience and the Future of Early Childhood Policy: Moving from Why to What and How'. Neuron, vol. 9, No. 5, 689–691 (September 2010);

Wadsworth, M. E., and L. E. Berger. 'Adolescents Coping with Poverty-Related Family Stress: Prospective Predictors of Coping and Psychological Symptoms'. Journal of Youth and Adolescence, vol. 35, No. 1 (March 2006).

⁴⁰ Clark, H., and others. 'A future for the world's children? A WHO-UNICEF-Lancet Commission'. The Lancet, vol. 395, No. 10224, 605–658 (February 2020).

⁴¹ These losses are just a small part of the total loss, if we take into account that this amount does not include losses in human capital due to the negative effects of malnutrition, deterioration in mental health, or the increase in teenage pregnancies (see Azevedo, J. P., and others. 'Simulating the Potential Impacts of COVID19 School Closures on Schooling and Learning Outcomes'. Policy Research Working Paper, No. 9285. World Bank Group, 2020).

with low levels of connectivity and who therefore have access to less effective distance learning modalities; children in poor households who struggle to have their basic nutritional needs met, do not necessarily have an adequate study space, or those who live in areas with internet access yet do not have the electronic devices necessary to access distance learning delivered via digital tools; children in single-parent households or households with low parental educational attainment where parents cannot provide support or a favourable environment for studying. Furthermore, children from indigenous populations and those with disabilities will also be disproportionately affected, as distance learning solutions do not always support their language or learning needs. There is, therefore, a need to focus efforts on ensuring continuity of learning for the most vulnerable children and young people.

3.2. Effects on teachers and education systems

Teachers, like other adults and workers, have been emotionally affected by the lockdown and the public health crisis in general.⁴³ Furthermore, teachers in several countries have continued their work from home and, in many cases, their workload has increased. This is partly because they do not have sufficient training to design and implement remote learning strategies (which will be discussed below), and partly because of the additional effort demanded by home working during an emergency situation in which they must also attend to their own caring responsibilities.⁴⁴ ⁴⁵ This poses a challenge to education systems in terms of ensuring that teachers maintain the physical and mental well-being needed to continue their work from home or to collaborate in the process of reopening schools.

Additionally, if schools reopen, it is uncertain whether the full teaching workforce will be available to work in a classroom setting, given that a significant proportion of them are in the age range at greatest risk of developing severe illness from COVID-19 infection. Furthermore, in several countries in the region, teachers have expressed fears of returning to schools due to the possibility of infection. This poses a challenge to education systems in regard to schools' eventual reopening, in the sense that there may be a short-term shortage of teachers and principals. There is also resistance from teachers' unions, who have already expressed opposition to a return to face-to-face instruction in some countries in the region.

The crisis will also jeopardize the funding of education systems, not only because of the economic recession and the demand for resources from other sectors such as health and social protection,⁴⁷ ⁴⁸ but also because of education systems' need for additional resources. In this regard, we can predict at least five sources of pressure for increased funding, in a context where governments have reduced fiscal capacity due to economic recession.

⁴² While, as of yet, there is no available data on parental support during the pandemic, there is evidence from other situations that parents with higher education levels spend more time helping their children with school activities (see Berniel, I. and R. Estrada. 'Poor Little Children: The Socio-economic Gap in Parental Responses to School Disadvantage'. Labour Economics, vol. 66, October 2020).

⁴³ Kim, L., and K. Asbury. "Like a rug had been pulled from under you." The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. University of York, Department of Education, 2020; Talidong, K. J. B., and C. M. D. Toquero. 'Philippine teachers' practices to deal with anxiety amid COVID19'. Journal of Loss and Trauma, vol. 25, No. 6–7 (May 2020); UNESCO. Adverse consequences of school closures. United Nations Educational, Scientific and Cultural Organization, 2020.

⁴⁴ Zhang, W., and others. 'Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 Outbreak'. Journal of Risk and Financial Management, vol. 13, No. 3 (March 2020).

⁴⁵ There is still a need for evidence on the effects of the pandemic on the working conditions and emotional health of teachers in Latin America. However, anecdotal evidence, as well as evidence from other countries, suggests that we can expect to see effects on teachers' workload and emotional well-being.

⁴⁶ Vaillant, D., and C. Rossel. 'Maestros en Latinoamérica: hacia una radiografía de la profesión' (Teachers in Latin America: towards an X-ray of the profession). Santiago de Chile: PREAL (Partnership for Educational Revitalization in the Americas), 2006.

⁴⁷ Blackman, A., and others. 'Public Policy to Tackle COVID-19: Recommendations for Latin America and the Caribbean'. Washington DC: Inter-American Development Bank, 2020.

⁴⁸ World Bank. 'The Economy in the Time of Covid-19: LAC Semiannual Report'. Washington DC: World Bank, 2020.

First, as discussed below, the eventual reopening of schools will require additional resources to ensure schools are adapted and comply with health and safety protocols. Second, as school closures continue, many systems will be forced to expand and strengthen distance learning strategies, which will require significant investment. Third, faced with a bottleneck of teacher availability, systems need additional resources for hiring new teachers. Fourth, the health crisis will affect teachers' health, requiring more resources to cover medical disabilities and physical and mental health care. Finally, in countries where a large degree of education coverage is provided by private institutions, there may be an increased demand for places in public systems from parents who decide to transfer their children from private to public schools for economic reasons.⁴⁹ This increased demand on the public system could be serious, given that a significant number of private institutions will be forced to close due to the economic crisis.

4. Emergency strategies adopted by countries in the region

Most countries in the region have implemented distance learning strategies to ensure that children and adolescents can continue their learning process (see Table A2, in annex). These strategies range from online education using digital technologies, educational radio and television broadcasts, to delivering study guides and printed materials in combination with the use of mobile phones. By the beginning of May, 18 countries⁵⁰ in the region had set up some kind of digital platform through their ministries of education.⁵¹ In several cases, these platforms include materials for both teachers and students, with curricular content organized according to grade and subject. It should be noted that Uruguay leads the region in online education with the Basic Computer Connectivity for Online Learning (CEIBAL) plan. Created in 2007, the CEIBAL plan guarantees access to computers for all children and adolescents aged between 6 and 15 years, as well as providing digital platforms that cover different areas of the curriculum and which allow teachers to interact with students and monitor learning.⁵²

One limitation of digital platforms is the difficulty of reaching children and adolescents living either in remote areas where connectivity levels are low, or in vulnerable households without electronic devices or internet access. To address this difficulty, some countries such as Cuba, the Dominican Republic, Haiti, Honduras, Panama and Venezuela have implemented alternative strategies using social networks and WhatsApp, as well as radio and television.⁵³ Others, such as Guatemala and Brazil, have combined mass distribution of printed materials with radio and television broadcasting in areas where there is no connectivity. On the other hand, countries such as Peru have gone further and issued tablets with data plans to students in rural areas, so that they can access the digital platforms designed for distance learning. Ecuador, meanwhile, has made agreements with mobile phone operators to send mass text messages containing educational content, and in Colombia operators have agreed not to apply charges for downloading content from the Ministry of Education.

According to data collected by UNICEF from 20 countries in the region,⁵⁴ as of 27 May, 100 percent of these countries have granted students and teachers access to government-supported digital platforms, 85 percent were disseminating educational programmes on television while 70 percent are doing so on radio. Additionally,

⁴⁹ Álvarez, H., G. Elacqua, and C. Méndez. La educación privada en América Latina y el Caribbe en cuidados intensivos (Private education in Latin America and the Caribbean in intensive care). Enfoque Educación (Education Focus Blog), Inter-American Development Bank, 2020.

⁵⁰ Argentina, Brazil, Colombia, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela.

⁵¹ UNICEF. 'Latin America & the Caribbean COVID-19 Education Response [5 May 2020]'. UNICEF LACRO Education Section, 2020.

⁵² Elacqua, G., and N. Schady. La educación ante el COVID-19 en América Latina: Retos y alternativas de política (Education in the face of COVID-19 in Latin America: challenges and policy alternatives). Enfoque Educación (Education Focus Blog), Inter-American Development Bank, 2020.

UNICEF. 'Latin America & the Caribbean COVID-19 Education Response [5 May 2020]'. UNICEF LACRO Education Section, 2020.

⁵⁴ UNICEF. 'Latin America & the Caribbean COVID-19 Education Response [27 May 2020]'. UNICEF LACRO Education Section, 2020.

60 percent have provided educational materials for home study and 60 percent have developed strategies to use mobile technology (WhatsApp, text messaging) or social networks to communicate with students.

Furthermore, some countries have implemented strategies to promote children's and adolescents' emotional well-being aimed directly at teachers or parents and caregivers, in an attempt to prevent and address the possible negative impacts of lockdown and school closures on children's and adolescent's emotional health. In Argentina, Brazil, Chile, Ecuador, El Salvador, Mexico, Panama and Uruguay brochures have been made available to teachers and parents containing recommendations on the support they should provide to children to maintain their emotional stability. Furthermore, web portals have been created in Colombia, Ecuador and Mexico, with advice on recognizing symptoms of depression, compiled recommendations for parents and helplines operated by mental health professionals. Other countries such as Bolivia and Uruguay have also implemented this helplines strategy. Information on children's and adolescent's socioemotional needs has also been disseminated through videos on social networks and via radio and television in countries such as Guatemala and Venezuela (see Table A3, in annex).

As previously explained, one of the consequences of school closures is the loss of access to school feeding programmes. Some countries such as Argentina, Colombia, Costa Rica, Dominican Republic, Uruguay and Venezuela have made efforts to continue school feeding programmes by providing vouchers or food directly to families. ⁵⁵ However, there is no available data on how successful these efforts are in terms of coverage.

Countries in the region have made huge efforts and have implemented multiple strategies to continue with distance learning, and in some cases to guarantee children's and adolescent's physical and emotional well-being. However, these strategies are not reaching everyone equally. Students' educational experiences via distance learning differ widely across and within countries: from online education with access to educational materials aligned with the curriculum and permanent communication between students and teachers, to access to a radio or television programme without interaction with a teacher, to the delivery of study guides via WhatsApp viewed on the screen of their mother's or father's mobile phone. Moreover, a significant number of children and adolescents are not receiving any kind of distance learning modality. According to UNICEF, only 63 percent of countries in the region have alternative education systems to reach the most vulnerable groups. This deficiency in coverage, combined with pre-existing structural barriers (differences in connectivity, access to a home environment for studying, and parental involvement and support, as described in the first part of this document), undoubtedly poses an imminent risk of widening education gaps in the region. It is therefore crucial to take every measure necessary to support the most vulnerable groups during the next stages of confronting and overcoming the current crisis.

5. Strategies for the future: a roadmap for the crisis with a vision for the future

Countries in the region face the challenge of addressing the educational emergency while planning a new normality that is still uncertain. This section presents a roadmap that offers guidelines at the country level. These guidelines are general enough to account for diversity in LAC, yet still factor in the minimum lines of action that must be taken to overcome the emergency and prevent educational gaps from becoming even wider.⁵⁷ The

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ The design of the roadmap was informed by the 'Framework for Reopening Schools' from UNESCO, UNICEF, the World Bank and the World Food Programme (WFP); technical and academic papers (referenced throughout the section); experiences from other countries where reopening processes have already begun; and discussions with other experts and policy makers.

roadmap proposes six lines of action. The first four are designed to focus efforts on ensuring children's and adolescents' learning and well-being: 1) planning for the urgent reopening of schools; 2) developing a strategy to ensure learning for all students; 3) preserving schools' protective role and providing services that have been disrupted; and 4) ensuring the emotional well-being of the educational community (teachers, families and students). Additionally, two crosscutting themes are proposed: funding and coordination between the education sector and other sectors to execute the necessary actions; and managing the current emergency with a long-term vision, in such a way that investments made contribute towards rebuilding an education system that offers learning to all students.

5.1. Planning for the urgent reopening of schools

As more information becomes available on the behaviour of COVID-19 in children and that infection rates are under control, reopening schools is the priority for countries in the region. Evidence suggests that COVID-19 affects children and adolescents substantially less than adults: infection rates are lower, as are severity and fatality rates among those who do contract the virus.^{58 59} One issue on which there is still inconclusive evidence, however, is children's role in transmitting the virus and to what extent opening schools could cause infection rates to spike. Nevertheless, in most countries where schools were reopened 30 days after the peak of infection, no change in the trend of new cases was seen.⁶⁰ This suggests that it may be feasible to reopen schools once the epidemiological curve begins to fall.

Available evidence suggests that it is possible to reopen schools under two conditions: that local transmission rates are low; and that schools can comply with biosecurity protocols to minimize the risk of infection, including physical distancing measures, hand hygiene, use of masks, and monitoring of symptoms.^{61 62 63} This means that the decision on when to reopen schools will depend on the situation in each country. Within each country, meanwhile, the decision will also depend on the local context in terms of the epidemiological conditions and governments' and schools' actual capacities. Given this diversity, it is crucial to articulate the urgency of opening schools and for governments to draw up detailed and rigorous plans for reopening schools as soon as infection rates drop.

Promoting the urgent reopening of schools is important for two main reasons. First, to ensure continuity of learning for all students, particularly the most vulnerable. As described above, not all students have access to the same quality of distance learning measures, and while in the long term connectivity and electronic devices should be universally accessible, this is not possible in the short term. Additionally, even if there is access to some kind of distance learning, students still miss out on the socialization that occurs at school. Recovering this is vital to maintaining children's and adolescents' learning processes and emotional development. Second, schools are not only learning spaces, but also protective spaces. As shown in section three, not only does closing schools impact negatively on learning, but also on several other dimensions of children's and adolescents' development, such as emotional health, physical protection and nutrition. Therefore, reopening schools is also a way to ensure the full development of children and adolescents.

⁵⁸ Götzinger, F., and others. 'COVID-19 in children and adolescents in Europe: a multinational, multicentre cohort study'. The Lancet Child & Adolescent Health, vol. 4, No. 9 (September 2020).

⁵⁹ Stokes, E. K. and others. 'Coronavirus Disease 2019 Case Surveillance – United States, January 22–May 30, 2020'. Morbidity and Mortality Weekly Report, vol. 69, No. 24 (June 2020).

⁶⁰ Crawfurd, L., S. Hares, and A. L. Minardi. 'Back to School: An Update on COVID Cases as Schools Reopen'. Center for Global Development, 12 June 2020.

⁶¹ Couzin-Frankel, J., G. Vogel, and M. Weiland. 'School openings across globe suggest ways to keep coronavirus at bay, despite outbreaks'. Science, 7 July 2020.

⁶² Oster, E. 'Triangulating Evidence on Outbreaks in Kid Settings'. Parent Data, 30 July 2020.

⁶³ CDC. 'Preparing K-12 School Administrators for a Safe Return to School in Fall 2020'. Centers for Disease Control and Prevention, 26 August 2020.

The reopening process requires an emergency plan led by the ministries of education in coordination with other sectors, such as health and telecommunications. The main actions governments should consider during the planning process are described below.

Defining clear guidelines on the requirements that schools must meet for safe reopening

The first priority in reopening schools is protecting the health of those who attend educational institutions (students, teachers and administrative staff). To do so, schools must have biosecurity protocols that minimize the risk of infection. Governments should **draw up clear guidelines on the requirements for the safe reopening of schools, as well as the criteria to be taken into account when deciding whether or not to open a school. These requirements are mainly related to physical distancing, hygiene and health prevention.⁶⁴**

Complying with physical distancing requirements involves regulating the number of students allowed in a single space and the distance between them; avoiding crowding by applying procedures for students to enter and exit (e.g. staggered schedules and restrictions on parents entering schools); as well as measures related to school transportation, sports and recreation activities (e.g. small groups and outdoors), and food.⁶⁵

Measures to ensure physical distancing, in particular reducing the number students who can share a space, involve making decisions about the number of students who can be in schools at any one time. To achieve this, schools should either be opened to certain groups of students (for example, initially opening to those who most need the face-to-face elements that schools can provide); or to all students, with attendance organized into groups who attend different shifts (per day or per week). This decision will depend on each country's specific circumstances and requirements. For example, some countries or cities may decide to open the lower grades first as younger children require the highest level of face-to-face supervision during the learning process. Other countries, meanwhile, may decide to prioritize getting students from higher grades back into school as they may be at greater risk of dropping out. Others may decide to open to all grades and vary instructional hours according to the needs of different groups of students. In any case, this decision must be informed by both academic needs (for face-to-face learning activities) and protective needs (school-provided services necessary for students' development), as well as the health risks posed by opening to various age groups.⁶⁶

Regarding hygiene and health measures, the practices adopted so far, as well as the World Health Organization (WHO) recommendations,⁶⁷ demonstrate that there is a need to maintain minimum hygiene levels. This involves cleaning schools, frequent hand washing, use of masks/face coverings when physical distancing cannot be

⁶⁴ Bos, M. S., L. Minoja, and W. Dalaison. 'Strategies for School Reopenings during Covid-19'. Washington DC: Inter-American Development Bank, 2020.

For examples of these decisions, see the cases of China, Denmark, Norway, Singapore and Taiwan in Melnick, H. and L. Darling-Hammond. Reopening Schools in the Context of COVID-19: Health and Safety Guidelines From Other Countries. Palo Alto, CA: Learning Policy Institute, 2020.

⁶⁶ Regarding countries outside the region that have already opened schools, Canada, Denmark and Norway prioritized reopening pre-primary and primary grades, while China prioritized opening to students who must prepare for secondary education entrance or completion exams. Uruguay prioritized rural schools when the decision was made to reopen schools. This was due to rural areas' low population density and low rates of COVID-19 infection, but also because of the low levels of internet connectivity that prevented students from engaging with distance learning methods.

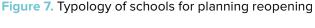
One approach to determining which age groups to prioritize when reopening face-to-face classes is to start with the youngest students, as infection and severity rates are lower among younger children. While this is a valid option, it must be noted that all ages require a degree of face-to-face education to promote continuity of learning and emotional health (for example, interaction with teachers and peers during adolescence plays a crucial role in defining educational trajectories). With this in mind, one option could be to give younger age groups priority in terms of number of face-to-face instructional hours, but with opportunities for all age groups to attend face-to-face classes.

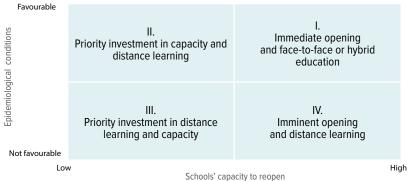
⁶⁷ WHO. 'Considerations for school-related public health measures in the context of COVID-19: Annex to Considerations in adjusting public health and social measures in the context of COVID-19'. World Health Organization, 2020.

observed,⁶⁸ monitoring symptoms in students and school staff, and clear protocols to follow if cases are detected in schools.⁶⁹ Therefore, access to cleaning supplies and water is a necessary condition for reopening.⁷⁰

Carrying out a quick diagnosis on the capacity of safely reopening schools, and design specific plans for continuity of education services according to the specific context

The decision to reopen will depend on the local context across two dimensions: 1) the epidemiological conditions and 2) schools' capacity to comply with biosecurity protocols in terms of infrastructure (capacity of classrooms and other spaces); availability of water, as well hand-hygiene and cleaning products; and transport conditions. There will be variation within the same country or region in the extent to which both of these conditions can be satisfied, so plans for continuity of education services (with or without opening) must be designed according to the specifics of each type of school (see Figure 7).





- **I. Schools for immediate opening:** schools located in areas where it is possible to open from an epidemiological point of view and which also have the capacity to comply with biosecurity protocols. These schools will be able to open immediately and to begin to implement face-to-face or hybrid education actions (complemented by distance learning see section 5.2).
- **II. Schools requiring priority investment in capacity:** schools located in areas where it is epidemiologically feasible to open but which do not yet have the capacity to comply with biosecurity protocols. These schools must be prioritized so that they have the necessary resources to implement the actions required to comply with health safety protocols. These schools will have to continue with distance learning while they implement the necessary actions to comply with regulations.

⁶⁸ WHO does not provide specific guidelines on the use of face coverings in schools and states that this decision depends on how widespread the virus is at the community level and to what extent it is possible to maintain a distance of one metre between people. The guidelines regarding the use of face coverings differs from country to country. While in the United States, the Centers for Disease Control and Prevention (CDC) recommend the use of masks by teachers, administrators, and students (particularly older students), in the United Kingdom, the Department for Education does not recommend the use of masks as long as students and teachers form groups that are kept consistent, with contact between groups minimized.

⁶⁹ It is important to note that there is still only limited evidence available on the effectiveness of temperature checks in managing COVID-19 transmission. In contrast, there is strong evidence that hand washing is an effective measure against transmission of the virus (see Carvalho, S., and others. 'Planning for School Reopening and Recovery After COVID-19: An Evidence Kit for Policymakers'. Washington DC: Center for Global Development, 2020).

⁷⁰ In the context of Latin America, where there are still schools without access to water, an alternative is the use of alcohol-based gels, which have been shown to be effective in preventing the transmission of the virus and are recommended by WHO as an option if access to clean water is limited. This could be a temporary hand-hygiene solution. However, the availability of water is essential for keeping schools clean. Understood in this way, governments must ensure that schools have adequate access to water before reopening.

⁷¹ Water supply, hand washing facilities, infrastructure adaptations to comply with physical distancing, etc. See details of water, sanitation and hygiene requirements in the practical guide for reopening schools developed by the Global Education Cluster, with input from Save the Children and UNESCO, among others.

III. Schools requiring priority investment in distance learning and capacity: these schools are the most urgent for attention, as they will take longer to open and students will therefore miss out on more school time. These are schools located in areas where it is not yet possible to open from an epidemiological point of view and which do not have the capacity to comply with biosecurity protocols. For these schools, efforts must prioritize educational provision and ensure that students receive quality distance learning (discussed in section 5.2), while investing in improving schools' capacity to open when health conditions allow.

IV. Schools for imminent opening: schools that have the capacity to comply with biosecurity protocols but are located in areas where it is not yet epidemiologically feasible to open. These schools will be able to open soon (once health conditions allow) and therefore will offer distance learning for a short time. They will then be able to begin to implement face-to-face or hybrid education actions (with complementary distance learning – see section 5.2).

The configuration of schools according to this typology in each country or municipality will determine the different investment priorities in the short- and medium-term, as well as the routes required to preserve the continuity of education services. For example, in areas with high infection rates and where schools have low capacity to comply with biosecurity protocols (quadrant III), the priority is improving the access to and quality of distance learning provision in the short term; while in areas where infection rates are under control and schools have low capacity (quadrant II) the priority is investing in schools' infrastructure to allow them to open as soon as possible. One input that can be very useful for governments in this diagnostic and planning process are the UNESCO-UNICEF-WFP guidelines that are directed both to ministries of education⁷² and to school administrators and principals.⁷³ These guidelines make it possible to identify needs at the school level to allow for safe reopening and management of schools.

Maintaining channels of communication with parents and teachers, and encouraging them to be involved in the plans for reopening

The issue of reopening schools has caused controversy in several countries, particularly among parents and teachers. While evidence is slowly emerging on how to open safely, there is resistance from some parents to sending their children to school due to fear of infection of the children and the families themselves. Similarly, teachers have expressed concerns regarding their own health in the face of returning to classes on a face-to-face basis, and in some countries, unions have openly expressed their opposition to a return to face-to-face classes.

It is important for the educational community to be involved in planning the reopening in order to manage fear and risk perceptions, as well as to build trust. To do so, spaces must be opened for dialogue with both teachers and parent organizations so that their needs and concerns can be understood, and mechanisms can be built collaboratively to enable the safe reopening of schools. It is especially important to involve trade unions in discussions about reopening, and to reach agreements on the basic conditions for opening (e.g. maintaining the option of working from home for teachers in high-risk categories, ensuring teachers have hygiene and protective equipment, etc.). Simultaneously, it is crucial to maintain dialogue with parents and to win their support, as they will be the ones who will ultimately push for a return to school if they see that schools are serious in their preparations.

⁷² UNESCO-UNICEF-WFP. 'Guidance notes on reopening schools in the context of COVID-19 for ministries of education in Latin America and the Caribbean'. Panama City: United Nations Children's Fund, 2020.

⁷³ Ibid.

The more governments engage in rigorous planning for reopening schools that takes into account the various contingencies that may arise, the more likely teachers and parents are to support returning to the classroom. Governments should provide clear and concise information on plans for reopening at the national and subnational levels; publish the guidelines and protocols they have designed to open schools safely; detail how schools are being prepared for reopening, what to expect from a safe school, and what the criteria will be for both opening and closing schools in the event of a resurgence in Covid-19 cases. To ensure messages reach various audiences, this information should be delivered using diverse media platforms, such as television, radio, text messages and print media. The media has an especially important role to play in showing the damage done to children by school closures, publicizing government plans in clear language, and following up on cases of reopening as they arise.

Ensuring the human expertise necessary for reopening

Education systems face challenges to ensure that they have the teaching staff necessary for reopening schools. On the one hand, there will be a reduction in the number of teachers available for face-to-face instruction given that a significant number of them belong to groups at risk of infection (because they are over 60 years old or because they have underlying health conditions). Simultaneously, some physical distancing measures, such as smaller class sizes or the combination of face-to-face and distance classes, will require additional teachers. Furthermore, not all teachers have the training or resources to implement high-quality distance education strategies.

Efforts should be made to expand the available teaching force via measures such as recruiting temporary teachers or recruiting highly-trained young professionals interested in working in the sector during the emergency (with targeted and expedited recruitment schemes such as Teach for All).⁷⁴ A complementary option that could be considered is paying a temporary bonus to teachers who decide to do face-to-face work (with the understanding that home-based teachers will continue to be paid). On the other hand, given that teachers who are at greater risk of infection will not be able to attend in person for some time but can continue working from home, teachers' work should be reorganized so that those who cannot attend school handle responsibilities aligned to the school needs during this period. These could include monitoring students via telephone or through digital platforms (depending on what technology is available), designing guides and materials that can be used by other teachers, and implementing online teaching activities where infrastructure is available.

5.2. Developing a strategy to ensure all students have access to learning

Each country's decision to reopen will depend on the national and local contexts. There is still uncertainty around when schools will reopen due to the pandemic's development in the region. We can expect, however, that the reopening will be gradual, and that some schools will remain closed for several more months. Additionally, further COVID-19 outbreaks may occur after schools have reopened, forcing authorities to close schools once more. On the other hand, even when students return to face-to-face classes, in many cases they will do so alternately (in groups or in shifts) as schools may not have sufficient capacity to maintain physical distancing if all students attend campus at the same time. Given these constraints, **governments must go beyond the emergency teaching solutions that were implemented at the onset of the pandemic and design a system-**

⁷⁴ In some cases, if there is a significant need for new teachers and national legislation does not permit recruitment beyond the regulated teacher recruitment processes, countries will have to implement emergency ordinances allowing rapid recruitment.

wide strategy to ensure all students have access to a robust, high-quality education. This requires actions along five components: 1) learning recovering; 2) maintaining student retention and connection to school; 3) hybrid learning schemes; 4) teacher training; and 5) support for families. These components are described below.

Preparing plans for learning recovering or remediation

Students will have significant lags or even losses in learning when they return to classrooms, especially those disconnected from school the longest (as described in section 3). Once students return to school, it will be important to **quickly measure students' learning in critical areas such as reading, writing and mathematics.** This will allow the extent of the lag to be identified so that the strategies required to recoup learning can be implemented, with efforts focused on the students with greatest lags. Some schools will have this capacity, but others will need technical support to conduct these assessments promptly and efficiently. Learning assessment institutes in each country can help to design and implement rapid assessments for priority learning areas.

At both the national and sub-national level, governments should **support schools to have remediation plans ready for priority areas at each educational level.** To achieve this, governments should learn from previous experiences of accelerated learning programmes that have been implemented in humanitarian crisis contexts or for over-age learners, and which are based on active learning methodologies, focused on students and on strengthening their self-esteem and motivation for learning. It is therefore more important than ever to implement methodologies focused on teaching according to students' actual learning level. There are various ways to implement such programmes, from personalized or small-group tutorials to the use of specialized software based on active teaching methods, and which provide students with immediate feedback. In some cases these programmes have been developed with the support of community volunteers who received previous training, or even university students, as in Chile's tutoring programme. The remediation model will depend on each country's needs and the technological resources they have available. In any case, these programmes should incorporate activities and materials suitable to students' learning level and should be aligned with learning objectives defined according to the priorities identified.

Ensuring that all students stay in school and remain connected to school

One of the most serious risks facing the school-aged population is not returning to school when face-to-face classes resume. This risk is not only due to the economic downturn and the prolonged school closures, but also fear on the part of parents or children and adolescents themselves around returning to school. There are at least three actions that governments should consider to prevent dropouts and ensure that students continue their education: monitoring students, campaigns to promote returning to school and deepening connections with schools, and eliminating economic barriers.

Ideally, countries should improve their **systems for student monitoring**, so as to be able to better monitor students at the individual level. This will be possible in the 70 percent of education systems in the region

⁷⁵ Longden, K. 'Accelerated Learning Programmes: What can we learn from them about curriculum reform?' Background paper, Education for All Global Monitoring Report 2013/4. UNESCO, 2013.

⁷⁶ Muralidharan, K., A. Singh, and A. Ganimian. 'Disrupting education? Experimental Evidence on Technology-Aided Instruction in India'. American Economic Review, vol. 109, No. 4, 1426–1460 (April 2019).

⁷⁷ Cabezas, V., J. Cuesta, and F. Gallego. 'Effects of Short-Term Tutoring on Cognitive and Non-Cognitive Skills: Evidence from a Randomized Evaluation in Chile'. Working Paper, May 2011.

that have the necessary information management systems to conduct such monitoring.⁷⁸ Where this is not possible, an alternative is to design monitoring schemes with the support of teachers and communities, particularly in rural areas. For example, teachers may report having lost contact with their students during the distance learning period, or families themselves may report cases of children and young people deciding not to remain connected to school. This information must be consolidated at the school or regional level (province, municipality) to take concrete actions to reconnect students with the education system.

Second, when schools reopen and while distance learning schemes are in place during the crisis, it will be essential to carry out **clear campaigns for staying in and returning to school**,⁷⁹ and to ensure that children and adolescents, particularly the most vulnerable, do not get left outside the system. Stay in school campaigns should communicate the importance of continuing learning at home and staying connected to school.⁸⁰ Once schools reopen, campaigns should focus on the importance of returning to face-to-face classes and communicate a reassuring message to families about the safety of returning (see section 5.1). These campaigns could use mass media such as radio and television, as well as text messages sent directly to families. Education ministries and local authorities will play a critical role in providing the support and credibility such campaigns require. Likewise, local-level community organizations, as well as adolescents and young people themselves, can contribute to implementing information and awareness campaigns in their communities.

The third action for promoting returning to school and preventing dropouts is to minimize the costs of attending classes. Here, efforts should be made to **reduce or even eliminate tuition costs for the most vulnerable families** and to provide subsidies for expenses such as uniforms, transportation or schoolbooks. There is evidence which suggests that reducing these barriers can incentivize children and adolescents to return school, as well as prevent future dropouts.⁸¹ Additionally, the cash transfer programmes in place in most countries in the region can help to ensure that children stay in school during the current crisis. Governments should not only continue these programmes, but also consider expanding cash assistance to vulnerable households that were not eligible for such programmes prior to the crisis.

Finally, in countries or cities where a significant number of students are expected to dropout of private schools, governments could consider **issuing vouchers to attend private schools that meet minimum quality standards**. This would not only prevent students from dropping out, but also reduce pressure on the public system and avoid the closure of high-quality private schools and the resulting loss of existing capacity at such a critical time.

Designing hybrid learning schemes that all students can access, taking into account that not all instructional hours will take place in school

The distance learning actions implemented in recent months have been designed as well as possible to deal with the emergency. They were, however, planned as "emergency teaching" interventions to temporarily maintain some continuity in educational provision. In the coming months, countries will move from "emergency" mode to

⁷⁸ Álvarez, H., and others. 'La educación en tiempos de coronavirus: Los sistemas educativos de América Latina y el Caribe ante COVID-19' (Education in the time of Coronavirus: education systems in Latin America and the Caribbean in the face of COVID-19). Discussion Paper, No. IDB-DP-00768. Social Sector – Education Division Inter-American Development Bank, 2020.

⁷⁹ UNICEF. 'Unicef Back-to-School Guide: Evidence-Based Strategies to Resume Education in Emergencies and Post-Crisis Transition'. United Nations Children's Fund, 2013.

⁸⁰ Staying connected to the school will vary somewhat in each context depending on what mechanisms are in place for this. Possible examples include text messages or calls to teachers, or communication through virtual platforms.

⁸¹ Carvalho, S., and others. 'Planning for School Reopening and Recovery After COVID-19: An Evidence Kit for Policymakers'. Washington DC: Center for Global Development, 2020.

a new "normal" mode, where it will be difficult to ensure that all students receive 100 percent of their education in a face-to-face setting. This situation means that it is crucial to develop a strategy with teaching and learning schemes that can be adapted according to various contexts and students' needs, bearing in mind that several schools will be unable to open in the coming months and that, when schools do reopen, not all instructional hours will take place at school.

These schemes require a pedagogical design that combines face-to-face and distance teaching and learning processes, and which makes full use of the technology available in the short term to reach all students. The specific characteristics of these bimodal or hybrid models will depend on the context of each country or region (province, state) and the educational and technological resources available. Here, it is important to clarify that the remote component is not necessarily online learning. Where digital resources are limited (as is the case in much of the region)82 it will be possible to make use of low-tech solutions such as delivering printed materials, combined with content delivered by media such as television or radio, and teacher supervision via telephone. Of course, in the medium term, the ideal is to have digital platforms that allow students and teachers to share content and interact in the same space. However, the reality in the region means that this will not be possible in the short term.⁸³ The short-term goal is to ensure that students receive an "educational package" while schools are closed or partially open. This educational package should guarantee, at a minimum, access to quality content (via digital platforms, television, radio or print); interaction and feedback with the teacher (via digital platforms, social networks, telephone, or face-to-face once schools reopen); and materials (print or digital) with which to carry out the corresponding learning activities. Table A4 (in annex) shows the types of resources and platforms available for the different requirements of this educational package. The design of these packages will allow for various learning paths, depending on the digital conditions achievable in the short term, the availability of content at the regional and local levels, and health conditions at the local level. For example, in areas where it is possible to secure connectivity and devices in the short term, the package will include digital content and platforms – while in remote areas where Internet capacity is low in the short term, the package may include radio and television content, printed guides and telephone communication. When health conditions allow, face-to-face contact will increase and the dependence on distance learning will be reduced. However, it is critical to plan for quality distance learning to deal with the possibility of further delays in school openings or if further closures are required in response to a possible resurgence in cases, as appears to be the case in some instances.

Designing these new hybrid models and consolidating a high-quality distance learning programme that is accessible to all students requires significant technical and human efforts. Therefore, it will be essential to determine which areas of learning to concentrate efforts on during the coming months. This will require strong leadership from ministries of education. Additionally, it is advisable to have a specialized team or taskforce at the ministerial or secretarial level that is dedicated to designing learning paths aligned to the curriculum. This team should be made up of experts in pedagogy and in the use of technology in education. These teams would help with the general design of hybrid teaching schemes; identify existing content and platforms that can be used for each prioritized subject area and grade level according to the curriculum, and that can be incorporated into the defined distance learning modalities; and design guides and protocols for

⁸² Rieble-Aubourg, S., and A. Viteri. 'COVID-19: ¿Estamos preparados para el aprendizaje en línea?' (COVID-19: Are we ready for online learning?). CIMA Note 20, Inter-American Development Bank, 2020.

⁸³ Only Uruguay has robust digital platforms (see Álvarez, H., and others. 'La educación en tiempos de coronavirus: Los sistemas educativos de América Latina y el Caribe ante COVID-19' (Education in the time of Coronavirus: education systems in Latin America and the Caribbean in the face of COVID-19). Discussion Paper, No. IDB-DP-00768. Social Sector – Education Division Inter-American Development Bank, 2020).

implementing these hybrid teaching schemes.⁸⁴ These teams would also help to identify what new educational content or resources are required in the short term.

This model for the new normal requires high-quality educational content that students can access from their homes, as well as distance feedback mechanisms. Therefore, over the following months, a set of high-quality educational resources should be consolidated for the various distance learning modalities, and these resources should correspond to the curriculum for each subject and grade. Existing resources already curated by specialized institutions in the field such as the OECD, UNESCO and the World Bank should be used to achieve this objective. Be Additionally, efforts must be made at the regional level to consolidate the new materials produced by various countries during the pandemic, so as to identify what new content is required and to create mechanisms that promote the creation of new content to be shared among countries in the region which share the same language, thereby allowing for economies of scale. The leadership and participation of the United Nations (UNESCO and UNICEF), as well as organizations such as the IDB and the World Bank, could be decisive in the effort to obtain high-quality resources in a relatively short space of time. To achieve this objective, it will be vital to involve countries in the region that have made significant progress in developing content and pedagogical strategies for the different modalities (as is the case of Uruguay for digital platforms and content, and Mexico for television content) that can be shared with other countries in the region.

Delivering high-quality content is a necessary, although not sufficient, condition for learning. To be effective, a distance or hybrid education model must contain mechanisms that allow for teacher-student interaction. This interaction is crucial to keeping students motivated. It also allows students' learning and well-being to be monitored, as well as offering the possibility of providing the feedback necessary to continue with the learning processes according to students' needs. Therefore, regardless of which distance education modalities are implemented, it is essential to **ensure that all children and adolescents have access to some means of communication with their teachers, whether through digital platforms or mobile phones**. This will be especially important where schools are expected to remain closed for longer periods, as there will be no face-to-face time to conduct this interaction.

Therefore, universal access to electronic devices with Internet access should be a medium-term goal, starting by ensuring the most vulnerable households have access to connectivity. 86 In the short term (the coming weeks), flexible solutions to guarantee a minimum level of interaction with the school must be implemented. These solutions will vary depending on the technological infrastructure available, and should be focused on children and adolescents from low-income households and areas where schools cannot reopen in the coming months. For example, in areas where there is no access to connectivity, it is essential to ensure that students have access to a phone and a basic plan for calling and texting. While in areas with infrastructure for Internet access, access to devices and data plans must be ensured. Wider access to data can be achieved by reducing Internet fees for accessing educational content, distributing cards with data plans or creating public internet "hotspots".87

⁸⁴ Guides and activities with specific learning objectives that students can develop at home, guidance on using distance learning content, and guidance on what activities to prioritize for face-to-face teaching. For example, taking advantage of face-to-face interaction with the teacher, collaborative work, or play and interaction between students.

⁸⁵ Reimers, F., and others. 'Supporting the continuation of teaching and learning during the COVID-19 Pandemic: Annotated resources for online learning'. OECD, 2020, has multiple resources in Spanish and English for different subjects and ages; the list of Education Above All_resources, where you can find resources in Spanish and English for some subjects and ages; the UNESCO repository that includes platforms, applications and some content; and the World Bank's repository of resources and platforms for distance education.

⁸⁶ Lustig, N., and M. Tommasi. 'Covid-19 and social protection of poor and vulnerable groups in Latin America: a conceptual framework'. UNDP Latin America and the Caribbean, COVID-19 Public Policy Document Series, No. 8, 2020.

⁸⁷ Trucano, M. 'How ministries of education work with mobile operators, telecom providers, ISPs and others to increase access to digital resources during COVID19-driven school closures (Coronavirus)'. Education for Global Development, World Bank, 2020.

Finally, it is necessary to **ensure the availability of the texts and educational materials needed to continue the learning process**. This is especially important for younger students, who require writing, colouring and sensory materials. As schools reopen, these materials can be delivered during attendance times. Otherwise, it will be necessary to make plans for sending materials to households, as several countries have done during the emergency. Items such as the Early Childhood Development Kit for Emergencies developed by UNICEF⁸⁸ can be especially useful for pre-school children.

Developing and consolidating teacher training and support programmes

Today, more than ever, we must ensure that countries have a trained and highly motivated teaching force to meet the challenge of supporting students in the midst of this unprecedented crisis. When implementing educational models that ensure learning even at a distance, the **teacher's role must be focused on supporting students and on pedagogical practices that foster autonomy, motivation and the ability to learn how to learn**. This requires trained teachers to implement active, student-centred practices that prioritize inquiry, applying knowledge, and connecting what is learned to students' daily life, rather than memorizing content. Furthermore, teachers must possess the technological skills to implement educational models designed for bimodal or hybrid education.

Given the current limitations in teacher training, ^{89 90} a training and support plan for teachers must be developed that equips them with the technological and pedagogical skills required to implement the strategies (distance or hybrid) that will be implemented over the coming months. To do this, countries can adapt and promote existing online training programmes⁹¹ and continuing education programmes with mentoring or coaching schemes⁹² and pedagogically trained tutors, who can quickly help to implement training processes for hybrid or distance education. In addition, to equip teachers in a flexible way over the coming months, they should be offered clear guidance (through written or video guides) with examples and activities they can easily use with their students according to the topic and grade, that use the content being delivered in different modalities, and which help to motivate students to learn and work autonomously.

As with content creation, this is an opportunity to unite efforts at the regional level and **develop a large regional teacher training platform** with online courses, demonstrations of guides, plans for hybrid education in various topic areas, and spaces for collaboration between teachers, schools and education authorities. This platform could be promoted by cooperating agencies with relevant experience and interest in the region, such as the Development Bank of Latin America (CAF), the Organization of Ibero-American States (OEI) and the Inter-American Development Bank (IDB). In addition to helping to address the current crisis, this platform would establish capacity to contribute to teacher training in the region in the medium term.

It is important to bear in mind that to be effective, teacher training requires an investment of teachers' time. In this time of crisis, extra time is scarcer than ever, and teachers may be resistant to devoting additional hours to

⁸⁸ UNICEF. 'Aprendizaje a través del juego: reforzar el aprendizaje a través del juego en los programas de educación en la primera infancia' (Learning through play: strengthening learning through play in early years educational programmes). New York: United Nations Children's Fund, 2018.

⁸⁹ Rieble-Aubourg, S., and A. Viteri. 'COVID-19: ¿Estamos preparados para el aprendizaje en línea?' (COVID-19: Are we ready for online learning?). CIMA Note 20, Inter-American Development Bank, 2020.

⁹⁰ Elacqua, G., and others. 'Profesión: profesor en América Latina ¿Por qué se perdió el prestigio docente y cómo recuperarlo?' (Profesion: teacher in Latin America – why did teachers' prestige disappear and how do we get it back?). Washington DC: Inter-American Development Bank, 2018.

⁹¹ Latin American Faculty of Social Sciences (FLACSO). 'Políticas exitosas de desarrollo profesional docente en América Latina y el Caribe 2005-2016' (Successful policies for teachers' professional development in Latin America and the Caribbean 2005–2016). Caracas: CAF Development Bank of Latin America, 2019.

⁹² For example: Colombia (Programa Todos a Aprender), Ecuador (Programa de Acompañamiento Pedagógico en Territorio), and Peru (Acompañamiento Pedagógico Multigrado, and Soporte Pedagógico).

continued training. To avoid resistance, it is important to maintain an ongoing dialogue with teachers and offer monetary incentives for investing their time in training (for example, some form of recognition or certificate that they can use later on in their teaching career).

Strengthening family guidance strategies to support home learning

While schools remain closed and during the process of reopening with hybrid education schemes, students will require close support at home from their caregivers. This is especially important in younger children, who do not yet have the skills to work autonomously, and who require play-based and interactive activities to learn.93 For older children and adolescents, the goal is not for parents to replace the teacher, but to create an enabling environment for learning. This involves providing physical space, materials and time (for example, establishing routines, protecting study time and not exceeding the time allotted for household chores, particularly for girls), and ensuring they can access content and communicate with the school in the defined distance mode. Governments must create or strengthen guidance and support programmes for parents, and align them with the educational strategy to be developed in the coming months. This could include, for example, providing specific guides by age group for support at home for certain priority areas; establishing helplines where parents can resolve their doubts about carrying out work at home; and offering concrete guidance on parental practices (through SMS, radio and television programmes, print media) to enable parents to support their children in academic activities and promote emotional well-being (for the latter, see section 5.4). To do this, countries can use existing resources that have been consolidated by organizations such as UNESCO,94 as well as resources that have been created in the region during these past months and that can be adapted according to country needs (see Table A3, in annex).

This is particularly important for parents with primary school children, so communication strategies should be designed to be easy to understand, with information and activities that can be implemented at home, and which can be disseminated through different media, such as television, radio, text messages or print media.

5.3. Maintaining the protective role of the school, particularly for those most vulnerable

The school provides services that go beyond learning and that help to protect and promote child and adolescent development. Efforts should be maintained and strengthened to continue essential services and programmes, particularly for those most vulnerable. First, **schools must retain programmes that provide food**, which is to be consumed in schools, following the necessary hygiene precautions. In addition, given that students will not necessarily attend every day when schools reopen, it is important to ensure that vulnerable children are provided with basic food on the days that they do not go to school, through the direct delivery of food baskets to households, or food vouchers in urban areas. To achieve this, as mentioned below, coordination with the social protection sector is of the utmost importance.

Second, every effort should be made to **maintain the protective services offered by the school in terms of detecting and preventing child neglect or abuse.** Continuous contact with students while schools are closed is essential to achieving this goal. To do this, both teachers and welfare teams can actively help by making check-up calls and sounding the necessary alarms to the relevant child protection institutions. In addition,

⁹³ UNICEF. 'Learning through play: Strengthening learning through play in early childhood education programmes'. New York: United Nations Children's Fund, 2018.

⁹⁴ UNESCO. Responding to COVID-19: Education in Latin America and the Caribbean: Thematic resources.

helplines can be set up so that families, the community, or children and adolescents themselves, can ask for help or report if, for example, very young children are left at home alone.

Third, as more sectors of the economy have opened up and adults go out to work, children and adolescents have less supervision and support during the hours when they were normally at school, which can increase risky behaviours such as pregnancy or substance use. Schools should **continue health promotion and prevention programmes**, such as sex education and substance abuse prevention, and find ways to deliver them at a distance. In many cases, schools have had to suspend these programmes because of the emergency. However, as school closures persist, it is important to ensure continuity, particularly for those who will not have the option of physically attending school in the coming months.

5.4. Ensuring the emotional well-being of the educational community

We are facing a crisis that will have adverse effects on the emotional health of adults, as well as children and adolescents. Ensuring the emotional well-being of children and adolescents requires a comprehensive approach that considers parents and teachers' mental health. It is a priority to support families and schools to identify and prevent mental health problems, and to promote a safe and caring environment. Parents should be guided with self-care strategies and concrete tools, so that they, in turn, can offer emotional support to their children and detect potential warning signs of mental health issues that require specialized care. In particular, families should be guided to establish routines and structures that, in some way, maintain the dynamic of socialization and positive family environment, and to manage feelings of fear and anxiety caused by the pandemic. This can be achieved by providing guides and printed or digital materials, delivering short messages with clear guidelines for action, and establishing helplines.

The current crisis is hugely different from any other emergency, and there is likely to be an atypical level of stress and anxiety upon returning to school. Both teachers and students have faced adverse situations that will make returning to "normality" difficult. While it is desirable to have health workers support in adapting socioemotional development strategies, screening for mental health problems and providing specialized care where needed, not all schools have the resources to do so. Therefore, ministries of education, with the support of the health authorities, should offer schools guidelines on emotional management upon return, outline strategies for emotional containment at the collective level, and enable the education community to discuss what has happened and have basic tools in place for emotional well-being. In addition, schools should be supported to ensure they have strategies that can be incorporated into the curriculum, with specific activities that promote the development of socioemotional skills and contribute to the emotional well-being of children and adolescents.⁹⁸ For this, teacher training will be essential (see section 5.2).

Finally, it is important to ensure the emotional well-being of teachers so that they, in turn, can support students. Teachers should therefore be offered socioemotional support and it should be ensured that they have emotional

⁹⁵ United Nations. 'COVID-19 and the Need for Action on Mental Health'. Policy Brief New York: United Nations, 2020.

⁹⁶ Galea, S., R.M. Merchant, and N. Lurie. 'The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention'. JAMA Internal Medicine, vol 180, No. 6 (April 2020): Dalton, L., E. Rapa, and A. Stein. 'Protecting the psychological health of children through effective communication about COVID-19'. The Lancet Child & Adolescent Health, vol. 4, No. 5, 346–347 (May 2020).

⁹⁷ See Table A3 for examples of the socioemotional support strategies for families implemented by some LAC countries during the emergency. Several international organizations have also made practical resources available for teachers and caregivers, so that they can support the emotional well-being of children and adolescents in the midst of the crisis. For example, the Inter-agency Network for Education in Emergencies (INEE) and UNESCO.

⁹⁸ World Bank. 'The COVID-19 Pandemic: Shocks to Education and Policy Responses'. Washington, DC: World Bank, 2020.

coping mechanisms and tools to promote their mental health. To do this, it is important to seek out mechanisms that help to strengthen support networks among the teachers themselves, and to ensure that they have access to specialized care if they need it.

5.5. Financing and coordination

Implementing the necessary actions to safely reopen schools, and to recover and strengthen the educational trajectories of children and young people in the region, will require additional resources to those foreseen for the education sector before the pandemic. The economic crisis, added to the demand for resources from other sectors such as health and social protection, may jeopardize the availability of resources needed to implement recovery plans. Therefore, budgets for education at all levels should be protected to the maximum extent possible, and it should be ensured that **budget size is maintained or even increased in absolute terms. Otherwise, the human development of an entire generation will be compromised.** This requires a commitment to children and adolescents at the country level, and strong national leadership from governments, especially ministries and secretaries of education, to identify the investment needs and the medium- and long-term costs of not implementing the actions required.⁹⁹

The solutions needed to escape the emergency and ensure the well-being and learning of all students are complex and require interventions in different dimensions (mental health, protection, food security, safe water and sanitation, telecommunications, and of course, education). In addition to economic resources, technical knowledge and coordination between sectors are required to reach coordinated and effective solutions. Governments should consider at least two concrete actions to maximize technical and financial resources, and to ensure a certain level of coordination. First, **form national and local intersectoral working groups on education during the COVID-19 emergency**. These working groups should be spaces to plan, coordinate and monitor the strategies required to comprehensively maintain the continuity of education for all students. As a minimum, they should include the health, telecommunications, child protection and social protection sectors, and of course, the education sector. They could also benefit from the technical secretariat of an organization with cross-sectoral technical capacity, such as the United Nations Development Programme (UNDP). Having these sectors in the same working group will also be an opportunity to redirect budgets and allocate them in a coordinated manner to the actions required. Additionally, these intersectoral working groups may have technical committees for specific topics, such as emotional well-being and mental health.

The second action to broaden the governments' capacity is to create partnerships with civil society organizations, promote private sector participation, and harness know-how and existing capacity. This is especially important for content creation, and in the design of pedagogical strategies and socioemotional support strategies, where different organizations have extensive experience. For example, partnerships may be considered with non-governmental organizations (NGOs), universities or high-quality private schools that have a curriculum developed for distance or hybrid education and can share or help to adapt content and methodologies to scale up in other schools, or that can contribute to teacher training. Partnerships can also be sought with organizations working in education that can help to build the capacity of trained and motivated human talent. For example, organizations such as Teach for All (present in 11 countries in the region) or high-quality universities can provide professionals or senior students, who are highly motivated and trained to support several of the tasks that will be required (tutoring, designing and adapting content, etc.). Finally, partnerships with telecommunications companies, and radio and television networks can help to increase access to content

⁹⁹ Modelling the budgetary impact of the actions required to overcome the region's education emergency is beyond the scope of this work. However, governments should collect the information required to estimate the resources needed to adapt schools and supplies to comply with the health safety requirements, hire additional teachers, expand connectivity, print and distribute materials, etc.

in different media. In any case, it is important that these partnerships are formed in an organized manner, to avoid duplicating efforts and so that they meet current needs.

Seeking partnerships can be a great opportunity to promote cooperation between LAC countries, especially between those that share a common language. International cooperation agencies such as UNDP, IDB, OEI and the World Bank, and international organizations such as Reduca or Summa, can play an especially important role in promoting and supporting regional initiatives. For example, as previously mentioned, the development of regional hubs or centres can be promoted. These would integrate high-quality materials and content that have already been tested, jointly develop new content, or promote the creation of content that can be used by different countries, depending on their predominant language. These regional centres could also be used for teacher training and to form teacher and school leader collaborative networks.

5.6. Managing the emergency with a view to the long term: rebuilding an effective education system for all

The challenges imposed by the current crisis have shown that we need to think differently moving forward, and build a better system than the previous one. This is now truer than ever for LAC. Prior to COVID-19, the region was already in the midst of a learning crisis and deeply unequal child and adolescent development opportunities. Governments are faced with the challenge of taking this crisis as an opportunity to transform a fractured education system, and to make a leap towards improving the quality of learning for all students. Governments must work to overcome this emergency with a view to the long term: to move towards a system that ensures learning for all students, regardless of their place of birth or residence. This involves planning and investing in at least three core elements: 1) closing the digital divide; 2) consolidating an educational model focused on student learning and that uses technology and teachers' time effectively; and 3) consolidating a high-quality body of teaching staff.

Universal internet access is needed to implement pedagogical innovations that use technology and therefore make quality education accessible to all. Furthermore, this will certainly not be the last emergency in the region, and countries will have to prepare themselves to ensure continuity in student learning in case they are forced to close schools again. It is an investment that will take time to implement, especially to reach the areas furthest from the urban centres, but it cannot be delayed. Therefore, a priority for the region in the coming years is to plan to ensure universal internet coverage and the availability of electronic devices that provide access to digital platforms and content. This will need extensive investment in infrastructure and devices, which in turn requires the promotion of cooperation between ministries of education and heads of information and communication technologies, as well as partnerships with telecommunications service operators.

Consolidating a student-centred teaching model requires **future investment in technology to be planned with** a view to the long term, considering how the school will use digital platforms and content in an integrated manner for effective learning. For example, investing in the development and adaptation of platforms and programmes that facilitate the constant monitoring of student learning and that use artificial intelligence to provide teachers with timely and accurate information on their students' achievements and difficulties in learning, so that they can offer more personalized pedagogical strategies, in line with student needs.¹⁰⁰ Plans should also be made to adopt digital adaptive learning tools to teach basic skills, such as math or reading, and

to deliver content, pedagogical activities and feedback according to students' learning levels,¹⁰¹ and which can later be integrated into projects, with the support of teachers. Moreover, any investment must prioritize digital platforms that enable communication and interaction with teachers and among students, the exchange of materials, and the monitoring and evaluation of students.

Technology has great potential for the advancement of high-quality education. However, it is not a substitute for teachers. The constant interaction between students and their teachers is fundamental for learning development, particularly for highly complex and non-cognitive skills such as self-regulation, empathy and independence. This is an opportunity to consider what kind of teacher is needed by education systems in LAC and, more so, what kind of training teachers require to be able to take up the challenge of training well-rounded students with the skills required to reach their full potential. The region is facing a challenge that will take years to overcome, and that is enhancing the professional skills of teachers. While this issue will not be resolved in the next two years, countries in region can still make strategic investments in the short term to strengthen initial and in-service teacher training programmes.

6. Conclusions

We are experiencing a crisis that is unprecedented in recent human history. The COVID19 pandemic has forced governments to take drastic measures that seek to contain infection rates and protect the lives of millions of people. While these measures were necessary in the short term to address the health emergency, it is important to restore the long-term vision with regard to the costs measures may carry for future generations. The closure of schools, combined with the lockdown and economic crisis, will have a negative impact on the current and future development of children, and may further widen the gaps that existed before the pandemic. This pandemic hit LAC at a time of crisis in learning and unequal development opportunities for children and adolescents. While governments have made efforts to sustain student learning and ensure their well-being, strategies have not reached students equally, in part due to pre-existing inequities in accessing resources, such as internet connection, device availability and enabling environments for growth and learning.

In the midst of the crisis, uncertainty, and fear generated by the reopening of sectors, it is important to focus the discussion on the present and future well-being of children and adolescents, and to do everything possible to ensure that they continue their cognitive and emotional development process. This involves focusing efforts on the most vulnerable and planning to gradually reopen schools as soon as the health emergency allows. While schools are closed, and once the reopening process begins, the emotional well-being of students must be ensured and learning processes must continue. This requires strong leadership from the ministries of education and a national commitment to protect and secure the resources needed to protect the human capital of an entire generation.

The pandemic revealed profound inequalities in human development opportunities in LAC. The crisis poses great challenges for education systems in the region. At the same time, it provides an opportunity to rethink the meaning of school, the fundamental role played by teachers, the use of technology to foster learning, and to build a solid system that drives the quality of education for all children and adolescents in the region.

¹⁰¹ For example: Mindspark (see details in Muralidharan, K., A. Singh, and A. Ganimian. 'Disrupting education? Experimental Evidence on Technology-Aided Instruction in India'. American Economic Review, vol. 109, No. 4, 1426–1460, April 2019).

Annex

Table A1. Number of students affected, by education level

Country		Primary	Secondary	Total	Decision	Date of closure	Duration of national clo- sure (days)
Anguilla	N/A	N/A	N/A	N/A	Not closed	N/A	N/A
Antigua and Barbuda	2,050	10,123	7,856	20,029	National closure	19 March	135
Argentina	1,694,680	4,753,843	4,612,663	11,061,186	National closure	15 March	139
Bahamas	3,594	29,504	26,884	59,982	National closure	16 March	138
Barbados	5,320	20,218	19,571	45,109	National closure	19 March	135
Belize	7,349	50,764	40,353	98,466	National closure	18 March	136
Bolivia	353,898	1,379,099	1,233,738	2,966,735	National closure	12 March	142
Brazil	5,101,935	16,106,812	23,118,179	44,326,926	National closure	17 March	137
British Virgin Islands	767	3,334	2,255	6,356	National closure	17 March	137
Chile	616,615	1,514,761	1,520,724	3,652,100	National closure	13 March	141
Colombia	1,309,386	4,303,833	4,821,029	10,434,248	National closure	15 March	139
Costa Rica	14,344	483,770	476,668	974,782	National closure	17 March	137
Cuba	370,468	741,269	795,057	1,906,794	National closure	23 March	131
Dominica	1,668	7,323	5,561	14,552	National closure	23 March	131
Dominican Republic	299,149	1,226,414	924,714	2,450,277	National closure	17 March	137
Ecuador	638,551	1,932,261	1,891,648	4,462,460	National closure until 15 July – targeted reopening	16 March	121 (138)
El Salvador	230,010	662,740	521,576	1,414,326	National closure	11 March	143
Guatemala	603,637	2,362,116	1,227,191	4,192,944	National closure	16 March	138
Grenada	3,698	13,195	9,135	26,028	National closure	15 March	139
Haiti	N/A	N/A	N/A	2,210,221	National closure	20 March	134
Guyana	27,872	94,488	85,934	208,294	National closure	16 March	138
Honduras	245,010	1,123,945	655,090	2,024,045	National closure	12 March	142
Jamaica	103,220	248,836	200,563	552,619	National closure	13 March	141
Mexico	4,942,523	14,182,288	14,034,552	33,159,363	National closure	20 March	134
Montserrat	85	460	317	862	N/A	N/A	N/A
Nicaragua	N/A	N/A	N/A	N/A	Not closed	N/A	N/A
Panama	95,481	418,852	322,913	837,246	National closure	11 March	143
Paraguay	181,007	727,363	611,308	1,519,678	National closure – Government announced closure until the end of the school year	10 March	144
Peru	1,642,768	3,592,865	2,779,973	8,015,606	National closure	12 March	142
Saint Kitts and Nevis	1,275	5,452	4,175	10,902	National closure	27 March	127
Saint Lucia	3,259	15,874	11,792	30,925	National closure	16 March	138
Saint Vincent and the Grenadines	N/A	N/A	N/A	25,520	Targeted closure	20 March	134
Suriname	18,150	67,690	58,408	144,248	National closure until 31 May – target- ed from then on	16 March	138
Trinidad and Tobago	29,585	131,350	105,381	266,316	National closure	16 March	138

Turks and Caicos Islands	1,077	3,680	2,316	7,073	National closure	19 March	135
Uruguay	N/A	N/A	N/A	956,304	National closure until 22 April, then targeted closure until 29 June when there was a general reopening	16 March	37 (105 until all schools reopened)
Venezuela	1,190,349	3,285,299	2,391,174	6,866,822	National closure	13 March	141
Latin America and the Caribbean	19,738,780	59,499,821	62,518,698	144,949,344			

^{*}Cut-off date: 1 August 2020.

Source: World Bank, UNESCO, Center for Global Development, UNICEF LACRO (Latin American And Caribbean Region Office) Education Section and the Presidency of Uruguay.

Table A2. Interventions in Latin American and Caribbean countries to implement distance education

			Media		 Parental			
Country		Online	Radio	TV	guide	Parental guide details	Tools for teachers	
Antigua and Barbuda	Implementation of online courses for secondary education, and creation of an online blog for each primary school.	Yes	Yes	Yes	Yes	Articles on supporting students with distance education		
Aruba	The Ministry of Education set up online platforms.	Yes	No	No	No			
Argentina (television)	Educational programmes are available on public television and radio. These are also delivered via online platforms and teacher training.	Yes	Yes	Yes	No		Online platforms for teachers to learn about how virtual class-rooms work, among others.	
<u>Bahamas</u>	The Ministry of Education launched live online primary and secondary schools.	Yes	Yes	Yes	Yes	Guides for online learning and the Ministry of Education's online portal.	Online resources for teachers from preschool through to eighth grade.	
<u>Barbados</u>	Implementation of distance learning through Google Classroom.	Yes	No	No	No		Online platform with videos for some subjects, such as health and mathematics, among others.	
<u>Belize</u>	Implementation of home learning programmes through online tools and teacher training programmes.	Yes	No	No	Yes	Information published in the Ministry of Education.	Provision of reading or online materials for teachers to enable the continuity of the learning process.	
Bolivia	Implementation of online platforms.	Yes	No	No	Yes	Handbook available for students, parents and teachers.	Teacher training through a partnership with Microsoft Bolivia.	
<u>Brazil</u>	Most states have used television channels and online tools to disseminate class content. The material has also been printed for households without internet access.	Yes	No	Yes	Yes	Guides focused on family learning and online training courses for home study support.	Free online courses to support the learning process for distance students.	
<u>Chile</u>	Online learning platforms.	Yes	No	No	Yes	Online resources for parents and students.	Platforms that facilitate training for teachers in the use of online distance education tools.	
<u>Colombia</u>	Digital learning strategies through online, television and radio programmes. For students without internet access, a home learning kit has been prepared. Resources have also been created to engage families in home learning.	Yes	Yes	Yes	Yes	Resources to engage families in home learning.		
<u>Costa Rica</u>	Online platform and televised support for organizing online learning.	Yes	Yes	Yes	Yes	Online materials or television broadcasts, including resources for working with students with disabilities.	One-week online tools training programme.	
Cuba	Distance learning through television and an online platform.	Yes	No	Yes	N/A		Individual and small-groups teacher training.	
Dominica	Online distance education and through printed materials for students without internet access.	Yes	No	No	N/A			

Dominican Republic	Online learning through online platforms, radio and television. Installation of over 1,000 internet access stations.	Yes	Yes	Yes	Yes	YouTube guides for parents on distance learning.	
<u>Ecuador</u>	Online platform to disseminate materials for students.	Yes	No	No	Yes	Resources for parents available online.	Online resources focused on supporting the learning process.
El Salvador	Online platform and television broad- casts, as well as a call centre, accessible by phone and mail, to provide support on accessing education activities.	Yes	No	Yes	Yes	Resources available online and a call centre to support parents.	Material to guide parents and students in the learning process.
<u>Guatemala</u>	Courses broadcast on television and radio every day.	No	Yes	Yes	Yes	Parent guides to online home schooling.	Platforms and libraries are available with resources for teacher training.
Grenada	Online distance learning.	Yes	No	No	N/A		
Guyana	Dissemination of educational content through television, radio and online platforms.	Yes	Yes	Yes	Yes	Resources for parents available online.	Advice on the learning process for teachers.
Haiti	Design of online platforms.	Yes	No	Yes	N/A	UNICEF has created videos for parents on how to deal with the current crisis.	The National Early Childhood Commission has supported teachers through WhatsApp and online media.
<u>Honduras</u>	Students receive their classes through a television signal.	Yes	No	Yes	No		
British Virgin Islands	Implementation of teaching through digital media. The Ministry of Education has focused on providing technological resources to households that lack these resources.	Yes	No	No	No		
Cayman Islands	Implementation of techniques and tools to ensure that the students' learning process continues.	Yes	No	No	Yes	Instructions for parents to achieve a distraction-free environment to sustain learning.	
Turks and Ca- icos Islands	Organization of online education by education centres.	Yes	No	No	No		
Jamaica	Distance education through online platforms, radio, television and printed materials.	Yes	Yes	Yes	Yes	Materials to maintain the organization and continuation of the learning process.	
<u>Mexico</u>	Dissemination of content through online platforms and television. Digital training courses for teachers.	Yes	No	Yes	No		Access to a space with reading materials and videos on various topics for teacher training.
<u>Panama</u>	Dissemination of content through radio, television and digital platforms.	Yes	Yes	Yes	Yes	Online guides to home schooling.	Training to manage the online classroom.
<u>Paraguay</u>	Online platform	Yes	No	Yes	No		
<u>Peru</u>	School materials available online and on television.	Yes	No	Yes	Yes	Constant online publications on home schooling.	
Saint Kitts and Nevis	Teacher training and distance educa- tion programmes through television and Internet.	Yes	No	Yes	Yes	Encouraging students to do their schoolwork.	
Saint Lucia	The Ministry of Education enabled online learning.	Yes	No	No	No		
Suriname	Distance education published daily.	Yes	No	Yes	N/A		
Trinidad and Tobago	The Ministry of Education has created an online learning portal and provided computers to students without access to them.	Yes	No	No	No		
Uruguay	Online platform available.	Yes	No	No	No		Platform for teachers to share positive experiences of training on using the tools.

Source: Created based on data collected by UNICEF, each country's Ministry of Education, the Center for Global Development and the websites cited in the table.

Table A3. Government interventions for child and youth mental health support

Country	Aimed at	Intervention
<u>Argentina</u>	General	Guide with recommendations for mental health professionals to provide assistance through the telephone and online.
Bahamas	Children	Access to counselling through the Virtual Learning platform.
Barbados	Children	UNICEF office discussions on psychosocial support for children.
<u>Belize</u>	Teachers	First Aid for Feelings workbook to help children alleviate stress and anxiety and to provide tools to keep in control during isolation.
Bolivia	General	Information helpline on mental health issues. However, this is not therapy. It is focused on children and people acting as caregivers in the pandemic.
Brazil	Parents and caregivers	Booklet with recommendations on emotionally supporting children during the pandemic.
Chile	<u>Teachers</u>	Learning and advice guides for teachers to support students with specific needs and in situations of emotional exhaustion and stress.
Cilie	Parents and caregivers	Guidelines for creating study routines, setting an example of self-care and positive language at home.
Colombia	Parents, caregivers and children	Portal with a collection of documents on caring for the socioemotional stability of children based on studies from various sources, such as universities and UNICEF, etc. It also has violence and telemedicine helplines.
Cuba	Teachers and parents	Partnership between the UNICEF office and UNESCO to disseminate material on psychosocial support during epidemics.
Ecuador	General	Portal with instructions for <u>detecting symptoms of mental</u> health problems, self-care <u>recommendations</u> , and a free <u>helpline</u> for psychological and emotional support. Content has also been broadcast on television to promote mental health at home.
	Parents	Guidelines on providing emotional support to students (UNICEF).
El Salvador	Students	Identification of good socioemotional practices to implement the emergency support tools. Production and dissemination of these materials. This was carried out with the support of UNICEF.
Guatemala	Students, teachers and parents	Psychosocial and emotional support through different media such as videos and readers. The material includes tips for mediation and to resolve family conflicts.
	Students and parents	Blog with posts by education experts on psychosocial support (UNICEF).
Honduras	Students	Support the provision of psychosocial support (UNICEF).
Jamaica	Students	Health care centre and hospital helplines.
Mexico	General and children	Portal with information on mental health risks in the current context and helplines. There are child-care helplines focused on training for parents and caregivers and other helplines to provide direct support for children.
Mexico	Parents and young people	Communication of material on socioemotional work at home. Work has also been done with education communities on mental health and psychosocial support (UNICEF).
Nicaragua	Students	Partnership between the Ministry of Education and UNICEF to provide socioemotional support to students.
Panama	Parents	Guide on routines, habits and emotional management (UNICEF).
Uruguay	General	Free helpline provided by mental health and psychology professionals.
Uruguay	<u>Parents</u>	Psycho-emotional support guide and organization of webinars with specialists to provide support to parents.
Venezuela	General	Dissemination of a campaign through television, radio and social networks, focusing on emotional well-being and maintaining emotional balance.
Tenezacia	Caregivers and children	Information on mental health and psychosocial support (UNICEF) and workshops.

Sources: Ministries of Education, Ministries of Health and UNICEF Country Office & Government COVID-19 Education Actions.

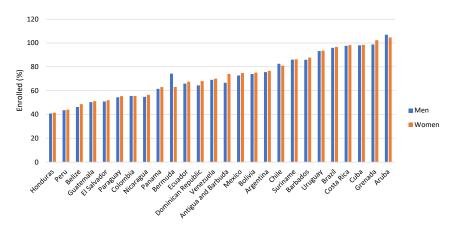
Table A4. Types of resources and platforms for distance learning, by use and required technology

			Use			
	Content	Guidance for use/ application of content	Monitoring and feedback on learning	Interaction with the teacher	Interaction with classmates/ group work	Minimum technology required
Resources and platforms						
Printed books/stories	✓					Daniel
Readers/workbooks/guides	✓	✓				Papel
Text messages or calls				✓		Basic mobile phone
Audiobooks	✓					MP3/mobile phone
Video classes/educational programmes/ documentaries	✓					TV or DVD player
WhatsApp/social networks				✓	✓	Mahila ahaaaiii
Communication platforms (e.g. Zoom, Google Hangouts)				✓	✓	Mobile phone with data access
Digital books/stories	✓		√*			Mobile phone
Games/apps	✓		√*			with internet connection
Complete courses with content, sequences, exercises, etc. (e.g. <u>Kolibri</u>)	✓	✓	✓			or tablet with uploaded content
Complete courses with content, sequences, exercises, etc. (e.g. <u>Khan Academy</u>)	✓	✓	✓			Tablet, computer with internet
Virtual classrooms (with teacher) e.g. Google Classroom, Moodle, Schoology	√**	√ **	/**	✓	✓	connection

^{*}Possible if there is internet connection

See resource repositories and platforms available at: UNESCO, OECD, World Bank, Education Above All, and Enseña por México.

Figure A1. Pre-primary enrolment

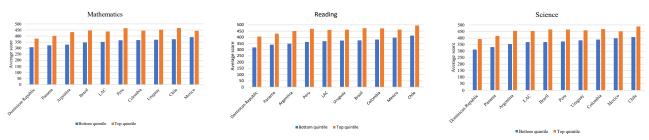


Note: The data were taken from the latest year with available information. For Nicaragua: 2010; Colombia: 2011; Aruba: 2014; Bermuda: 2015; Paraguay: 2016; Argentina, Brazil, Chile, Honduras, Mexico, Panama, Suriname, Venezuela and Uruguay: 2017; Antigua, Barbados, Barbuda, Belize, Bolivia, Costa Rica, Cuba, Ecuador, El Salvador, Dominican Republic, Grenada, Guatemala and Peru: 2018. By pre-primary, UIS refers to initial organized educational programmes that are designed to introduce children over 3 years old to the school environment.

Source: UNESCO Institute of Statistics (UIS).

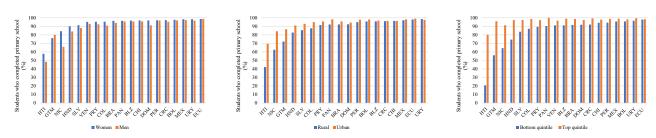
^{**}Requires involvement of teacher to include content, student guidance, and monitoring and feedback of learning.

Figure A2. Programme for International Student Assessment (PISA) 2018 test results by quintiles of socioeconomic level



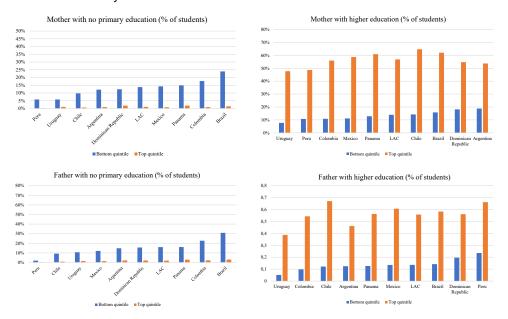
Note: Quintiles are based on an index which measures the possession of assets in students' households. These assets include electronic goods and the number of rooms in the house, among other things. Only countries in Latin America are taken into consideration when calculating the quintile to which each household belongs.

Figure A3. Primary school completion by gender, area and socio-economic level in 2018



Note: Due to a lack of data, the data reported are from 2017 for Chile and Haiti, 2016 for Belize, 2015 for Guatemala, and 2014 for Nicaragua and Venezuela. Source: Education-UNESCO Institute of Statistics.

Figure A4. Parental education by socio-economic level of household



Note: Quintiles are based on an index which measures the possession of assets in students' households. These assets include electronic goods and the number of rooms in the house, among other things. Only countries in LAC are taken into consideration when calculating the quintile to which each household belongs.



Challenges Posed by the COVID-19 Pandemic in the Health of Women, Children, and Adolescents in Latin America and the Caribbean

By Arachu Castro

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Abstract

The COVID-19 pandemic has unexpectedly transformed the access and the organization of health services for an indeterminate time, circumventing the efforts made in recent years to improve women, children, and adolescent health indicators in Latin America and the Caribbean. In most countries, the segmentation of health services, the concentration of human resources and medical technology in some urban hospitals, the under-financing of primary health care and epidemiological surveillance, and the lack of coordination between the different levels of care weaken the coordination of national response actions. Maintaining essential health services for women, children, and adolescents while mitigating the pandemic's impact represents an unprecedented challenge. This report presents estimates of the effects of the reduction of health services coverage on achieving or maintaining the 2030 Agenda for Sustainable Development's Goal 3 targets – reducing maternal, neonatal, and under-5 mortality and guaranteeing universal access to sexual and reproductive health services. The pandemic and its response make it challenging to reach or sustain these targets, even though the region was well on track to achieve them. Urgent priorities oriented towards achieving women, children, and adolescent health equity during and after the pandemic require to 1) increase public spending on health and social policies to control the pandemic and to favor social and economic reactivation and reconstruction, 2) restore and rebuild essential health services, and 3) strengthen the primary health care strategy.

The need to prioritize health care for women, children, and adolescents during the COVID-19 pandemic

Following the World Health Organization (WHO)'s declaration on March 11, 2020 that the COVID-19 disease was a pandemic (and the first caused by a coronavirus), the authorities of several Latin American and Caribbean countries decreed a state of alarm to reduce the transmission of the virus. This situation, predicted by some epidemiological projections, but for which there were no contingency plans, has great repercussions on the survival of the populations most underserved, particularly in urban slums and rural areas of a region characterized by social inequality and health inequities (1, 2). As of September 1, 2020, more than 7.8 million people in Latin America and the Caribbean have been diagnosed with COVID-19 (3) and around 300,000 have died, 40% of them in Brazil (3, 4). As of that same date, the estimated proportion of people who have lost their lives to COVID-19 per 100,000 inhabitants in the region is highest in Peru (117), Ecuador (102), Chile (59), Brazil (58), Mexico (51), Panama (47), Bolivia (44), Colombia (39), Argentina (20), Honduras (19), Guatemala (16), and the Dominican Republic (17) (4, 5).

In addition to the thousands of deaths from COVID-19 and the suffering caused in the region, comparing the deaths reported from any cause with those expected in the same period in previous years can more accurately indicate the impact of the pandemic on mortality (6). For some weeks, excess deaths have been estimated at 185% in Peru, 219% in Mexico, and 242% in Ecuador (7). These excess deaths are due both to COVID-19 and indirect causes produced by the decrease in the provision of health services and the decrease in the use of these services. It is estimated that the indirect effect of the pandemic on services and on the health of women, children, and adolescents is extremely high (8, 9), even greater than that of direct deaths from COVID-19 (10).

On the one hand, the increase in the number of people with symptoms seeking care collapses health facilities, particularly if they require critical care. Intensive care beds have been insufficient in countries such as Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, or Peru (4). In some countries, hospitals have been designated to exclusively care for people with COVID-19, the provision of prevention and health promotion services and clinical care (including essential services) have been interrupted, and a portion of the health personnel has been relocated to the most overloaded hospitals, which has depleted other facilities of personnel and supplies (11). On the other hand, confinement measures and curfews, the closure of schools, the limitation of public transport, or the population's fear of acquiring COVID-19 in health facilities hinder or postpone the search for care, even for health emergencies or for chronic conditions that require periodic care (12, 13).

Overcrowding for long periods of time in homes in areas neglected by public services, in addition to increasing the risk of exposure to the virus, leads to an increase in domestic violence against children, adolescents, and women (11, 14-17), pregnancies resulting from rape – which by definition are unintended – and other causes of toxic stress (9). In these same underserved areas, the economic poverty that characterizes them increases due to the decrease in job opportunities and the consequent difficulty in buying food as well as the suspension of school feeding programs (12), which can cause an increase in malnutrition. These situations affect indigenous (18, 19) and Afrodescendant populations to a greater extent due to their many deprivations and to the racism, discrimination, and violence they receive both in the community and in health care facilities (20).

This confluence of complex situations limits coverage, accessibility, and health care for women, children, and adolescents and leads to an increase in morbidity and mortality from various causes and not just from COVID-19. In addition to contributing to increasing poverty for a large portion of the population and social inequality in Latin America and the Caribbean, the pandemic's impact is reversing achievements made in the last two decades, reflected by social and health indicators (1).

Challenges for health systems and for access to health care for women, children, and adolescents

In Latin America and the Caribbean, governments have allocated resources to strengthen the capacity of the health sector to face the pandemic (21), but the response is insufficient in a large portion of the region's countries due to the pre-existing weaknesses of health systems (22). In most countries, segmentation between public services, social security services, and private medicine, the concentration of human resources and medical technology in some urban hospitals (23), the under-financing of primary health care (PHC) and epidemiological surveillance, and the lack of articulation between the different levels of care weaken the coordinated actions of the national response (1). It is a pressing challenge.

Maintaining essential health services for the care of women, children, and adolescents while mitigating the impact of the pandemic represents an unprecedented challenge – or "two great challenges in parallel" (24) – particularly in the countries where health care coverage is not universal. The pre-pandemic situation is reflected in the reproductive, maternal, neonatal, and child health coverage index (RMNCH) developed by the WHO and collaborators (25, 26). It consists of the weighted average of eight indicators intrinsic to PHC: women between the ages of 15 and 49 with demand for contraception satisfied with modern methods; four or more prenatal care visits; skilled assistance during delivery; children 12 to 23 months who have received the tuberculosis vaccine (BCG); three or more doses of the diphtheria, tetanus, and pertussis vaccine (DPT3); and the measles vaccine; children under 5 years of age with diarrhea who received oral rehydration salts; and children under 5 years of age with symptoms of pneumonia treated by a health professional (27).

The association between the RMNCH index and health outcomes is evident in Latin America and the Caribbean. The higher the RMNCH coverage index, the lower the maternal mortality ratio (maternal deaths per 100,000 live births) (see Figure 1) and the under-five mortality rate (per 1,000 live births) (see Figure 2). The correlation coefficient that measures the linear relationship between the RMNCH index and maternal mortality (R2 = 0.6741) and between the RMNCH index and the under-five mortality (R2 = 0.7023) indicates that around 70% of the variance between countries in the maternal mortality ratio and in the under-five mortality rate is explained by the RMNCH coverage index. It would be expected that the countries that are in the quadrants closest to the lower right corner are the ones that can best cope with the pandemic's consequences on the health of women, children, and adolescents—both by having better coverage of RMNCH services and by having a lower maternal and under-five mortality.

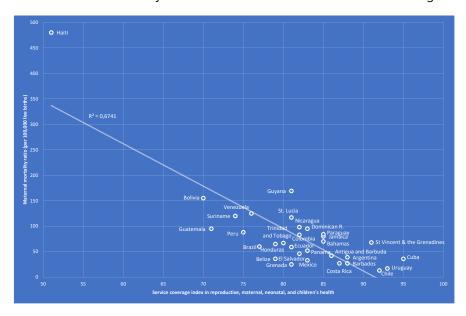


Figure 1. Decrease in the maternal mortality ratio with the increase in the RMNCH coverage index

Source: Prepared by the author based on State of the World's Children 2019 (New York: UNICEF, 2019) (28) and Primary health care on the road to universal health coverage: 2019 monitoring report (WHO: Geneva, 2019) (27).

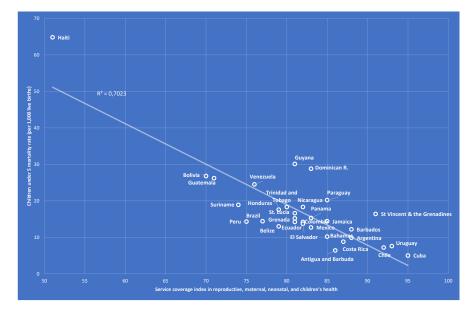


Figure 2. Decrease in the under-five mortality rate with the increase in the RMNCH coverage index

Source: Prepared by the author based on State of the World's Children 2019 (New York: UNICEF, 2019) (28) and Primary health care on the road to universal health coverage: 2019 monitoring report (WHO: Geneva, 2019) (27).

The priority that each country sets on its public health systems, indicated by public spending, explains another part of each country's preparedness and contingency planning to face the pandemic. In 2014, the Directing Council of the Pan American Health Organization (PAHO) set a goal of 6% of gross domestic product (GDP) for public spending on health, and PAHO suggests that 30% of this budget be allocated to primary health care (29). Of the seven countries with the highest RMNCH index (Cuba, Uruguay, Chile, Saint Vincent and

the Grenadines, Argentina, Barbados, and Costa Rica), five dedicate the highest percentage of GDP to public spending on health: Cuba (10.9%), Uruguay (6.5%), Costa Rica (5.6%), Argentina (5.6%), and Chile (5.0%); the other countries in the region spend less than 5.0%, with the exception of Nicaragua (5.4%) (30).

In Latin America and the Caribbean, there is great variability between countries both in the response of health systems at the beginning of the pandemic and in the decrease in the demand for health services due to confinement measures, limitation in transportation, or fear of infection. Beginning in March 2020, UNICEF conducted a monthly survey with experts from its offices around the world to obtain information on the maintenance of health services and nutrition programs that have the greatest impact on child and maternal health (12). In the region, 23 countries reported information, presented in the Annex. This same Annex shows information from the Economic Commission for Latin America and the Caribbean (ECLAC) and the Food and Agriculture Organization of the United Nations (FAO) on the maintenance of school feeding programs, in-kind food vouchers, and cash transfers (31); information from PAHO on the maintenance of vaccination services (32); and results of a survey conducted by the author between April and May 2020 with key informants from different countries (13).

- » Each country's decisions to maintain or suspend the services that are reflected in the Annex were taken mainly as contingency plans at the time of the declaration of the pandemic, regardless of the number of COVID-19 cases diagnosed at that time:
- » The countries that have maintained access to all health services are Cuba, Costa Rica, and Uruguay. These three countries have a public health system characterized by a high level of coordination and based on a PHC that is equitable, with high resolution capacity, and articulated with the hospital network (33, 34); modeling and epidemiological surveillance are another characteristic of the response in Cuba (35).
- » The least affected services are emergency obstetric care (to attend childbirths, abortions, and other complications). They have been maintained in Anguilla, Antigua and Barbuda, Barbados, Belize, Brazil, British Virgin Islands, Dominica, Grenada, Guyana, Dominican Republic, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Venezuela, while in Bolivia and Ecuador they have decreased by less than 10%.
- » Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, wellness checks for children, clinical care for gender-based violence victims, sexual and reproductive health (including contraception), treatment for infectious and chronic diseases, and nutrition programs have been suspended or limited to a greater or lesser extent in most countries. For example, vaccination programs have been partially suspended in Argentina, Bolivia, Brazil, the Dominican Republic, Ecuador, Haiti, Honduras, Paraguay, Peru, and Saint Lucia, while they have been maintained, in addition to Cuba, Costa Rica, and Uruguay, in the Bahamas, Barbados, Belize, Colombia, Dominica, Grenada, Guatemala, the British Virgin Islands, Mexico, Nicaragua, Panama, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, and Venezuela.
- » Several of the programs to combat hunger, such as cash transfers, in-kind food vouchers, and school feeding programs have been expanded and even new measures have been introduced in Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Ecuador, Haiti, Honduras, Jamaica, Panama, Paraguay, and Venezuela (31).

In addition to the response capacity and the equity of health systems and other public policies, the variability of the crisis caused by the pandemic depends on the social determination and the social determinants of health that characterize each country, such as the health and nutrition status of the population, their demographic and socioeconomic composition, as well as their degree of access or exclusion to services (2, 20). The evidence from the influenza pandemics of 1918 and 2009 and that of COVID-19 shows the contribution of the social determination and the social determinants in the incidence of cases and in mortality, which is higher

in population groups with lower socioeconomic position – among whom there is a concentration of non-communicable chronic diseases (such as hypertension, diabetes, and obesity) (36) – and in disempowered and underserved ethnic population groups (37, 38). This situation contributes to the increase in health inequity, in a region that before the pandemic was already characterized by great inequities in women, children, and adolescent's health (39).

The pandemic and Goal 3 of the 2030 Agenda 2030 for Sustainable Development

"Ensure healthy lives and promote well-being for all at all ages" is Goal 3 of the 2030 Agenda for Sustainable Development (40). Among its goals, it includes: "By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births" (Target 3.1); "By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births" (Target 3.2); and "By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health in national strategies and programmes" (Target 3.7). The pandemic and its response are making hindering the achievement or the maintenance of these targets, even though the region was well on track to achieve them (23, 41).

In Latin America and the Caribbean, Goal 3 affects millions of people. The United Nations projects 10.5 million newborns per year, with 16% being born from adolescent mothers (5) (see Table 1). Taking into account that 46% of pregnancies in the region end in abortion (42), the total annual pregnancies would be 19.5 million. By age group, there are 51.7 million boys and girls under 5 years old, 52.2 million between 5 and 9 years old, 52.4 million between 10 and 14 years old, and 53.5 million between 15 and 19 years old (5).

Table 1. Projection of the population size of children and adolescents, the number of annual births, and the concentration of births among adolescents, Latin America and the Caribbean, 2020

	Population 0-4 years	Population 5-9 years	Population 10-14 years	Population 15-19 years	Births per year	Births among adolescents
Latin America and the Caribbean	51,689,827	52,197,418	52,365,020	53,546,187	10,549,227	16.0%
South America	32,233,520	32,490,325	32,794,212	33,944,268	6,569,234	16.3%
Argentina	3,736,651	3,709,817	3,597,262	3,539,449	755,237	14.4%
Bolivia	1,185,499	1,179,088	1,161,012	1,136,684	246,637	14.4%
Brazil	14,475,093	14,601,817	14,942,442	16,218,004	2,934,460	16.6%
Chile	1,162,223	1,265,856	1,249,637	1,244,242	231,145	11.3%
Colombia	3,710,699	3,703,456	3,873,485	4,246,391	739,473	18.8%
Ecuador	1,667,087	1,610,643	1,555,045	1,560,940	336,114	17.9%
French Guiana	35,621	30,500	28,955	28,598	7,154	10.9%
Guyana	73,864	73,764	70,499	74,852	15,592	18.6%
Paraguay	701,092	682,819	676,926	659,352	143,157	16.2%
Peru	2,833,265	2,612,135	2,696,055	2,438,549	574,091	12.9%
Suriname	52,186	52,645	51,594	50,637	10,694	14.0%
Uruguay	236,656	236,414	233,314	245,615	47,931	15.1%
Venezuela	2,363.409	2.731.190	2.657.796	2.500.772	527.519	20.6%
Mexico and Central America	16.051.060	16.193.104	16.068.389	16.147.597	3.263.318	15.5%
Belize	39.446	38.660	37.997	39.853	7.922	16.9%

Costa Rica	348.002	357.596	355,406	363,431	70,147	14.2%
El Salvador	576,216	570,607	577,896	587,927	117,747	18.5%
Guatemala	2,065,382	1,982,085	1,926,021	1,945,584	423,040	15.5%
Honduras	1,017,017	988,975	1,023,648	1,040,990	207,332	17.8%
Mexico	10,958,742	11,210,511	11,140,870	11,209,593	2,224,071	14.9%
Nicaragua	656,942	660,204	637,140	603,021	134,045	18.6%
Panama	389,313	384,466	369,411	357,198	79,013	17.8%
Caribbean	3,405,247	3,513,989	3,502,419	3,454,322	716,675	14.5%
Antigua and Barbuda	7,355	7,228	6,814	7,053	1,480	10.5%
Aruba	6,080	5,677	6,800	7,210	1,230	6.7%
Bahamas	27,064	26,590	31,293	32,502	5,386	9.1%
Barbados	15,120	15,498	17,547	18,965	3,062	10.1%
Cuba	571,283	628,093	603,903	642,829	115,717	14.7%
Curação	8,996	10,335	10,497	11,077	1,755	8.4%
Grenada	9,012	9,119	8,623	7,514	1,843	6.4%
Guadeloupe	22,897	22,097	28,714	29,799	4,691	4.8%
Haiti	1,262,943	1,237,836	1,202,069	1,144,460	271,066	10.7%
US Virgin Islands	5,970	6,898	7,242	6,776	1,232	7.8%
Jamaica	30,823	233,966	226,882	239,718	47,487	13.9%
Martinique	18,353	17,600	22,799	24,323	3,734	3.4%
Puerto Rico	84,291	156,033	210,323	184,343	23,026	12.6%
Dominican Republic	1,002,829	996,519	977,245	958,630	207,971	21.5%
Saint Lucia	10,826	10,986	11,152	13,183	2,196	13.4%
Saint Vincent and the Grenadines	7,706	8,241	8,355	9,073	1,578	14.1%
Trinidad and Tobago	88,366	96,085	96,320	89,490	18,148	7.2%

Source: World Population Prospects 2019 (New York: United Nations, 2019) (5).

Note: The number of births is equivalent to the number of pregnancies carried to term, but not to the total number of pregnancies.

Two estimates made at the beginning of the pandemic have found alarming results. The first, conducted with data from all low- and middle-income countries in the world, including 34 countries and territories in Latin America and the Caribbean, estimated that a 10% reduction in essential maternal and child health services as a consequence of the pandemic could cause 28,000 maternal deaths and 168,000 neonatal deaths additional per year (9). The second study is conducted with data from 118 countries, including 23 from Latin America and the Caribbean, and the Lives Saved Tool (LiST) (8). The study estimated that a sustained reduction over six months of between 9.8% and 18.5% in the coverage of maternal and child health services and an increase in acute malnutrition of 10% as a consequence of the pandemic could cause 12,200 maternal deaths and 253,500 deaths in children under 5 years in the world in addition to those estimated before the pandemic (8). These figures could rise to 56,700 and 1,157,000 additional deaths, respectively, if during those six months there is a decrease in coverage of between 39.3% and 51.9% and an increase in acute malnutrition of 50% (8). These data more than justify the need to strengthen maternal and child health services instead of suspending or limiting them.

The LiST methodology assumes two major factors that affect the coverage of services: the provision of health services (determined by the availability of human resources in health and by the availability of supplies and medical equipment) and the utilization of health services (determined by the demand for services and by access to services), in addition to considering access to food (8). The data disaggregated by country from the LiST study (43) include the projection of maternal and under-five mortality and the use of services under three

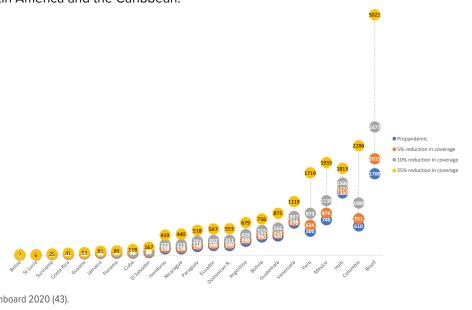
scenarios: reduction of the coverage of maternal and child care by 5%, 10%, and 25%, due to a decrease in both the provision and the demand for services.

Comparing these projections with the 2019 data on maternal and child health from UNICEF (28) allows to estimate the impact of the pandemic on the fulfillment of some of the Goal 3 targets in 23 countries in Latin America and the Caribbean. Although the data are not disaggregated by socioeconomic position or ethnic group, we should expect that the effect of the reduction in coverage will be greater among the most underserved populations. The analysis may be updated when homogeneous data are obtained for the entire region, which is ongoing within the framework of the ISLAC Project (44).

Target 3.1: Reduce maternal mortality to less than 70 deaths per 100,000 live births

In the 23 countries of Latin America and the Caribbean included in the LiST study, the excess maternal deaths during a year as a result of the response to the pandemic would be 1,210 with a 5% reduction in coverage, 2,430 with a 15% reduction, and 7,981 with a 25% reduction (43). Figure 3 shows the estimate of the number of excess maternal deaths in one year for each range of reduction of coverage by country.

Figure 3. Estimate of the number of excess deaths due to maternal causes for each range of reduction of coverage (5%, 10% or 25%) during one year due to the effect of the response to the pandemic in selected countries in Latin America and the Caribbean.



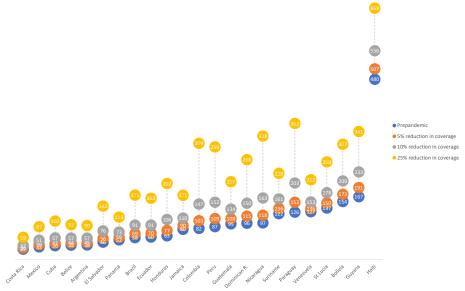
Source: LiST Data Dashboard 2020 (43).

For example, if before the pandemic 1,700 women died per year in Brazil due to maternal causes, a reduction of 5% of coverage would increase that figure to 2,015 a year, a reduction of 10% would increase it to 2,677 deaths, and a reduction of 25% would increase it to 5,021 deaths. To these maternal deaths caused by the reduction in services we should add those that may result from the risk caused by COVID-19 during pregnancy, as it is beginning to be found in Brazil (45).

To contextualize these figures based on the number of births, Figure 4 shows the estimated increase in the annual maternal mortality ratio with the reduction of services. According to these estimates, of the 10 countries that have already met Target 3.1 (Costa Rica, Mexico, Cuba, Belize, Argentina, El Salvador, Panama, Brazil, Ecuador, and Honduras), Honduras would stop meeting it with a 5% reduction in services, El Salvador, Panama,

Brazil, and Ecuador, as well as Honduras, would no longer meet it with a 10% reduction, and only Costa Rica would continue to meet the target with a 25% reduction. In the case of Cuba, where services have been maintained, there would be no such impact. The 13 countries that had not met the target before the pandemic (Jamaica, Colombia, Peru, Guatemala, the Dominican Republic, Nicaragua, Suriname, Paraguay, Venezuela, Saint Lucia, Bolivia, Guyana, and Haiti) would have an alarming increase that would distance them from the achievements made in the last 10 or 20 years (46).

Figure 4. Estimate of the annual increase in the maternal mortality ratio (deaths per 100,000 live births) if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% during a year in selected countries in Latin America and the Caribbean



Source: Prepared by the author based on LiST Data Dashboard 2020 (43), State of the World's Children 2019 (New York: UNICEF, 2019) (28), and World Population Prospects 2019 (New York: United Nations, 2019) (5).

Target 3.2: Reduce neonatal mortality to less tan 12 per 1,000 live births and under-5 mortality to less than 25 per 1,000 live births

The neonatal mortality rate is associated with maternal mortality (39). In Latin America and the Caribbean, for every maternal death there are, on average, 12.2 neonatal deaths (28). In the region, complications related to preterm birth are the leading cause of neonatal deaths, followed by congenital anomalies, complications during delivery, and septicemia (39). For this reason, prenatal care for pregnant women and skilled birth attendance are essential interventions to reduce neonatal deaths (39). Promoting and supporting breastfeeding also helps to reduce child morbidity and mortality. It is worrisome that, during the pandemic, violations of the International Code of Marketing of Breastmilk Substitutes have been reported in Argentina, Belize, El Salvador, Ecuador, Guatemala, and Mexico (see Annex) —an inappropriate practice that runs counter to the improvement of infant nutrition. Situations of confusion have also arisen in health facilities where, due to unawareness of the WHO recommendations on the importance of continuing to promote and support breastfeeding during the pandemic, medical personnel have promoted, without clinical reasons, the separation between mother and newborn as well as feeding with substitutes rather than promoting attachment and breastfeeding (47, 48).

In children under 5, approximately 85% of deaths in the region occur before reaching one year of age (39). Living conditions during the first 5 years, such as those associated with acute malnutrition and lack of access to health services to prevent or treat preventable diseases, contribute to increased mortality during childhood (39). Despite the expected increase in acute malnutrition, care seeking may decline, in some cases, by fear of infection, as has been documented in Haiti, where admissions to treat acute malnutrition in children have decreased by 73% since the start of the pandemic, according to UNICEF data (49).

During the pandemic, increased food insecurity can lead to malnutrition in pregnant women, micronutrient deficiencies during pregnancy, intrauterine growth retardation, small for gestational age, acute and chronic malnutrition, and other forms of malnutrition during childhood, which in turn increase the risk of death from infectious diseases (50-52). Malnutrition can also lead to early childhood development delay (53-55), which can lead to impaired language, cognitive and socio-emotional skills, as well as to increased risk of chronic diseases throughout the life course (56, 57).

Other interventions that contribute to reducing the under-5 mortality rate are the expanded programs on immunization (EPIs). In Latin America and the Caribbean, this coverage decreased by 12% between 2010 and 2019, particularly in the diphtheria, tetanus, and pertussis (DPT) vaccine (58). The third dose of DPT has decreased in the region from 88% in 2010 to 81% in 2019, with the most marked decreases in Brazil (from 99% to 73%), Bolivia (from 91% to 75%), Haiti (from 67% to 51%), and Venezuela (from 78% to 64%), while in Suriname it has decreased 17 percentage points, in the Bahamas and Mexico 13 points, and in Honduras 10 points (58). On the other hand, 542,000 children in Brazil and 348,000 in Mexico did not receive any dose of DPT in 2019 (58).

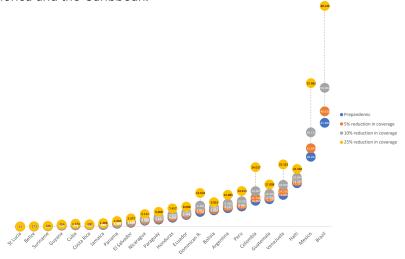
During the pandemic, the population's fear of being exposed to COVID-19 and the difficulties caused by the limitation in public transport and by the confinement and physical distance policies (58) have been reflected in a decrease in the demand for vaccination services in half of the 38 countries in the region that reported information to PAHO in June 2020 (59). On the other hand, at least 18 countries have reported difficulties in obtaining vaccines and supplies such as syringes, mainly due to limitations in international and national transportation and to the closure of borders (59).

In 23 countries that provided information, the decrease in the number of doses administered between the first trimester of 2019 and the first trimester of 2020 is 5.5% for the first dose of DPT, 6.4% for the third dose of DPT, and 4.0% for the first dose of measles, mumps, and rubella (MMR) (59). Immunization campaigns against measles have been postponed in at least Bolivia, Colombia, Honduras, the Dominican Republic, and Paraguay, and partially suspended in Brazil, Chile, and Mexico (59). Other countries that have partially suspended some EPIs are Argentina, Ecuador, Haiti, Peru, and Saint Lucia (32). In June, outbreaks of vaccine-preventable diseases had been detected in Argentina, Brazil, Guatemala, Haiti, Mexico, and Venezuela (59).

Even a partial suspension of the EPIs during the pandemic can have serious consequences for recovering coverage, particularly in countries where they were already in decline. According to the disaggregated data from the LiST study (43), even with a 5% reduction over a year of maternal and child health services in Latin America and the Caribbean, between 15 and 18 percentage points of health coverage would be lost for the measles vaccine and between 10 and 18 percentage points for polio. In the case of measles, which is highly communicable, lack of vaccination can lead to outbreaks that endanger children, particularly if they are malnourished (60).

One of the two indicators to measure compliance with Target 3.2 is the under-5 mortality rate. In the 23 Latin American and Caribbean countries included in the LiST study, excess deaths in children under 5 years of age would be 17,153 with a 5% reduction in coverage during one year, 33,074 with a 15% reduction, and 105,181 with a 25% reduction (43). Figure 5 shows the number of additional under-5 deaths per country under the three scenarios of reduction of maternal and child health services coverage during one year of 5%, 10%, and 25%, and the increase in acute malnutrition of 10%, 20%, and 50%, respectively.

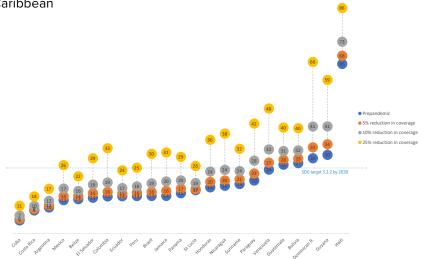
Figure 5. Estimate of the number of excess deaths in children under 5 years of age for each range of reduction in coverage (5%, 10% or 25%) during one year due to the effect of the response to the pandemic in selected countries in Latin America and the Caribbean.



Source: LiST Data Dashboard 2020 (43).

Figure 6 shows the increase in the under-5 mortality rate during one year under the same scenarios. Of the 18 countries studied that have already met Target 3.2 (Cuba, Costa Rica, Argentina, Mexico, Belize, Ecuador, El Salvador, Colombia, Peru, Brazil, Jamaica, Panama, Saint Lucia, Honduras, Nicaragua, Suriname, Paraguay, and Venezuela), all but Venezuela could maintain the target with reductions of up to 5% in coverage, and Paraguay, in addition to Venezuela, would not maintain it with reductions of up to 10%. With reductions of 25%, only Cuba, Costa Rica, Argentina, Belize, Ecuador, and Peru would maintain the target. The five countries that have not met it (Guatemala, Bolivia, the Dominican Republic, Guyana, and Haiti) would have an alarming increase that would distance them from the achievements made in the last 10 or 20 years (46), in addition to causing a large number of preventable deaths.

Figure 6. Estimate of the increase in the under-five mortality rate (deaths per 1,000 live births) if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% during a year in selected countries in Latin America and the Caribbean



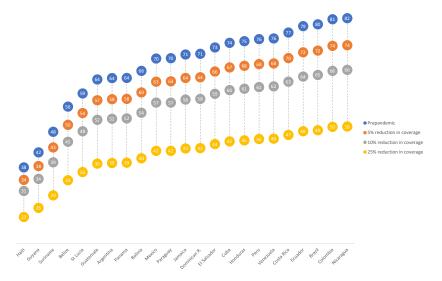
Source: Prepared by the author based on LiST Data Dashboard 2020 (43), State of the World's Children 2019 (New York: UNICEF, 2019) (28), and World Population Prospects 2019 (New York: United Nations, 2019) (5).

Target 3.7: Ensure universal access to sexual and reproductive health care services

Sexual and reproductive health services vary in the content of the services they offer, but at the very least they provide counseling and provision of contraceptive methods. In Latin America and the Caribbean, 79% of women who want to avoid becoming pregnant use modern contraceptive methods, yet the region has the highest unintended pregnancy rate in the world, estimated at 69% of all pregnancies (61). Another characteristic of the region is that it has the highest concentration of adolescent pregnancies in the world, with an average of 16% of the total (see Table 1) (5). Although adolescent pregnancy is a complex social phenomenon that results from many factors, one of them is the lack of information or access to contraceptive methods (39).

Using the disaggregated data from the LiST study (43), Figure 7 shows the decrease in the annual prevalence of the use of contraceptive methods with reductions during one year in the care coverage by 5%, 10% and 25%. With a 5% reduction in coverage, the prevalence of contraceptive use would decrease by between 4 and 8 percentage points, and by between 7 and 16 with a coverage reduction of 10%.

Figure 7. Decrease in the annual prevalence of contraception if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% in selected countries in Latin America and the Caribbean



Source: Prepared by the author based on Roberton et al. 2020 (62).

Urgent priorities oriented towards women, children, and adolescent health equity during and after the pandemic

1. Increase public spending on health and social policies to control the pandemic and to favor social and economic reactivation and reconstruction

The COVID-19 pandemic undeniably exposes the limitations of Latin American and Caribbean health systems, the strengthening of which cannot continue to wait or depend exclusively on the budgets allocated during the pandemic. The political instability that preceded the outbreak of the pandemic in countries in which the population demanded more redistributive and fair social policies, together with the devastating impact of the pandemic, create the ideal conditions for governments to justify spending 6% of the GDP in health (29) and to fund other social policies, imminently (63, 64) – such as cash transfers (1) and other forms of responses to

hunger (31, 49) – despite the economic contraction that results from the pandemic (23, 65). Doing otherwise would not only set back hard-won health and social gains but would exacerbate the current crisis and prevent countries from being prepared for the next pandemic or humanitarian crisis.

In this necessary readjustment of social policies, it is essential to include institutional and democratic mechanisms of public spending transparency and accountability (11). Information campaigns and public policies must be transparent and adapted to different living conditions, and in particular to those of the populations that survive with greater deprivations in both urban and rural areas. To achieve greater adaptation, it is essential to include the participation of people who live in these communities and of community organizations that have a track record and credibility in those areas, since they know better the needs of the population and their ability to accept measures that will require a temporary or medium-term adaptation to new forms of social organization. Given the advancement of the pandemic, it is essential that populations who live in urban slums and indigenous and Afrodescendant communities take part in the development of public policies that are equitable, that promote transmission prevention, and that facilitate the isolation of symptomatic people and the treatment of those who develop complications without instances of discrimination occurring (2).

It is essential that public policies are established with a gender perspective, since the deprivations and needs of women, particularly if they are in charge of children, the elderly, or people with disabilities, or if they suffer violence by their partners, require a particular prioritization. The transformation of systems of caregiving for school-age children due to the closure of schools translates into a greater burden of responsibility for the people who care for them, who in most Latin American and Caribbean countries tend to be their mothers – many of whom are adolescents. The responsibility of caring for family members can delay seeking care when the person in charge develops symptoms of COVID-19 or other health conditions. For this reason, public policies and community action must be proactive in finding women who feel unable to leave their homes to seek care, as well as older people who live alone, which can be even more difficult in contexts of high citizen insecurity (2).

2. Restore and rebuild essential health services

The response to the pandemic in many countries of the region has led to the suspension or limitation of reproductive, maternal, neonatal, and child health services that need to be restored as soon as possible (66–69) to avoid greater morbidity and mortality.

The mechanisms that are drawn up to care for people with COVID-19 must include transfer plans to health facilities equipped with the sufficient technological density required to attend to serious cases. In rural areas, this will require investments in ambulances or in the provision of alternative modes of transportation that allow the safe transfer of patients to hospitals with intensive care units. It would be counterproductive to expect people living in urban slums and rural areas to find on their own – as has often been expected of them in so many places in the region – their way of getting to a hospital, to be admitted, and to receive the timely and quality care that they need. Here the question arises as to which hospitals should these people be directed: to the closest public or private hospital with available beds or to the one that is preassigned according to their rights or type of insurance? Due to the segmentation of health systems in many Latin American and Caribbean countries, the ministries of health must strengthen their leadership and conduct concerted and comprehensive actions, even if that requires to intervene all health sectors. This includes having trained and in training medical and nursing personnel, having an inventory of all health facilities, and access to hospital beds in intensive care units, whether public or private. The lower the current segmentation, the lesser the challenge and the faster the response (2).

These new plans to respond to the pandemic must be leveraged to serve people in the same communities who require health care that cannot be postponed, such as sexual and reproductive health care (including contraception, pregnancy, childbirth, and abortion), newborn care, immunization programs, care for infectious diseases, delivering medications for chronic and mental illnesses, emergency surgeries, care for victims of

violence and accidents, programs for the protection and promotion of breastfeeding, and nutrition programs, among other actions.

Table 2 offers a list of resources with recommendations for the continuation and reestablishment of health services for women, children, and adolescents with an equity, gender, and multicultural perspective.

3. Strengthen the primary health care strategy

It is essential to strengthen the PHC strategy —with a family and community approach that is organized to achieve universal health access, so that it can respond to the greatest number of health situations, including emergencies— investing 30% of public spending on health on PHC (29). In addition to helping to improve the coverage of services, a solid and quality PHC protects the population from catastrophic health expenditures (11). Strong PHC systems can solve, in close proximity to the population, most of their health conditions, as well as develop health promotion and disease prevention measures, in coordination with specialized health services through reference and counter-reference health systems. The reproductive, maternal, neonatal, and child health coverage index (25–27) is closely linked to the strength of PHC and is associated with better maternal, child, and adolescent health indicators. Countries in the region that have had the capacity to respond to the challenges posed by the pandemic, without suspending their health services and nutrition programs and to transform their organization to further facilitate access, offer models for countries that are based on curative systems centered around hospitals that are having difficulties in making their services more flexible and closer to the population.

At the same time that the response to the pandemic is urgently developed, "it is essential, also urgently, to reflect on the structural causes not only of this, but also of other epidemic processes" and other public health priorities (70). Although the measures are designed for the immediate term, the success of these strategies will allow, when we overcome the pandemic, the strengthening of public health systems and the necessary rethinking of priorities oriented towards health equity for the coming decades.

Table 2. International recommendations for the continuation of health services for women, children, and adolescents with a multicultural, equity, and gender perspective

Maternal, child, and adolescent health care during the pandemic:

- Ensuring continuity in the provision of essential sexual, reproductive, maternal, neonatal, child, and adolescent health services for the population in the context of COVID-19 (24).
- Immediate Steps to Safeguard Progress for Every Woman, Child and Adolescent (66).
- Neonatal Care in Times of COVID-19 (71).
- Provision of Sexual and Reproductive Health care and Family Planning during the COVID-19 pandemic health emergency in Latin America and the Caribbean (72).
- Sexual and Reproductive Health and Rights, Maternal and Newborn Health & COVID-19. "It is critical that all women have access to safe birth, the continuum of antenatal and postnatal care, including screening tests according to national guidelines and standards, especially in epicenters of the pandemic, where access to services for pregnant women, women in labour and delivery, and lactating women is negatively impacted. Keep the health system functioning: Maintain sexual and reproductive health and rights (SRHR) information and services, protect health workers and limit spread of COVID-19" (73).
- Sexual and Reproductive Health and Rights: Modern Contraceptives and Other Medical Supply Needs, Including for COVID-19
 Prevention, Protection and Response. "Provision of modern short- and long-acting contraceptives, information, counselling and services (including emergency contraception) is lifesaving and should be available and accessible during the COVID-19 pandemic response" (74).
- Adolescents and Young People & Coronavirus Disease (COVID-19). "In the context of COVID 19, with the disruption of schools, routine health services and community-level centers, new ways of providing information and support to adolescents and young people for sexual and reproductive health and rights need to be established. Young people can be an important resource in mitigating risks, and community outreach in this crisis" (75).

- Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage (76).
- Programmatic guidance for sexual and reproductive health in humanitarian and fragile settings during COVID-19 pandemic (77).
- The Immunization Program in the Context of the COVID-19 Pandemic (78).
- Guiding principles for immunization activities during the COVID-19 pandemic (79).

Response to the pandemic with a multicultural and equity perspective:

- Promoting health equity, gender and ethnic equality, and human rights in COVID 19 responses: Key considerations. "The COVID-19 pandemic affects diverse groups of women and men differently. The risks and consequences are disproportionately felt by certain groups, especially those living in situations of vulnerability and those who experience discrimination. It is vital that country responses to COVID-19 consider equity, gender, ethnicity, and human rights perspectives to: prevent the expansion of inequalities; account for the everyday lived realities of different groups that may affect the success of measures" (80).
- Implications of COVID-19 for indigenous people in Latin America and the Caribbean (81).

Response to the pandemic with a gender perspective:

- Gender Equality and Addressing Gender-based Violence (GBV) and Coronavirus Disease (COVID-19) Prevention, Protection and Response. "The pandemic will compound existing gender inequalities, and increase risks of gender-based violence. The protection and promotion of the rights of women and girls should be prioritized" (82).
- COVID-19: A Gender Lens. Protecting sexual and reproductive health and rights and promoting gender equality. "Disease outbreaks affect women and men differently, and pandemics make existing inequalities for women and girls and discrimination of other marginalized groups such as persons with disabilities and those in extreme poverty, worse. This needs to be considered, given the different impacts surrounding detection and access to treatment for women and men" (83).

Annex

Impact of the response to the pandemic on health systems and on access to care, with information on the percentage of coverage reduction of primary health care and nutrition services, as a consequence of the COVID-19 pandemic in Latin American and Caribbean countries between March and June 2020.

Country or countries
Data from UNICEF from March and May 2020.
Data from UNICEF on the impact on the provision of health and nutrition services (in percentages) from June 2020.
Data from ECLAC and FAO on maintaining social services to combat hunger from April 2020.
Data from PAHO on maintaining immunization programs from May 2020.
Data collected via survey between April and May 2020

Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

May: Impact on non-urgent dental health services, general medicine, and occupational therapy services. Lack of information. Temporary closure of school feeding programs and of non-urgent health nutrition counseling services

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Emergency obstetric care, HIV and TB treatment, support for mental, psychosocial, addiction services, other emergency care, water, sanitation and hygiene services in health care facilities.

< 10% Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, clinical care for gender-based violence victims, non-communicable diseases (NCD) treatment services (dialysis, physical therapy), protection and promotion of breastfeeding programs and appropriate complementary feeding, nutrition support for pregnant and lactating women.

10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception (sexual and reproductive health services).

75-100% Nutrition programs for school-going children and for adolescent girls and boys.

May: Immunization programs maintained in Barbados, British Virgin Islands, Dominica, Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines.

May: Immunization programs partially suspended: Saint Lucia.

Argentina

March: Hoarding of medical supplies and fear of saturation of health services.

May: Impact on immunization services and preventive visits. Postponement of nutrition services. Difficulty in governing the health system and unifying the response due to its segmentation between public care, social security, and private care. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Protection and promotion of breastfeeding programs, vitamin A supplementation.

10-25% Antenatal check-ups, obstetric care, postnatal care, immunization, contraception, TB treatment.

50-75% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations).

Maintained: cash transfers.

Extended: in-kind food vouchers and school feeding programs.

May: Immunization programs partially suspended.

Bahamas

April: Maintained: in-kind food vouchers and cash transfers.

May: Immunization programs maintained.

Belize

May: Postponement of health fairs and other community activities, which means that health personnel cannot reach isolated communities. Suspension or limitation of public services and immunization programs, but the Ministry of Health has requested parents to take children scheduled for vaccination to health facilities. Lack of sufficient information because it is not publicly available, it is only available through key people in the Ministry of Health. Requirement to wear masks to go to health facilities, but masks are difficult to access. Suspension of deworming services and provision of vitamin A in schools due to the closure of schools. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, essential newborn care, clinical care for gender-based violence victims, HIV treatment, TB treatment, malaria treatment, other emergency care, water, sanitation and hygiene services in health care facilities, home fortification with multiple micronutrient powders.

< 10% NCD treatment services (dialysis, physical therapy).

10-25% Antenatal check-ups y de contraception, protection and promotion of breastfeeding programs.

25-50% Nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

50-75% Postnatal care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), support for mental, psychosocial, addiction services, other health-related community services, protection and promotion of appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition programs for adolescent girls and boys.

75-100% Nutrition programs for school-going children.

April: Maintained: in-kind food vouchers and school feeding programs.

May: Immunization programs maintained.

Bolivia

March: Initial stage of the pandemic (March 12).

May: Impact on care in general and on disease prevention programs. Decreased micronutrient and vitamin A supplementation due to priority response to COVID-19. Suspension of classes and consequent suspension of complementary food and breakfasts in schools. Lack of complete information on the situation due to the rural dispersion of the population.

Percentage of the drop in the coverage of health services:

< 10% Emergency obstetric care, clinical care for gender-based violence victims, NCD treatment services (dialysis, physical therapy), other emergency care.

10-25% Antenatal check-ups, obstetric care, postnatal care, early detection and treatment of child wasting/severe acute malnutrition.

25-50% Essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception, HIV treatment, TB treatment, malaria treatment, support for mental, psychosocial, addiction services, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition support for pregnant and lactating women.

50-75% Home fortification with multiple micronutrient powders.

75-100% Nutrition programs for school-going children and for adolescent girls and boys.

May: Immunization programs partially suspended.

Brazil

March: Fear of the collapse of health services due to lack of financing and deterioration in quality in recent years. Circulation of fake news.

May: Population fear of seeking care (prenatal, immunization, contraception, sexually transmitted infections, monitoring of child development). Decrease in the number of health professionals due to suspected or diagnosed COVID-19. Saturation of hospitals with confirmed cases of COVID-19. Difficulty for people with other health conditions in accessing hospital care in several cities of the country. Lack of information about the public health system given the high decentralization of the Unified Health System (SUS) and the priority of the Ministry of Health, states, and municipalities in responding to COVID-19 cases. School closings. Loss of income for self-employed or informally employed people. Suspension of the MMP Program due to lack of national production.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Emergency obstetric care, HIV treatment, TB treatment, malaria treatment, NCD treatment services (dialysis, physical therapy), water, sanitation and hygiene services in health care facilities.

April: Maintained: cash transfers.

Extended: school feeding programs.

May: Immunization programs partially suspended.

The delay in seeking routine care in health facilities, associated with difficulty in transportation, can affect prenatal consultations and obstetric-gynecological emergency care. Lack of counseling and accessing medications can have an impact on the prevention of mother-to-child transmission of HIV and syphilis.

Chile

March: Disruption of children centers. Closing of borders, with the consequent impact on migration from Peru and Bolivia.

April: Maintained: school feeding programs and cash transfers.

New measures are introduced: in-kind food vouchers.

Colombia

April: Maintained: school feeding programs and cash transfers.

Extended: in-kind food vouchers.

May: Immunization programs maintained.

Costa Rica

March: Initiation of mitigation measures to avoid saturating health services and to provide fiscal relief to the population from utilities and taxes

April: Maintained: school feeding programs and cash transfers.

New measures are introduced: in-kind food vouchers.

The response to the pandemic is supported by primary health care, which has been activated so that it continues to function normally. The control of the chains of contact of the transmission of COVID-19 is conducted at the community level. Regional hospitals have been strengthened with personal protective equipment and the availability of COVID-19 tests. Each person who arrives at a hospital has their temperature taken and their symptoms evaluated; in case of suspicion, they are directed to the emergency room to separate them from other patients. An area of the National Rehabilitation Center, which has respiratory therapy, was designated to care for people with COVID-19. A regulation was created according to which low-risk pregnant women are called by phone to verify that they have taken the tests. If medium risk is detected or has already been diagnosed, the woman has to go to a clinic in the primary care system and, if she is at high risk, to a hospital. To guarantee access to medicines, a public-private cooperation agreement was made according to which rental, postal, and municipal cars are used with available vehicles, and gasoline and drivers are provided to distribute medicines at home and avoid population movement. This distribution system includes drugs for chronic diseases, such as antihypertensives, insulin, and antiretrovirals, as well as contraceptives, but high-risk drugs are excluded. The program is highly valued by the population. There has been no impact on sexual and reproductive health programs for the adolescent population.

Cuba

Development of a plan for the control of COVID-19 coordinated by an inter-sectoral working group of the Ministry of Public Health and the Civil Defense Staff. It consists of: the reinforcement of epidemiological surveillance, particularly at the borders; reorganization of care in all health facilities, with greater decentralization of care to communities to avoid saturation of hospitals, limitation of access to hospitals, and postponement of non-urgent surgeries; training of all health personnel in diagnosis and care; protection measures aimed at the population by promoting the use of homemade masks. Implementation of inter-sectoral measures in schools to inform the population and diagnose respiratory infections early and fiscal relief for the payment of utilities. Maintaining support for child health services in primary care and for children with disabilities who go to school. Activation of all municipal and provincial Defense Councils. Increase in cases of gender violence.

May: No impact on health care.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Antenatal check-ups, obstetric care, postnatal care, emergency obstetric care, essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception, clinical care for gender-based violence victims, HIV treatment, TB treatment, malaria treatment, NCD treatment services (dialysis, physical therapy), support for mental, psychosocial, addiction services, other emergency care, other health-related community services, water, sanitation and hygiene services in health care facilities, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, home fortification with multiple micronutrient powders, nutrition programs for school-going children and for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

May: Immunization programs maintained.

There is no collapse of the health system, which relies on the strength of the family medicine model and the comprehensive service network at the first level of care (in clinics and polyclinics). However, the limitation in public transport can impact access to the second level of care (hospitals). Prevention of mother-to-child transmission of HIV and syphilis has not been interrupted by the response to the pandemic. Access to contraceptive methods, for sale in community pharmacies, is not affected by the pandemic.

Dominican Republic

March: Saturation of health services. Lack of personal protective equipment for health personnel. Concern about the possibility of contagion in health facilities for pregnant women and people with HIV, tuberculosis, or other conditions that require attention. Economic slowdown due to the reduction in tourism and remittances from Europe and the United States and due to the impact on small and medium-sized companies, which are the large formal employers of the population. Significant economic impact in poor households headed by women are expected, in particular because they are the caregivers of the sick, disabled, or elderly. Discrimination against people with COVID-19.

May: Impact on immunization services, prenatal and postnatal care, pediatric care, essential services for people with HIV, including the distribution of antiretrovirals, counseling, and CD4 and viral load tests. Relocation of around 30% of medical and nursing staff to care for COVID-19 cases. Designation of around 40% of the 170 public hospitals to care for COVID-19 cases, which threatens the continuity of essential services for children and pregnant women. Lack of processing of health services production indicators during the pandemic, meaning that the information is very limited and can only be obtained directly from some key actors in the health system. Impact on chronic malnutrition, which has been stable at 2%. Impact on nutrition services in health facilities and in the community (nutritional counseling, breastfeeding support, growth monitoring, distribution of micronutrients and fortified foods) due to movement restrictions and to the reduction of health personnel who are older, chronically ill, or reassigned to COVID-19 care.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, water, sanitation and hygiene services in health care facilities

< 10% Essential newborn care

10-25% Antenatal check-ups, immunization, home fortification with multiple micronutrient powders, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women.

25-50% Postnatal care, contraception, clinical care for gender-based violence victims, other emergency care, other health-related community services, protection and promotion of breastfeeding programs and appropriate complementary feeding. **50-75%** Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations).

April: Maintained: in-kind food vouchers and cash transfers.

May: Immunization programs partially suspended.

El Salvador

Limitation of community health workers to visit homes, including for immunization. Continuation of immunization services in primary care centers. Lack of access to information on the discontinuation of health services. Shift from school feeding to household feeding. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services:

10-25% Protection and promotion of breastfeeding programs and appropriate complementary feeding.

April: Maintained: cash transfers.

Extended: in-kind food vouchers.

The follow-up of pregnant women and children in health services has been lost, which leads to the lack of continuity of care for pregnant women with HIV, syphilis, or other sexually transmitted infections, to the lack of verification of adherence to treatment, as well as to the lack of monitoring of early childhood development and immunization programs. The limited access to home visits has reduced the scope of community actions.

Ecuador

March: Additional pressure on a health care system weakened by the austerity measures implemented a few months before the pandemic, with a particular impact on health personnel. Fear of the capacity of the health sector to respond to other health conditions and to provide comprehensive care. Suspension of children's and educational centers to avoid infections, but with the consequent burden on women to care for children at home.

May: Impact on immunization services, prenatal and postnatal care, pediatric and nutritional care, protection and promotion of breastfeeding. Lack of public information available from the Ministry of Health. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Water, sanitation and hygiene services in health care facilities.

< 10% Emergency obstetric care, other emergency care.

25-50% Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), other health-related community services, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition programs for school-going children, nutrition support for pregnant and lactating women. **50-75%** Contraception (sexual and reproductive health services).

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

Guatemala

March: Closing of activities (March 22). Fear of limited institutional capacity. Closing of children centers.

May: Lack of existence of guidelines from the Ministry of Health for health personnel on how to proceed in the face of the pandemic. Impact on all public programs, such as immunizations, prenatal care, HIV and tuberculosis, early childhood development, growth monitoring, early identification of acute malnutrition, counseling on adequate feeding of infants and young children, and communication for behavior change. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Other emergency care.

10-25% Postnatal care, HIV and TB treatment.

25-50% Protection and promotion of breastfeeding programs, vitamin A supplementation, Home fortification with multiple micronutrient powders

50-75% Protection and promotion of appropriate complementary feeding, deworming prophylaxis, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

April: Maintained: school feeding programs and cash transfers

May: Immunization programs maintained.

Guyana

March: Activation of the National Center for Emergency Operations to provide inter-sectoral support.

May: Immunization programs partially suspended.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, essential newborn care, clinical care for gender-based violence victims, other emergency care, water, sanitation and hygiene services in health care facilities.

< 10% Antenatal check-ups, postnatal care, immunization, contraception, HIV treatment, NCD treatment services (dialysis, physical therapy), protection and promotion of breastfeeding programs, deworming prophylaxis.

10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), protection and promotion of appropriate complementary feeding, home fortification with multiple micronutrient powders, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

25-50% Nutrition programs for school-going children.

50-75% Other health-related community services.

Haiti

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

Honduras

March: Lack of impact on health care. Among first deaths, all had late diagnosis. Discrimination against people with COVID-19.

May: Decrease in all health services due to lack of demand for care due to isolation. Impact on community monitoring meetings for children under 2 years of age. Difficulty aggravated by the dengue epidemic that existed pre-pandemic that had a great impact on the population under 15 years of age.

April: Maintained: school feeding programs and cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

The health system is collapsed. The population fears going to health centers because of the risk of infection and those who go to the emergency room have difficulty in receiving care due to the overload of health services. Supplies have been prioritized for the response to the pandemic to the detriment of supplies necessary for pre-pandemic care. The health system has little capacity to prevent mother-to-child transmission of HIV and syphilis, and access to HIV and syphilis tests has been difficult. The cost of contraceptive methods is a barrier to access. The established distancing measures and the fear of contracting COVID-19 limit the demand for vaccines by the population and the community activities of the immunization service by health personnel. Despite the fact that the health facilities are open, the immunization services of some facilities are closed because, with the lack of provision of personal protective equipment for the vaccinators, there is a reluctance of the personnel to vaccinate or because it has not been possible to replace the vaccinators over 60 years of age or who do not have private transportation to travel to the facility.

Jamaica

March: Declaration of national disaster by the prime minister (March 13), with the consequent restriction of population movement. Fear of over-saturating an already overwhelmed health system. Confidence of the population in the government due to early political decision-making and strong preparation. Closing of schools, with the consequent overburdening of childcare for women and possible impact on access to employment, food, and medical care. Discrimination against families with members with COVID-19. Fear of the increase in gender violence and other forms of domestic violence due to the restriction of movement.

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

There is a lack of clarity on the part of the Ministry of Health about the health services most affected and that require strengthening. Prevention of mother-to-child transmission of HIV and syphilis, monitoring of early childhood development, and immunization programs have been made worse by the lack of monitoring of pregnant women and children. Community information and outreach activities are not being conducted.

Mexico

March: No activity. Cases of gender violence associated with confinement are reported.

May: Impact on non-communicable or chronic disease care services and postponement of many surgeries. Lack of official information from the Ministry of Health due to its almost exclusive dedication to attending to the pandemic. Impact on maternal, infant, and young children nutrition counseling. Impact on school nutrition and health programs. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services:

10-25% Nutrition support for pregnant and lactating women.

25-50% Protection and promotion of breastfeeding and of appropriate complementary feeding.

75-100% Nutrition programs for school-going children and for adolescent girls and boys

April: Maintained: school feeding programs and cash transfers.

May: Immunization programs maintained.

The population with greater social exclusion lacks information on the options to access health services. Prenatal control, timely delivery care and access to health services, lack of information about people's health and ensuring that pregnant women diagnosed with HIV, syphilis, or other sexually transmitted infections continue to be in contact with health services are great challenges in a context of structural social inequality.

Nicaragua

March: Preparation of a national contingency plan by the Ministry of Health with the support of the Pan American Health Organization.

May: Immunization programs maintained.

Panama

March: Cancellation of outpatient care and non-urgent surgeries; it includes the cancellation of prenatal care, sexual and reproductive health services, pediatric monitoring, and preventive consultations. Closure of child and educational centers, with the following overload for women to care for children at home. Dispensing of prescriptions for 3 and 6 months to reduce visits to health centers. Supermarkets limited to 50 people. The population demands economic measures. Lack of income and lack of food purchases for people in the informal sector, with a greater impact on women. Distribution of food and vouchers for supermarkets, but without clarity on their quantity and frequency. Fear that domestic violence services will not work. Demand from some population groups requesting the closure of borders to prevent migration to the country; more than 2,500 migrants who arrived from Colombia cannot continue their passage to Costa Rica and, among them, 27% are minors, the majority under 5 years of age. Prohibition of visiting minors' reception centers and juvenile detention centers.

May: Suspension of nutrition programs for children who go to school due to them being closed.

Percentage of the drop in the coverage of health services:

75-100% Home fortification with multiple micronutrient powders.

April: New measures are introduced: school feeding programs.

May: Immunization programs maintained.

Paraguay

March: Prioritization of emergency services. The control of healthy and at-risk children, prenatal care, and chronic diseases are not interrupted but take a back seat. Fear of increased mortality from preventable causes, especially maternal, neonatal, and cardiovascular mortality. Fear of declining immunization coverage and food security. Provision of food kits and cash transfers to families in vulnerable situations through payments in digital format (Ñangareko Program). Implementation of a call center of the Ministry of Health staffed by ministry officials and last year medical and dental students for self-reports, queries, and complaints. Implementation of home delivery of food, cleaning products, pharmacy, and other products by medium and small companies communicated through social networks. Medical consultations via WhatsApp and/or Facebook to avoid going to health centers and to avoid leaving home. Distribution of packages of school snacks for periods of 10 days. Continuation of the prevention and care protocol for women who are survivors of violence. Report of 2,028 complaints of family violence in the month of March, 200 more cases than in March 2019. Discrimination against people with COVID-19. May: Decrease in prenatal care services due to restrictions imposed by the government and the population's fear of being infected in health facilities. Lack of diagnostic tests for obstetric pathologies, which results in increased maternal and neonatal morbidity and mortality. Lack of sexual and reproductive health services and contraception, leading to a higher number of unwanted pregnancies and, in particular, adolescent pregnancy. Lack of official national data. Potential impact on the monthly distribution of fortified milk from the Comprehensive Nutritional Food Program for children under 5 years of age at nutritional risk and for underweight pregnant women due to restrictions imposed by the government.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Postnatal care, emergency obstetric care, essential newborn care, immunization, HIV and TB treatment, other health-related community services, water, sanitation and hygiene services in health care facilities, protection and promotion of breastfeeding programs and appropriate complementary feeding, nutrition programs for school-going children, nutrition support for pregnant and lactating women.

10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception (sexual and reproductive health services).

April: Maintained: cash transfers. Extended: in-kind food vouchers.

Peru

March: Cancellation of outpatient care (immunization, prenatal, obstetric, contraception, pediatric, adult, nutrition), health promotion activities, and home visits (for example, to administer meningococcal vaccines to people over 60 years of age in peri-urban areas of Lima due to lack of personal protective equipment). Maintenance of emergency services. Maintenance of response services to family and gender violence, with a specific line for violence against children, with a communication campaign to alert the population about these services.

May: Immunization programs partially suspended.

Suriname

March: The government, with the support of PAHO and UNICEF, establishes a list of decisions to take 24 hours, 48 hours, and the first week after the diagnosis of the first case. Joint mobilization between the government and the United Nations country team to establish a response plan and request resources from local banks and the private sector given the difficulties in mobilizing donor resources. Immunization schedule disruption: DTP-Hep-HibB1 vaccine administration decreases from 71% to 52% between February 15 and March 15.

May: Immunization programs maintained.

Uruguay

March: Continuation of the functioning of the health system, except for the postponement of non-urgent surgeries. Technological innovation for communication through social networks.

April: Maintained: school feeding programs and cash transfers.

May: Immunization programs maintained.

Venezuela

March: Collapse of a health system already weakened before the pandemic. Maintenance of immunization and emergency services. Restriction of prenatal, obstetric, contraceptive, pediatric, and adult preventive care, treatment of HIV and tuberculosis, treatment of non-communicable diseases (such as dialysis and physical therapy), nutrition and food distribution services, and child care.

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs maintained.

Source: Prepared by the author based on four sources: in blue, the *UNICEF COVID-19 Monthly Survey* conducted in March and May 2020 and provided by the Public Partnerships Unit of UNICEF's Regional Office for Latin America and the Caribbean (12); in green, from the report *Preventing the COVID-19 crisis from becoming a food crisis: Urgent measures against hunger in Latin America and the Caribbean*, from ECLAC and FAO (31); in yellow, from PAHO's *Results from the Third Survey on the NIP Situation in the Region of the Americas*, conducted in May 2020 (32); and, in orange, from a survey conducted by the author between April and May 2020 among key informants from different countries (13).

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Planning a Sustainable Post-Pandemic Recovery in Latin America and the Caribbean*

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Abstract

In 2020, Latin America and the Caribbean (LAC) will experience the most severe economic recession in decades. This paper looks at the challenges confronted by LAC and proposes a series of actions in order to structure a recovery plan that minimizes potential moral hazard effects, while aligning fiscal, social and environmental sustainability priorities. High pre-pandemic sovereign debt levels, worsening credit ratings, and low tax revenues limit the much-needed fiscal space to overcome the present health and economic crisis. Most countries in the region are at risk of losing two decades of progress in the fight against poverty and inequality, while their upper-middle-income status makes them ineligible for debt relief and aid packages from advanced economies. The focus on solving the current crisis may also delay much needed progress on climate change mitigation and adaptation efforts, as well as overall improvements in the Sustainable Development Goals. We propose a combination of fiscal policy responses combined with new sources of financing to unlock a sharp recovery, with minimal harm to fiscal sustainability in the long run. Through expanded public-private partnerships and blended finance structures, governments should be able to leverage private financing in large job-creating undertakings. Additionally, the issuance of SDG-linked sovereign debt and Special Drawing Rights (SDRs) with SDG conditionality could also provide much needed liquidity at a low cost.

1. Introduction

The coronavirus pandemic has had a devastating impact in Latin America and the Caribbean (LAC). The region is not just facing a recession, characterized by negative growth and high unemployment. It is at the risk of losing at least two decades of social and economic progress.

Of the ten countries with the highest number of COVID-19 cases to date, five are LAC. In the case deaths per million population, four countries in the global top 10 are from the region. More strikingly, the region accounts for just 8.4 percent of the global population, but 30 percent of total COVID-19 fatalities to date (half of those deaths in Brazil alone). An unprecedented crisis has struck an already vulnerable region. The number of cases and deaths has plateaued at a high level, with some exceptions like Uruguay (where the pandemic was much less intense) and Chile (where the peak was observed in July).

The ensuing series of lockdowns in response to the pandemic – and the associated loss of income and the disruption of businesses – has brought on what may be the deepest recession in a century (IMF, 2020). As of June 2020, IMF estimates suggest that Latin America and the Caribbean will be the hardest hit region of the world, with an estimated 9.4percent GDP contraction in 2020. Advanced economies will on average contract by 8.0 percent in 2020, while emerging economies are expected to fall only by 3 percent, mainly because China and India will continue to grow (IMF, 2020). The situation is especially dire for Latin America, considering that in the five years preceding the current recession, economic growth was already the world's lowest (on average just 0.4 percent per year).

According to a <u>recent</u> report from UNDP, the recession is causing a significant reduction in employment, which could have long-lasting effects. Household surveys show that the number of individuals out of the labor force is surpassing those into it, in countries as diverse as Mexico, Chile, and Peru. The World Bank <u>expects</u> a tenpercentage-point increase in poverty rates in the region because of the pandemic. For example, Household Surveys from Colombia indicate that 38 percent of population was below the poverty line in May, relative to 27 percent in the pre-pandemic months.¹

High levels of urbanization, population density, and informality, combined with limitations in terms of health infrastructure, explain this outcome. Informal employment, which according to a recent <u>report</u> from the Inter-American Development Bank represent 56 percent of total employment, together with the lack of adequate social safety nets that push people into the street in order to make ends meet, have made lockdown measures relatively long and ineffective. According to Google's Community Mobility Report (Figure 1), lockdowns have lasted longer Latin America relative to Europe, where time spent at home is back to the levels of the prepandemic period.² As infection rates continue to be high, Latin Americans appear to be unable or unwilling to resume economic activity, suggesting households are experiencing an income crunch. This further reinforces the idea that the recession faced by the Latin America will be significantly more severe and profound than in other regions.

¹ See Núñez (2020) for Colombia and Lustig et al. (2020) for other countries in Latin America.

² Data from Google is based on mobile use, which could be concentrated in higher income households in Latin America, suggesting that the effectiveness of lockdowns is greater that it actually is. Low income households have probably resumed activities, or suspended them less to begin with, consistent with the fact that informal activities continued, given weak safety nets.

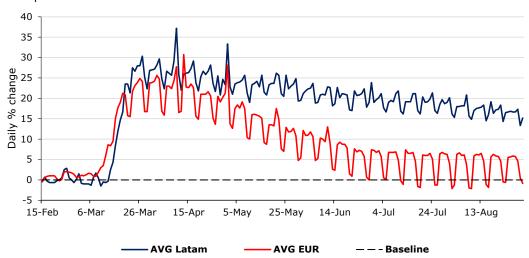


Figure 1. Time Spent at Household

The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020. **AVG EUR** is defined as the average daily change from the baseline in France, Germany, Italy, the Netherlands, Poland, Spain, Sweden and the United Kingdom. **AVG LATAM** is defined the average daily change from baseline in Argentina, Brazil, Chile, Colombia, Mexico and Peru. Data extracted from Google Community Mobility Report (2020).

Similarly, there is a clear indication that inequality will increase due to a number of factors, including significant job losses in low-paid, unskilled, and informal activities. In addition, there are structural forces at play that could lead to other forms of inequality in the long term. One example is the digital divide that prevents segments of the population from adequate access to online education. Reports in the press are pointing in the direction that that the disadvantaged are suffering the most during the pandemic. In terms of poverty rates and income concentration – as measured by the Gini coefficient – the region has already undone much of the progress observed since the early 2000s.³

2. Transitioning from "preservation" to "recovery"

Given the magnitude of the crisis, governments are prioritizing the preservation of lives and livelihoods by putting more resources into the health sector, providing subsidies to businesses, and supporting households' incomes with cash and in-kind transfers. The response has been closer to the type of disaster-relief typical of an emergency, rather than an economic stimulus package to deal with a more conventional recession. Transitioning from "preservation" to "recovery" will be the next phase of the crisis. Although there will be some overlap between the two types of responses, and countries are still primarily focused on the disaster relief and preservation as the pandemic is not yet under control, recovery packages will gain an increasing amount of attention. Preparing the design of effective recovery packages is the next main challenge. One possible scenario is that the pandemic does not recede, in which case a protracted recession will require an even more aggressive recovery package. If either herd immunity is reached, a more effective treatment, or a vaccine are delayed then the transition for preservation to recovery make take months and even years.

In contrast to LAC, sustainability-oriented recovery plans to revitalize the economy, including the adoption of low-carbon growth pathways, are already underway in places where the pandemic has weakened. This is the case of the European Union, where an aggressive spending plan is prioritizing clean energy infrastructure, R&D, connectivity infrastructure and education (these items account for 25 percent of the recovery efforts).

³ Lustig and Tomassi (2020) and Foschiatti and Gasparini (2020) reach similar conclusions.

Promoting a green recovery has been central in the stimulus packages not just in Europe, but also to some extent in China and India. In the case of China, the government launched the New Infrastructure Strategy based on renewables, electrification of various industries including transport, and digitalization (also called REED). India has just announced the electrification of the rail system using solar energy as part of its COVID-19 economic recovery strategy. The relevant question is whether this type of green recovery is viable in Latin America, once the pandemic recedes.

To prepare the ground for the debate about economic recovery in Latin America it is crucial to underscore that some of the effects of the pandemic can last longer than those of a typical recession so that sustained and longer-term actions will be required.⁴ This is not a typical recession that can be resolved with short term Keynesian stimulus. Framing the response in terms of prolonged recovery support instead of short-run stimulus is more adequate.

Long-term recovery strategies are also particularly relevant in order to reconcile the economic growth and employment goals with the low-carbon and climate-resilient development agendas that many countries in the region have set; a looming biodiversity and climate crisis (which also drive instability, inequality and insecurity in the region) cannot be ignored in this debate. It is also important to acknowledge that part of the reduction in economic activity is the result of supply restrictions, so additional government expenditures should not be the only driver —and in some cases not even the most relevant one— behind the economic push. An important aspect of the recovery is related to the technologies that allow businesses to operate, even before the pandemic is fully resolved.

Another aspect to consider is that the current crisis comes at a time when waves of social unrest are spreading across LAC. The main drivers of discontent have been lackluster growth, lack of upward mobility, and demands for greater voice and representation. Even in better-performing economies, like Chile, many feel that their expectations and aspirations have not been met, and that those at the top of the income distribution have captured most of the gains. Social unrest, which has been hibernating during the "preservation" phase, will likely return with a vengeance and will put social issues at the front of the policy agenda. In other words, the political dynamics of the region may force governments into avenues that involve the re-design of social pacts —as in Chile—more than exclusively "recovery packages."

3. The COVID middle-income trap

The large majority of countries in LAC are middle-income (MICs) where governments cannot afford a "whatever it takes" response, and are instead doing whatever they can. But whatever they can do will not be enough.

In contrast to the advanced economies that have no constraints on borrowing, LAC countries seem to be a missing middle in the discussion, namely middle-income countries with high levels of debt, sharp and deep recessions, and very high unemployment. These fiscally-constrained countries may not be able to cope with the health crisis, while at the same time ensuring and adequate recovery. Fiscal space is constrained, forcing Latin American countries to be selective in terms of the size and composition of the recovery packages.

One key aspect of the "missing middle" is that governments lack the resources to increase public investment and depend heavily on access to international finance. So far LAC countries –with the exception of Argentina and Ecuador– have had adequate access to global capital markets, but this could change without notice. Deteriorating fiscal and economic conditions have already triggered a cascade of credit-rating downgrades that could worsen. If markets close or become too expensive, LAC will need to rely exclusively on official lenders such as the IDB or CAF. But these institutions have limited capacity to lend to MICs, and will require capital replenishments.

⁴ Although the IMF is projecting a strong recovery in 2021, there is significant uncertainty. In the case of the U.S. former Council of Economic Advisers Chairman Jason Furman projects a high unemployment rate for many years. Things will not be very different in Latin America.

4. Designing recovery packages under multiple constraints and objectives

From a macroeconomic viewpoint, first and foremost, recovery packages should focus in bringing back output and employment to the long-run sustainable levels. Closing the output gap (i.e. bringing GDP to its potential level) and generating jobs so that unemployment returns to its "natural" level should be the overriding goals. This calls for government expenditures that have the largest fiscal multipliers possible and that are particularly labor-intensive. Although some have mistakenly used the analogy, this is not a war reconstruction effort. Physical capital was not destroyed, and the priority now is to put it motion again. Barring public health constraints, allowing firms to operate, workers to return to their jobs, and motivating consumers to buy again are the key short-term challenges.

But a response focusing just on these aspects would be short-sighted. Recovery packages should incorporate some structural goals, if what is meant is really to "build back better" in the sense of seizing the opportunity to improve conditions relative the pre-pandemic. One aspect is to promote a more sustainable recovery by ensuring, for instance, that agricultural and forest resources are not degraded and can continue to provide goods and services in the medium term. More broadly, making the recovery a greener, nature-based, less carbon-intensive one, that accounts for climate change, should be part of the design.

On the structural side, a crucial aspect has to do with importance of reducing poverty and inequality in a more decisive way. Considering that the pre-pandemic levels placed the LAC region as one of the most unequal regions in the world, post-pandemic recovery should aim at not just avoiding a reversal in the positive trends that were observed during the previous two decades, but accelerating the progress that has been achieved. This is a serious challenge, as preliminary evidence indicates that on these fronts the region has lost during the pandemic two decades of social progress.

Needless to say, designing interventions that simultaneously meet all these goals is difficult, as there are many examples of conflicts and trade-offs, rather than synergies, among them. Interventions that ease tensions and maximize their complementarities will be essential for the recovery phase.

One good example of the latter is climate-resilient housing. Green social housing can tackle both the social, climate and environment needs and drive job generation. Green housing could include distributed renewable energy solutions and energy efficiency considerations (passive designs, natural lightning, etc.). There are many others examples of measures that can be part of a green recovery, including in the short-run, such as eh replacement of poorly-targeted energy subsidies, for cash transfers targeted to the poorest groups of the population.

But complementarities are not always possible. Take for example the case of onshore wind energy that, according to the International Energy Agency, creates 1.5 jobs per million dollars in spent in capex. This means that the green recovery needs to take place, investments have to be careful of not crowding-out other sectors that potentially have a greater expansionary impact on jobs in the short term.

In other words, given the magnitude of the economic contraction and its expected duration, governments need to have clear guidelines on how to prioritize expenditures and other interventions. In some cases, such as green stimulus and the need to reduce inequality, a long-run perspective is necessary. In others, such as cash transfers to prevent malnutrition, credit guarantees and tax deferrals to avoid bankruptcies, and payroll subsidies to prevent furloughs, short-run interventions are appropriate. Government will need to strike that balance, aiming at "integral" interventions that combine social and environmental impacts with short-term output and employment generation, as in the example of green social housing.

5. The Fiscal Dimension

The pandemic will leave the region with much higher debt levels. According to the <u>IDB</u>, gross public debt in Latin America will raise on average to 70-73 percent of GDP in 2022 from 57 percent of GDP in 2019, significantly higher than the 44 percent of GDP observed during the 2008-2009 GFC. In the medium term, debt service will crowd out other expenditures, and debt-overhang will restrict economic growth.

Stimulus packages do not occur in a vacuum and should take into consideration the constraints under which governments operate. Apart from institutional capacity, which limits what governments can actually do, fiscal constraints put limits to the size of the stimulus packages that governments can implement.

In theory, the severity of the economic shock associated with the pandemic in Latin America would suggest the need of a large response, at least relative to other less-impacted regions. In practice, however, the size of the fiscal stimulus packages in Latin America tells a different story altogether. An analysis by Elgin et al. (2020) shows that richer countries tend to adopt larger fiscal stimulus packages. What this means is that, when it comes to crisis-response, other factors different than the actual severity of the shock drive the size of the response.

Fiscal stimulus packages in Latin America are constrained by the following factors:

- » The region's track record of procyclical fiscal policies. Investors are less willing to lend to a region where measures that ensure debt repayment (such as running primary fiscal surpluses once economic conditions normalize) are unlikely.
- » Social expenditures, in particular, are more procyclical than total spending in Latin America. If history is any indication of future performance, social programs such as cash transfers included in the COVID-19 emergency packages are likely to remain in place, or a fraction of them, even if they were intended to be purely transitory.
- » High initial levels of public indebtedness. Average public debt increased to 45 percent of GDP in 2019 from 30 percent of GDP in 2014 (ECLAC, 2020), and is likely to reach 70 percent of GDP with measures adopted during the "preservation" phase.
- » Currency depreciations during the pandemic (resulting from lower commodity and export prices, falling remittances, and the collapse in tourism) have increased external debt measured in local currency, raising public debt-to-GDP ratios.
- » Lower expected economic growth, higher sovereign risk, and institutional and political constrains to adopt measures that strengthen fiscal accounts, all of which are likely to occur in Latin America, reduce sustainable levels of public debt.
- » Fear of credit-rating downgrades or, in some cases, their inability to secure financing from markets.

Given these constraints, moving from the disaster management or preservation emphasis to long term economic recovery means that responses from governments will need to be particularly selective in terms of initiatives and efficient in the sense that public resources should leverage private spending by incentivizing the private sector to take risks. An example is the use of credit enhancements to de-risk certain investments that can be undertaken by the private sector. In addition, if governments do not have the fiscal space today, they can precommit future fiscal appropriations for projects that the private sector can finance now.

Finally, governments should try to open some fiscal space today by adopting measures that will improve fiscal sustainability in the medium term. A key aspect to consider is that tax revenues in LAC were already insufficient prior to COVID-19 and are far below the OECD average.⁵

Examples of these are built-in mechanisms to increase fiscal revenues or reduce expenditures in the medium term, once economic conditions are normalized. Adopting those measures now sends a credible signal, both to markets and credit rating agencies. This positive feedback from reform, to improved future fiscal outcomes, and greater fiscal space today, should be one the guidelines in the design of effective strategies to respond to the crisis more effectively.

The policy mix should not exclusively focus on expenditure items with high fiscal multipliers to get a higher "bang-for-the-buck" in terms of GDP. Rather, fiscal packages should deliver the type of economic growth that would be most effective in terms of fiscal sustainability. This could be done by prioritizing investments in sectors that have large impact on future fiscal revenues, or widening the tax base, by reducing informality. Closing loopholes, reducing tax expenditures —and more broadly increasing tax productivity— are good candidates. The Inter-American Center of Tax Administrations (2017) estimates that in the case of the VAT tax exemptions cost approximately 2 percent of GDP.

Enacting legislation today to raise taxes (or reduce expenditures) in the future, depending on macro outcomes (such as the output gap or the unemployment rate) is one way to proceed. For example, prolonging cash transfers to vulnerable groups in the post-pandemic should be made contingent on legislation that reduces fossil-fuel subsides or VAT exemptions. Greater financial inclusion —to enable the transfer of cash subsidies—has been a positive side-effect of the pandemic. This will prove instrumental in order to refund taxes paid by low income households. Another option to raise more revenues is taxation of digital services.

On the institutional side, the challenge is to reform institutions to make credible future commitments to increase taxes or reduce expenditures to reach sustainable debt levels. Fiscal rules may not be strong enough. Maybe constitutional amendments, like the one introduced in Colombia in 2011, making fiscal sustainability a mandatory constitutional criteria, should be put on the table, with automatic tax or spending adjustments and credible sanctions.

6. Other policy areas relevant for the recovery

A sustainable recovery requires the intervention of other policy areas, apart from fiscal stimulus. Government responses have to be broad. As mentioned in a recent <u>essay</u> by Bordoff, recovery packages need to go beyond traditional fiscal expansions, and should include productive development policies (PDPs), also called 'modern' industrial policies. These are policies aimed at reducing coordination failures (a certain investor undertakes a project if others take some actions), facilitating the flow of information, provide key essential inputs, etc. PDPs should identify sectors that are particularly important for the recovery and remove constraints that impede their growth.

Although some of those interventions need to be horizontal, in the sense of benefiting all sectors at a national level, like 'infrastructure,' most PDPs are very sector-specific. One key element, underscored by Ghezzi (2017), is the need to coordinate actions between private and public agents. This requires significant interaction and exchange of information between the relevant parties. Providing the right economic incentives —through regulation— as well as access to low-cost financing are good examples of adequate PDPs.

While PDPs are important, they are just one component of a more radical attempt at accelerating growth. Policies related to labor markets and social insurance are essential. As mentioned above and in the IDB note,

 $[\]begin{tabular}{ll} 5 & See, for example, \underline{www.cepal.org/en/news/latin-america-and-caribbean-tax-revenue-gains-under-threat-amid-deteriorating-regional-outlook and the second control of the secon$

informal employment in the region before COVID-19 was already over 50 percent of the labor force and is likely to increase to perhaps to close to 60 percent post-COVID. During the pre-pandemic scenario, the creation of formal jobs was insufficient to lower informality rates significantly. The recovery needs to incorporate solutions to the very large levels of informal employment, otherwise it will fail to make significant progress on the pressing issues of poverty and inequality.

Tackling inequality will require a redesign of social insurance and social protection policies, and changes in the structure of taxation. Social protection should not be based on taxes on formal employment, which should be covered with general tax revenues. If informality is going to be seriously tackled it will probably take much of the fiscal space that there is.

A strong recovery that enhances fiscal capacity is crucial in order to enable lasting interventions in areas such as education. Already millions of students who are unable to study from home or return to school are either working informally or neither working nor studying. This is a generation-wide risk which, if not addressed urgently, can have negative and long-lasting impacts.

7. The climate and environmental dimension

As mentioned earlier, a vital aspect to consider in recovery packages is the medium-term improvements in economic and physical resilience against climate change and the continued commitment to low carbon emissions. Le Queré et al. (2020) report that daily global greenhouse gas (GHG) emissions decreased by 17 percent by early April 2020, when compared to that same period in 2019, due to the strict confinement measures imposed by governments worldwide. This reduction in daily GHG emissions is likely to extend into the year as economic activity will continue to be affected by the pandemic. However, it is possible that a recovery in output in the short to mid-term is met by an even greater increase in carbon emissions, as economic activity is expected to rebound and fossil fuel prices will remain subdued according to current market projections.

There is some initial evidence (based on air quality in large cities in advanced economies) suggesting that GHG emissions could experience a very rapid uptake as economies recover, mimicking the period immediately following the 2008 global financial crisis (GFC) when the world experienced the highest annual growth in total emissions ever recorded (Peters et al., 2012). A significant rebound, as expected by the IMF (2020) and the OECD (2020), global GHG emissions could rapidly exceed the pre-pandemic levels.

As argued by Hepburn et al. (2020), recovery packages have the potential of accelerating or retarding progress on climate change. If the right policies are in place –that go far beyond what can be included in a recovery package—, achieving Sustainable Development Goal 13, climate action, as well as the existential goal of the 2015 Paris Climate Agreement to limit human-induced warming of the global atmospheric mean temperature to 1.5°C, could still be possible but very challenging. Largescale climate actions are needed even if all countries comply with their pledged contributions to the Paris Accord, if the goal is to limit warming to 1.5 degrees. More so, given that most countries do not even live up to their initial targets.

Therefore, the need to adopt low-carbon and climate-resilient spending pathways is crucial. If the right projects during the recovery are funded this could bring a double-dividend: economic and social recovery while achieving climate emission goals. There are some clear candidates, such as fossil fuel subsidy reforms and promoting the energy transition. High-speed internet connectivity that requires labor for installation, will also enable more efficient transactions potentially reducing the per transaction carbon emissions if applied in certain activities that reduce the need for wasteful analog logistics systems, and, when directed to the poor, narrows the digital divide in key areas such as he access to education. It also has a positive effect on productivity, lowers entry barriers, and enhances competition.

Another component of the green economy is often overlooked: restoring and conserving natural ecosystems can stimulate rural economies, create rural and urban jobs and help maintain critical ecosystem services vital

to the economy, such as water supply. In addition, these activities can strengthen the resilience of ecosystems to climate—induced change. Enhancing the resilience of ecosystems is necessary to help ensure the economic and social well-being of communities, particularly the rural poor who are amongst the most vulnerable to the impacts of climate change in Latin America. Research also suggests that, by the measure of per dollar invested in restoration activities create more jobs than traditional industries.⁶

In addition, cash transfer programs introduced during the pandemic can be transformed in a way that is more compatible with long term structural goals. One example is to keep cash subsidies only if other subsidies which are detrimental for the climate goals –such as subsidies on gasoline or electricity consumption– are removed. More broadly, additional expenditures resulting from the current crisis should be aligned with robust and improved social and environmental policies. There is an opportunity to reduce energy and gasoline subsidies, with climate change and fiscal benefits.⁷

Solving the economic havoc caused by the COVID-19 crisis must go hand-in-hand with resilient strategies to climate-induced threats (including droughts, hurricanes, cyclones, floods and sea-level rise), as well as long-term environmental sustainability and biodiversity conservation. With more awareness about the devastating effects of a predictable and preventable crisis like this one, the world would be in a better position to tackle the even more disruptive and lasting crisis of climate change.

But a word of caution is necessary. The recovery should be based on policies that produce the minimum harm possible to climate goals, but reducing carbon emissions is just one aspect to consider. Although governments should refrain from investing in fossil fuel energy infrastructure where technology may be locked-in for decades, reducing carbon emission should not be the overriding goal of fiscal stimulus in the short run. A vigorous expansion is crucial, although clearly not at the expense of ecosystems, water and other ecosystem services. But restoring income is necessary income to sustain long-term interventions, such as green infrastructure, research, development, and demonstration, which are crucial for the climate agenda.

Financing the recovery in LAC

In the case of low-income countries, the IMF, MDBs, and the Paris Club of bilateral creditors have responded with timely debt relief packages. This has not been the case for MICs as higher per capita incomes make these countries ineligible for debt relief. Rather than debt forgiveness, what these countries need is access to new financing so they can adopt more aggressive expansionary spending policies. For countries such Brazil, Chile, Colombia, Mexico, and Peru, among others, debt relief is not the answer.

Given their small size compared to the expected depth of the recession, stimulus packages have not focused on clean infrastructure investing in LAC. This is in sharp contrast with the World Bank's recent **Transformative Climate Finance** report, that argues that countercyclical spending could favor blended finance as a tool for economic recovery. Defined as the co-investment of public, philanthropic and/or aid finance along private finance, blended finance can become a major force in the economic recovery. By using public funds to take higher-risk positions in investment projects, private investors could be attracted to engage in transaction otherwise deemed too risky for their risk-return profiles. This is particularly interesting when thinking about shovel-ready energy and public infrastructure projects that may have become underfunded or have been halted due to the public health measures during the pandemic. De-risking this portfolio of projects could be a priority of recovery measures.

While philanthropic, aid or impact investors have traditionally used blended finance to leverage private resources in project-based finance, the present crisis presents a unique opportunity for public investment to structurally

⁶ See Nielsen-Pincus and Moseley (2010).

⁷ The reform of fossil fuel subsidies can also reduce price distortions on non-renewable energy and favor the way to clean technologies. Prices of technologies in comparison to fossil fuels can be consulted in IRENA (2020), Global Renewables Outlook, Energy transformation 2050.

leverage private funds. Renewable energy and low-carbon transport projects, as well as reforestation, land restoration, ecosystem-based adaptation, coral reef restoration, may now be unattractive for large private investors. By enacting project-based recovery strategies where public capital takes a junior position to private debt, governments should be able to decrease the risk profile of desirable projects such that private investors complement the government's countercyclical spending. Moreover, in most instances the public sector can operate through state-owned financial institutions —such as Colombia's Financiera de Desarrollo Nacional—which are not part of the central government and, therefore, do not put pressure on the fiscal balance.

In essence, by selectively engaging in investment projects that also produce positive environmental externalities, recovery packages could also help reduce carbon emissions. While it is likely that current fiscal needs can cause cuts in environmental spending, public-private investments contingent on positive socio-environmental externalities could offset the potentially negative effects of the crisis on climate goals.

Some alternatives include debt-for-climate, debt-for-sustainability and even debt-for-forests swaps where multilateral and private creditors provide debt relief in exchange for climate action, progress in sustainability metrics and reforestation by debtor countries. However promising these vehicles may sound, they are far from being the ideal tool to provide large amounts of structural financing in the short to medium term. Debt-for-nature swaps have existed since the 1980s and have faced sever obstacles such as limited scalability potential, weak accountability mechanisms for debtor countries, and misaligned incentives where most if not all private debt holders are not willing to forgo debt payments in exchange for a public good.

As has been frequently mentioned, a targeted issuance of special drawing rights (SDRs) by the IMF would provide much needed quick and cost-effective liquidity to member's foreign reserves without incurring in higher levels of debt. The IMF's rapid credit and financing instruments are capable of providing \$1 trillion in loans, failing short of the \$2 trillion estimated to be needed to fund the worst-case economic scenario for the coming months (IMF, 2020). According to the Peterson Institute for International Economics, a \$500 billion general issuance of SDRs would provide \$22 billion to the world's poorest nations, an amount far greater than the \$14 billion debt suspension package agreed by the G20.

Such scenario would not be without precedent. In 2009 the G20 summit quickly agreed to a \$250 billion general issuance. The ideal scenario would provide a targeted issuance of SDRs to low- and middle-income countries, although this would require amending the IMF's articles of agreement, something not feasible in the face of a crisis with urgent needs. A valid concern about the issuance of SDRs is the creation of a moral hazard because of the lack of conditional reforms, but countries should tie fiscal spending commitments with the SDGs and climate change goals. While the monetization of SDRs into hard currencies may imply higher costs than concessional loans, these two financing mechanisms could be used in tandem and not thought of as being mutually exclusive.

These options, complementing those discussed in Cárdenas (2020) and Velasco (2020), could help countries in the missing middle group which are unable to access debt-relief packages. Countries in this category are also fearful of credit rating downgrades and the eventual loss of market access.

SDGs-linked bonds

One alternative is to issue bonds that are linked to specific subsets of the Sustainable Development Goals. As proposed by Pinzón et al. (2020), these SDG-linked bonds should have a lower cost of capital than conventional sovereign bonds. In principle, by embedding sustainability considerations within sovereign debt, an investor should be able to mitigate ESG risk at a country level. Multilateral and Regional Development Banks would contribute concessional capital to a debt fund that could buy these bonds, offers partial guarantees to reduce the risk of the bonds, and offer grants to cover structuring costs. In this sense, the debt fund would be able to provide large amounts of concessional financing for countries interested in issuing SDG-linked bonds.

From the perspective of sovereign debtors, SDG-linked debt issuance would be an ideal vehicle to finance a better recovery. If the goals set out by the terms of the bond are met, countries would have to pay lower coupon fees. Not only could they begin to replace general purpose bonds in terms of size, they would also align long-term fiscal sustainability with economic and environmental sustainability.

Innovative structures can also be used by private issuers. In fact, the \$1.5 billion sustainability-linked bond issued by ENEL (the Italian multinational energy company) in late 2019 is a good example. As opposed to a traditional green bond, proceeds from ENEL's sustainability-linked bond are not earmarked to specific projects or investments. Instead, much like a conventional corporate bond, the funds can be applied to operating expenses or capital expenditures without any specific ESG requirement. However, ENEL's bond coupon rate is variable and depends on the company meeting a specific performance target, namely the increased share of its renewable energy installed capacity to at least 55 percent in 2021 from 46 percent as of 2019 (BNP Paribas, 2019). If the company is unable to meet the aforementioned target, the bond's coupon rate will increase by 25 basis points. Similarly, Latin America's first sustainability-linked bond issuance by Brazilian pulp producer Suzano will have a 10-year maturity and embed a 25-basis points coupon step triggered if the company fails to reduce gas emission intensity by 10.9 percent from a 2015 baseline by 2025. This KPI (key performance indicator) will be reviewed by ISS, an independent third-party, giving greater confidence to investors.

This structure is thus able to align the incentives of both creditors and debtors to invest in more sustainable projects, while eliminating the need for an earmarked use-of-proceeds approach. Issuers are also able to better administer funds without being limited to specific investments, while the ESG audit burden is reduced by only requiring an initial baseline and end line assessment of the targets in question.

In a world where emerging market governments do not necessarily have shovel-ready projects that meet a minimum of ESG criteria to issue green bonds, and where conventional debt issuance may displace the SDGs from the spending spotlight in the short and medium run, SDG sovereign debt financing could be an optimal economic, social, and environmental solution.

The issuance of SDG sovereign bonds will require a transformational change within Ministries of Finance in emerging markets to a more comprehensive approach to development where improvements in social and environmental performance indicators are at the core of a country's debt sustainability strategy. Unlike the approach taken by private issuers, an SDG sovereign bond would have to focus on more than one performance metric, likely a combination of SDGs and their respective indicators. As proposed by Pinzón et al. (2020), a multi-actor technical assistance package would have to accompany the issuance of SDG sovereign bonds such that governments are able to build capacity to identify viable key indictors and targets, as well as methodologies to measure their progress. Additionally, to avoid adding to the complexity of existing ESG and green bond standards, anchor investors should establish a common set of principles to make different SDG sovereign bonds comparable among themselves, and against other ESG investment vehicles.

One of the opportunities brought by SDG sovereign bond issuances is the possibility to counterbalance the credit rating downgrade that will result from higher debt-to-GDP ratios by missing middle countries. In principle, by investing in bonds whose government issuers are keen to improve social, economic and environmental conditions, the underlying socio-environmental risks associated with the country in question would also decrease in the mid- to long-term. If credit rating agencies are able to incorporate the reduction in socio-environmental risks that result from SDG sovereign bond issuance into sovereign credit ratings, any conventional debt issuance would inevitably result in higher downgrades than its equivalent in SDG bonds.

Ministries of Finance will be able to best generate growth, jobs and long-term income multipliers while maintaining sustainability at the core of the economic recovery by issuing SDG sovereign bonds. Using those funds as part of local blended finance structures, governments would be able to further catalyze commercial investment in SDG-oriented projects.

9. Conclusion: The path forward

The economic crisis wrought by the COVID-19 pandemic is likely to cause a serious reversal in developing and emerging economies. While poorer economies may benefit from aid and debt suspensions, upper-middle-income countries representing roughly 40 percent of the world's population face an impeding sovereign debt crisis and are ineligible for current debt suspension programs. Additionally, conventional short-run Keynesian stimulus will probably not be sufficient to offset some of the crisis' consequences, requiring new and more sustained interventions in order to deliver long-lasting reductions in poverty and inequality.

At the crux of the pandemic, these countries seek to resolve the need to increase fiscal spending, contain development reversals and not falter in the face of longer-term crises such as climate change. Restoring fiscal sustainability will therefore be essential in order to fund interventions for years, not months. In addition, countries need to emerge better prepared to handle the climate and environmental crisis. To do that, the focus should not be placed exclusively on government expenditures, but also include other policy actions in areas such as public-private partnerships, and the use of financial instruments to de-risk clean investment projects. Other elements like extended producer responsibility and polluter pays principles can help making the green investments more sustainable.

Deteriorating credit ratings are likely to restrain the access of middle-income countries to financial markets. New structures to access global liquidity such as the issuance of SDG-linked sovereign bonds and the targeted allocation of SDRs with SDG conditionality could better solve the health, economic and ecological crises we are going through at present. In the long run, these mechanisms could help create a financial and economic system that is more resilient to exogenous shocks in the future.

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Do we Need to Rethink Debt Policy in Latam?*

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Abstract

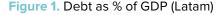
The COVID-19 shock raised concerns about debt sustainability both globally and in Latin America and has motivated a number of policy recommendations: debt standstills, issuing contingent debt or debt repurchases among others. In this paper we argue that debt sustainability was not a problem in the region coming into the crisis and, more surprisingly, will not be an issue when coming out of it, a result that is consistent with the fact that markets have remained mostly open. We then review recent proposals and conclude that, while subject to improvements, the current contractual environment for sovereign debt appears able to deal with the uncertainties posed by the shock. In fact, we describe the recent restructurings of Argentina and Ecuador to show that large debt restructurings can successfully be implemented within the current framework, though we also find that the economic costs of such restructurings exceeded benefits, particularly in the case of Argentina.

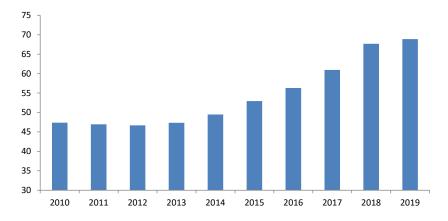
1. Introduction

Since its birth 30 years ago with the Brady bonds, the asset class of sovereign debt has gained over time in volume, liquidity and predictability. Decade after decade it has become a reliable and increasing source of financing. Latin American has been part of this trend as shown by the growth in the level of government debt as % of GDP over the last ten years (Figure 1).

While it is true that the region has been prolific in episodes of debt distress in recent years, for example in Argentina, Ecuador, Uruguay and a few Caribbean countries, these episodes, rather than making countries and markets shy away from sovereign debt, only seem to have helped to make the asset class stronger. Just to give one example, the Argentine default of 2001 prompted the inclusion of collective action clauses in new bonds issues. These clauses, by forcing a restructuring on all bondholders when a sufficiently large number agrees to the restructuring helped provide the flexibility to implement corrections when needed later on. The cases of Ecuador and Argentina that we discuss below being two recent examples.

Needless to say, sovereign debt has not been uncontroversial having both supporters and detractors. Supporters argue three main advantages of sovereign debt. First, that it provides the resources for development, freeing the country from the constraints of domestic savings. Norway, for example, is mentioned as a country that managed to mobilize its natural resource wealth by tapping foreign savings accelerating its path to becoming one of the richest countries in the world. Second, that it allows to anticipate future consumption when you know future income will grow as would be the case of Guyana today. Third, that it provides a way for smoothing transitory shocks as for example in Caribbean countries when subject to the devastating effect of hurricanes. The COVID-19 crisis appears to be an event where sovereign debt can be a useful tool to smooth the effects of what is believed will be a relatively transitory shock.





The detractors mostly focus on one very strong point: that it has been shown that debt tends to be procyclical, meaning that debt may not be used to smooth transitory negative shocks but may be instead the vehicle for pursuing a short term agenda, probably the government's. In this view governments use sovereign debt when they can to put countries on an unsustainable long term path for the benefit of a short term gain, the trademark of populism.

¹ The cases include Argentina in 2001, Ecuador in 2001 and 2008, Uruguay in 2001, Dominican Republic in 2005, Belize in 2006 and 2012, Jamaica in 2010 and 2013, St. Kitts and Nevis in 2011 and Grenada in 2004. See Sturzenegger and Zettelmeyer (2006) for the first four cases, and IMF (2013) Jahan (2013), Das et al. (2012) for the other 6 cases. See Feibelman (2017) for Ecuador's 2008 restructuring.

² See Panizza et al. (2020) and references there.

The procyclicality of the debt, it is argued, is fostered, maybe even encouraged, by the markets themselves that open up when countries do well, and repayment seems secure and quickly retrench at the first sign of trouble. According to this criticism, at the end of the day sovereign debt actually unsmoothes consumption, the opposite of what it was supposed to do.

Markets have also been questioned in their ability to discipline debtors. The interventions of multilaterals in the form of occasional bailouts further weakened the disciplining role of markets. Why evaluate risk if protection is always close at hand?³ To make things worse, after a default, no matter how harsh, new forward-looking unbruised investors always appear willing to come along. In fact, exclusion times after episodes of debt distress have shortened systematically over recent years.⁴ Thus there is consensus today that markets will function better when forcing private sector haircuts in scenarios of debt distress, something that has been known for some time now as "private sector involvement".

It is not surprising then that the COVID-19 outbreak has led to a revival of this debate. The sharp output declines, together with the need to increase outlays to deal with the pandemia, have led countries to pile up a new layer of debt in a way that may jeopardize their future prospects. Initially capital flows retrenched, and several prominent economists predicted a tightening of market conditions over the immediate future, a tightening which in turn could trigger a new, possibly massive, wave of debt defaults. The beginning of the year saw calls for urgent action both in terms of debt standstills or, even more radically, debt restructurings ahead of an impending crisis.

Angel Gurria, Secretary General of the OECD put it bluntly⁵:

"Latin America already had a lot of debt before the crisis, ... after the brutal reality" left by the virus the region would need much greater resources and/or relief on its debt."

Jeffrey Sachs, Professor at Columbia University warned that⁶:

"If handled with care, this year's debt-service payments can and should be recapitalized at low interest rates to avoid a financial pile-up. If not, 2020 will mark a devastating new episode of global financial crisis."

Today, several months into the COVID-19 crisis, I think we are clear to say that a drying up of the market for sovereign debt, not only did not occur, but, on the contrary, that financing has remained ample and available. As shown in Figure 2, flows have returned after an initial sharp retrenchment, offering financing conditions that have turned better than ever before. Throughout 2020 in the region Colombia and Brazil placed debt at a 3% interest rate, Honduras and El Salvador at around 5%, among others.

There is an extensive literature on the role of bailouts that blossomed after the bailouts of the Asian Crisis of 1997, leading to a fundamental change in the role of multilateral institutions. Initially multilaterals, particularly the IMF, viewed their role as one of precluding capital flow disruptions; but this objective mutated with time to that of organizing the way in which the private sector would also provide debt relief ("private sector involvement") in an equitable way between private and official creditors when crises struck. This view matured in the run up to the Russian default of 1998 and eventually feeds the idea that the private sector needs to share in the costs of debt disruption, a view that is today universally accepted.

⁴ See Panizza et al. (2020), Gelos et al. (2011) Richmond and Dias (2008).

⁵ See www.ft.com/content/a86e0382-8f63-4f4f-839c-51c5a9ccc9e5.

⁶ Sachs (2020).

Figure 2. Capital Flows to Emerging Markets

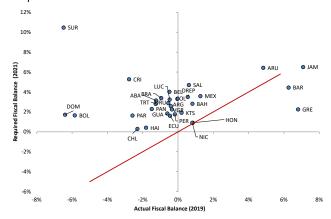


But this short run availability does not mean that a problem may not be brewing. That nothing has happened this year does not mean that there will not be a problem ahead. Furthermore, it could be argued, along Jeffrey Sach's line that the problem is getting worse and that the recent availability of funds should be interpreted as another chapter of irresponsible market lending, thus strengthening not weakening the call for action.

The recent experiences of Ecuador and Argentina could provide some support to the point. Both countries managed to attain a voluntary agreement with creditors providing substantial debt relief. Participation in these two exchanges reached percentages in the upper 90s implying that collective action clauses were met, thus blocking holdouts. If the market understood that a debt relief was needed in these cases, why not argue the same for the other cases? Of course, to make this argument we would need to argue that these restructurings will not lead to long term costs. But the amount of debt relief and the participation rates both look impressive and vindictive of the "do something" approach.

More to the point, Figure 3 shows the primary surpluses that would be required if markets for sovereign debt close. The graph shows in the vertical axis the primary surpluses that will be needed to pay for interest coming due after 2021.⁷ The horizontal axis shows the primary result in 2019. A number above the 45 degree line means that a fiscal adjustment (relative to 2019) would be called for, a situation that virtually applies to all countries. In fact, if markets close, the average adjustment required will be 3,3% of GDP but with a range that goes all the way to an impossible 16,9% of GDP for Suriname or 8,1% for Costa Rica and Dominica.

Figure 3. Primary Surpluses Required in a Distress Scenario



⁷ To compute this number we add the expected fiscal deficits of 2020 and 2021 to the 2019 debt levels and multiply it by the implicit interest rate of debt of 2022 with all data taken from the 2020 October WEO.

This note attempts to think about the question of whether action in the debt front is called for, or whether current institutions have the flexibility and capacity to deal with current and future upheavals and should be left to work things out on their own terms.

To address this question we first analyze the debt sustainability situation of countries going into the crisis. We find below that, taken as a whole, the region did not seem to be, prior to the crisis, in an unsustainable path. We then update this exercise assuming what is expected to happen to debts and output as a result of the COVID pandemia. Surprisingly, we will show that we don't find that the situation deteriorates significantly, in other words that, with some exceptions, debt sustainability will not to be a concern upon exiting the COVID crisis either. We spend some time in checking the robustness of this result to different assumptions.

Even if we conclude that no impending crisis is looming in the horizon, is this enough to discard the notion that action should not be taken? Not necessarily. We first review the recent restructurings of Argentina and Ecuador, trying to assess costs and benefits. The aim is to provide some guidance on whether they could be an example to be emulated. We show that current bond covenants are relatively well prepared to execute such corrections, but when we dwell into the cost-benefit of the debt restructuring we argue that the costs of the restructuring on private sector wealth may actually dwarf the savings obtained on public debt.

With the ammunition of these analyses in the final section we discuss some of the policy recommendations that have been put forward over recent months and provide a few of our own. We briefly discuss the role of official lending, standstill, contingent debt, debt buybacks and debt maturities.

Our final conclusion is that while always subject to permanent improvements, the current framework has worked relatively well and should not be uprooted.

Debt Sustainability Coming into COVID-19

Let's start our debt sustainability exercise doing a simple computation summarized in figures 4 and 5.

Figure 4. Projected GDP growth (20-24)

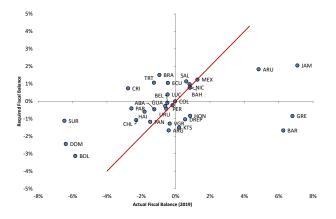
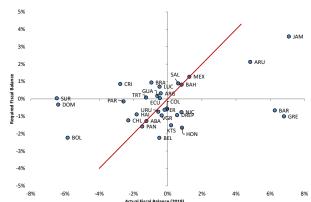


Figure 5. Historic GDP growth plus 2%



This exercise computes sustainability pre-COVID. In the graph we compare 2019 primary surpluses with the required primary surpluses that would have made the debt sustainable according to expectations then. Countries below the 45 degree line are in the "sustainable" region (primary surpluses larger than those required), while those that are above are in the "unsustainable" region. Required primary surpluses are computed through the well known equation

 $ps^r = d \frac{(r-g)}{1+g}$

where ps^r is the required primary surplus, r is the average interest rate, g the expected growth rate of the economy, expressed in the same currency as r; d is the debt to GDP ratio.

The intuition for this equation is straightforward. If the interest rate is larger than the growth rate then you need a primary surplus to pay at least part of the debt. Otherwise debt would grow faster than GDP increasing the debt-to-GDP ratio eventually making debt unsustainable. If, on the contrary, growth is bigger than the interest rate, then the country can afford a primary deficit. If the growth rate and the interest rate are equal, the required primary surplus is zero, debt grows at the rate of growth of the economy and the debt to GDP ratio remains stable. In this way, the interplay of the growth of the economy and the interest rates becomes a first reference point for debt sustainability.

In order to make the estimations comparable we will do away with specific idiosyncrasies, so the computation will be done using comparable WEO data. g will be computed under two assumptions. One uses the expected growth in nominal dollar GDP for the period 2020-2024 as presented in the October 2019 version of the WEO (Figure 4); the other uses the average real growth rate for each economy for the period 2000-2019, adding 2% to account for US inflation (Figure 5). r is estimated as the ratio between interest payments and debt for 2019 (an estimation using an average for recent years does not modify the results that much, so we omit it for brevity)8. Debt is the debt to GDP ratio as presented by the WEO.

Needless to say, this analysis is very coarse. It just identifies if the primary surplus is sufficient to stabilize the debt to GDP ratio. When it does not, it does not mean that the debt is not sustainable, it just means that a fiscal adjustment is needed going forward.

Cochrane (2020) puts it nicely:

"We agree that there is some upper limit on the debt to GDP ratio, and that a rollover crisis becomes more likely the larger the debt to GDP ratio. Given that fact, over the next 20-30 years and more, the size of debt to GDP and the likelihood of a debt crisis is going to be far more influenced by fiscal policy than by r-g dynamics.

I especially like this view because it doesn't make sense that an interest rate 0.1% above the growth rate vs. an interest rate 0.1% below the growth rate should make a dramatic difference to the economy."

So, the results should be taken as indicative of whether large fiscal adjustments are needed or not. We should worry about sustainability only if the required adjustments appear to be politically unfeasible.

The computation is subject to a number of limitations. Current interest rates may not reflect interest costs in the future, and future growth may be faster or slower than past growth. Current fiscal results may not be the ones to look at because they may diverge from their long run equilibrium. For example, we don't even consider the fiscal results of 2020 or 2021 in this computation, but rather compare the needed fiscal results with those of 2019, the last "normal" year.

⁸ This estimation overestimates the interest rate cost to the extent that domestic denominated debt includes an inflation component. This bias actually strengthens the results presented below.

Figure 4 computed with the growth rate predicted for the following 4 years at the end of 2019 shows that most countries are reasonably close to the 45 degree line, that is, in the sustainable region, in fact the average required adjustment is zero. From the 32 countries in the sample, only 10 require an adjustment larger than 1% of GDP, only 7 one larger than 2% of GDP and only 1 one larger than 4%.

The general picture does not change significantly when using the average growth rate of the last 20 years (plus a 2% annual rate to account for US inflation) in Figure 5. The average adjustment is again zero, and only 9 require an adjustment larger than 1% of GDP, only 5 one larger than 2% of GDP and only 2 one larger than 4%.

The take away from this first exercise is that coming into the crisis we could not say that Latin American countries faced an impending debt crisis. This may explain why markets were buoyant at the time.

3. Was Debt Sustainability Affected by the 2020 Crisis?

The COVID crisis had two obvious effects on debt sustainability. On the one hand it decreased output, increasing debt burdens; on the other hand, deficits are going to be unusually large in 2020 and 2021, increasing debt. To make matters worse, some countries have seen their credit ratings deteriorate, increasing interest costs. Thus, the starting point for a debt analysis at the end of 2021 by definition has to be worse.

Figure 6 shows the impact of COVID on output by comparing output forecasts for both 2020 and 2021 as they stood at the end of 2019 relative to where they are today.⁹

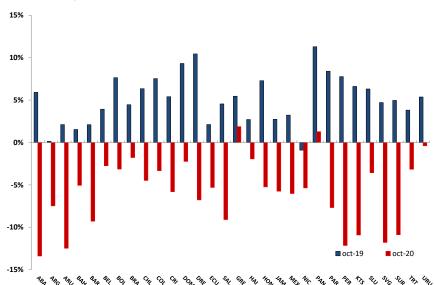


Figure 6. A Downward Change in Expected Growth

The Figure shows that COVID-19 has implied a drastic shock in income, and, while everybody agrees it has a large transitory component, there is still a significant discussion on what the persistence of the shock may be. Reasons for persistence include, in addition to the uncertainty of the outbreak itself, primarily the destruction of firm capital during the transition, the secular decline in the demand for certain activities that will require reallocation, and damage in the accumulation of human capital.¹⁰ On the other hand savings rates have dramatically increased, fostering capital accumulation, while productivity may also increase going forward as

⁹ To be precise this graph computes the change in the cumulative 20–21 growth rate in WEO's October 2019 and October 2020 reports.

¹⁰ See F. Buera et al. (2020) for a list of these arguments, and IDB (2020) and González et al. (2020) for a discussion on human capital.

digitalization allows for a quicker absorption of technological change. The complexity of the channels implies that this is a debate that is open today.

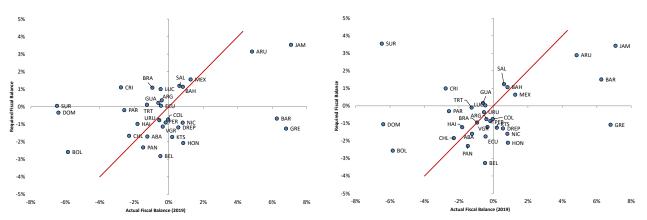
Figures 7 and 8 update the exercise of figures 4 and 5 by taking into consideration these effects. The two graphs now focus on 2022 so the level of debt to GDP is computed assuming the expected output performance in 2020 and 2021 and the expected deficit buildup during those two years, with all data taken from the October 2020 WEO. With these assumptions, Figure 7 assumes that real borrowing costs return to 2019 levels and that trend growth goes back to its historical value, while Figure 8 also assumes trend growth is also its historical value, but uses as interest cost that which is expected for 2022, thus internalizing any increase in the cost of debt that may have materialized during this period.

Relative to the fiscal results in 2019, Figure 7 suggests the need of an average adjustment -0.1% of GDP with 8 countries requiring an adjustment larger than 1% of GDP, 6 one larger than 2% of GDP and 2 require an adjustment larger than 4%. Figure 8 shows the need of an average adjustment of -0,2% of GDP with 6 countries requiring an adjustment larger than 1% of GDP, with 5 one larger than 2% of GDP and 2 require an adjustment larger than 4%.

Why is this number actually lower than the one we found in 2019 in spite of the higher debt to GDP levels? Because the primary deficit that keeps the debt to GDP ratio stable increases with the debt level when the growth rate is higher than the interest rate. But even if we restrict to the countries where the interest rate is higher than the growth rate and need to have a primary surplus, the change in the required primary surplus is just 0.2% if the interest costs remain as in 2019. In fact, if the interest costs are those of 2022, they need a smaller primary surplus of 0.4% of GDP. So rather than increasing the cost of debt actually decreased. This provides extra room for sustainability.

Figure 7. Growth and Financing as before

Figure 8. Growth as before with 2022 Financing



While the differences in required primary surplus may not be that large when comparing before and after COVID-19, it may very well be true that these results are today less attainable given the fiscal results of 2020 and 2021 which showed large a deterioration across the whole region. So, how far away are these results from where we expect to be at the end of 2021? Table 1 discusses this by showing the primary results, realized or predicted, for 2019-2021, and the required primary result in 2022 that would make debt sustainable. The question we want to address is how far away are the primary fiscal results required in 2022 both from those expected for 2021 and the historical primary surpluses attained in each country. The "Additional Adjustment" column in Table 1 shows the extra amount of fiscal correction that will have to be implemented after 2021. The average required improvement is 1,6%, with only four countries requiring an adjustment larger or equal to 4% after 2021. Again, the numbers do not suggest a situation that is unmanageable. The last column shows the needed adjustment relative to historical values. Figures 9 and 10 show these required adjustments in a histogram.

Table 1. Additional (primary) Fiscal Effort Required

	2019	2020 (p)	2021 (p)	2022 (required primary deficit)	Additional adjustment	Historical primary surplus (2005-2018)	Adjustment to Historical primary surplus
Antigua and Barbuda	-1.2%	-9.3%	-2.1%	-1.6%	0.5%	-1.3%	-0.3%
Argentina	-0.4%	-8.5%	-4.5%	-0.8%	3.7%	-0.9%	0.2%
Aruba	4.8%	-18.4%	-0.5%	2.9%	3.4%	-0.3%	3.2%
Barbados	6.3%	1.0%	3.5%	1.5%	-2.0%	-0.3%	1.8%
Belize	-0.5%	-5.6%	-4.2%	-3.3%	0.9%	1.1%	-4.4%
Bolivia	-5.8%	-7.0%	-5.4%	-2.6%	2.9%	0.0%	-2.6%
Brazil	-1.0%	-12.0%	-3.1%	-0.9%	2.1%	1.1%	-2.0%
Chile	-2.3%	-8.1%	-3.7%	-1.8%	1.8%	0.9%	-2.7%
Colombia	0.0%	-6.2%	-2.9%	-0.7%	2.1%	0.6%	-1.3%
Costa Rica	-2.8%	-4.2%	-2.0%	1.0%	3.0%	-1.0%	2.0%
Dominica	-6.4%	-1.5%	1.5%	-1.0%	-2.5%	1.8%	-2.9%
Dominican Republic	0.6%	-4.6%	0.2%	-1.3%	-1.5%	-0.5%	-0.8%
Ecuador	-0.5%	-5.8%	-1.3%	-1.7%	-0.4%	-0.7%	-1.0%
El Salvador	0.6%	-8.8%	-3.5%	1.2%	4.8%	-0.9%	2.1%
Grenada	6.8%	0.5%	3.6%	-1.1%	-4.6%	-0.3%	-0.8%
Guatemala	-0.6%	-3.8%	-1.9%	0.2%	2.0%	-0.5%	0.7%
Guyana	-1.8%	-5.2%	-2.1%	-1.2%	0.9%	-2.8%	1.7%
Haiti	-1.8%	-5.6%	-4.3%	-1.2%	3.0%	-2.3%	1.1%
Honduras	0.8%	-2.5%	-1.7%	-2.1%	-0.4%	-2.0%	-0.1%
Jamaica	7.1%	3.5%	5.4%	3.4%	-2.0%	6.7%	-3.3%
Mexico	1.3%	-2.0%	0.2%	0.6%	0.4%	0.2%	0.5%
Nicaragua	0.8%	-3.0%	-2.1%	-1.6%	0.5%	0.0%	-1.6%
Panama	-1.5%	-6.8%	-4.9%	-2.3%	2.6%	0.9%	-3.2%
Paraguay	-2.6%	-6.3%	-3.2%	-0.3%	2.9%	0.8%	-1.1%
Peru	-0.2%	-7.9%	-2.6%	-0.9%	1.7%	1.3%	-2.2%
St. Kitts and Nevis	0.2%	-7.6%	-4.7%	-1.2%	3.5%	6.2%	-7.4%
St. Lucia	-0.5%	-7.9%	-2.4%	0.0%	2.4%	-0.8%	0.8%
St. Vincent and the Grenadines	-0.4%	-4.9%	-4.0%	-1.2%	2.8%	-0.7%	-0.5%
Suriname	-6.5%	-7.4%	-1.4%	3.6%	4.9%	-0.8%	4.4%
The Bahamas	0.8%	-3.3%	-6.6%	1.1%	7.7%	-1.5%	2.5%
Trinidad and Tobago	-1.3%	-11.1%	-4.2%	-0.1%	4.1%	-0.4%	0.3%
Uruguay	-0.6%	-2.9%	-1.2%	-0.4%	0.8%	1.3%	-1.7%

Note: 2019 data is taken from WEO october-19, while 2020 and 2021 data is taken from WEO october-20. The remaining shows the calculation for the financial deficit required to stabilize the debt-gdp ratio. We use the formula (1) for the primary surplus and we add the interest payments used the implicit rate of 2022 to the new stock of debt.

Figure 9. Fiscal Effort Required in 2022 for Sustainability

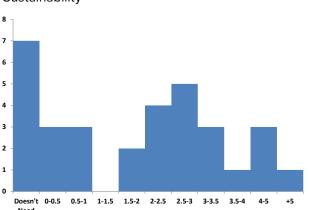


Figure 10. Fiscal Effort Required vs Historical Primary Surplus

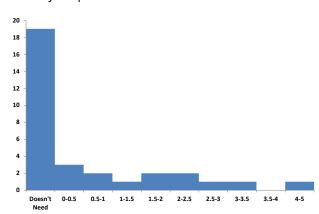
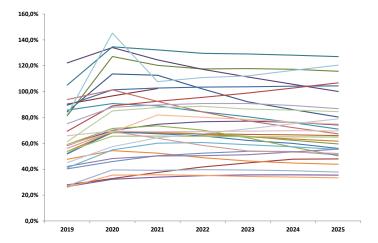


Figure 11. Latam Debt-GDP Ratios According to WEO



Figures 9 and 10 allow two main conclusions. The first is that given the deterioration of fiscal results in 2020 and 2021 there is still a road ahead in terms of fiscal convergence, the average correction needed in 2022 is 1.6% and 1.7% when weighted by GDP, which is not small. But Figure 10 shows that relative to historical primary balances, the required adjustment is not that large in fact on average the adjustment required is -0.6% and -1% when GDP weighted.

We argued above that countries did not face an imminent debt crisis coming into the crisis. The different exercises done in this section allows us to conclude that neither will they do coming out of it.

One explanation for this somewhat surprising result is that in spite of debt downgrades, the crisis of 2020/2021 has come together with a period of unusually low interest rates. In fact, average implicit rates which were 4.2% in 2019 for the region, actually fall to 3.9% by 2022 (4% if Ecuador and Argentina are excluded). These low interest rates have helped maintain sustainability in spite of the increase in debt ratios. Another reason is that fiscal prudence over the years have allowed countries to build the fiscal space to absorb the jump in the debt level without stressing fiscal sustainability.

Obviously our analysis is simple and conventional, and we have focused on the general results for the region. Our conclusions depend on a number of assumptions on which there is much uncertainty. Will low interest

rates persist? What if market close requiring a more than 3% fiscal adjustment as mentioned in the introduction? What if the fiscal effort in 2022, already significant relative to what is expected in 2021, is stressed by a second COVID wave which weakens economies into the future?

One way to check the robustness of our conclusion is computing how much extra fiscal effort would be required if interest rates turn out higher or growth lower. This extra fiscal effort can be measured against 2019 fiscal results, relative to historical primary surpluses or relative to the expected primary surpluses for 2021.

Table 2 shows the results using as a baseline the historical growth performance for each country, and the financial costs for 2022. The table shows the required fiscal effort in each scenario (the baseline is the number in the upper left quadrant). When comparing with fiscal results in 2021, a deterioration in interest rates or growth rates of 2%, brings the required adjustment from 1.6% to 3.1% of GDP. Relative to 2019's primary surplus the required effort moves from -0.2% to 1.3%, and relative to historical primary results from -0.6% to 0.9%. While a deterioration of the situation will require a bigger effort, the range of scenarios remains within reach, particularly relative to historical values or normal times.

Table 2. Robustness Check

Average Adjustment relative to primary balance 2021					
GDP growth/interest rate	*	+1%	+2%		
*	1.6%	2.3%	3.1%		
-1%	2.4%	3.1%	3.8%		
-2%	3.1%	3.8%	4.6%		
	Average Adjustment relativ	ve to primary balance (2019)			
GDP growth/interest rate	*	+1%	+2%		
*	-0.2%	0.6%	1.3%		
-1%	0.6%	1.3%	2.0%		
-2%	1.3%	3.8%	3.0%		
	Average Adjustment relative to hi	storic primary balance (2005-2018)			
GDP growth/interest rate	*	+1%	+2%		
*	-0.6%	0.1%	0.9%		
-1%	0.1%	0.9%	1.6%		
-2%	0.9%	3.8%	2.3%		

Two additional pieces of information provide more robustness to our conclusion. First that the debt projections of WEO itself show that with few exceptions debt to GDP ratios appear to stabilize in the region. (Figure 11). Second that financing has remained available. In fact, over the year several countries have managed new debt issues. Table 3 shows some recent issues.

Table 3. Recent Debt Issues in Latam

Country	Date of bond offer	Amount of issuance (US\$B)	Coupon rate (%)	Maturity Rate
Panama	03/26/2020	2.5	4,5	04/01/2056
Peru 04/	0.4/46/0000	1	2.39	01/23/2026
	04/16/2020	2	2.78	01/23/2031
Guatemala	04/21/2020	0.5	5.38	04/24/2032
		0.7	6.13	06/01/2050

	04/22/2020	1	3,9	04/27/2025
Mexico		2.5	4.75	04/27/2032
		2.5	5	04/27/2051
Paraguay	04/23/2020	1	4.95	04/29/2031
Chile	05/05/2020	1.46	2.45	01/31/2031
Calamah:	06/01/2020	1	3.13	04/15/2031
Colombia		1.5	4.13	05/15/2051
Brazil	06/03/2020	1.25	2.88	06/06/2025
		2.25	3.88	06/12/2030

While the latter is not a proof of sustainability, it appears there is no generalized concern on the ability of countries to pay their debts. This is consistent with the view that a debt crisis is not looming in the horizon.

4. The Restructuring of Ecuador and Argentina

The fact that a debt crisis may not be in the comings, does not mean that no action should be taken. To this end it is interesting to look at the cases of Argentina and Ecuador that did attempt (successfully) to reduce their debt burdens during 2020.

4.1. The Theory of Debt Restructurings

There is an extensive literature on debt restructurings asking how should they be done, what haircuts have they delivered, and how beneficial or costly have they been for the economies that went that path.¹¹ Here, I want to focus on this last question: How can we know if a restructuring is convenient for a country or not?

The response to the question needs to sort out, first, if the debt restructuring was strictly necessary. A brief paragraph on the theory of sovereign debt will clarify why.

The theory of sovereign debt started by asking the question of how a debt instrument that has weak legal protection as a result of the difficulties in litigating against sovereigns could exist. The literature has focused on three main explanations: fear of exclusion from markets, sanctions, and reputation effects. However, fear of exclusion and sanctions find little support in the data. Countries re-access markets very quickly after defaults and at interest rates that do not include a sizable penalty. When they do include a penalty it does not last long¹². Sanctions, in turn, are seldom used. However, reputation effects do seem to matter. Restructurings, for example, lead to a collapse in FDI and local investment.¹³ The reason is simple: if the government restructures the debt, why would I trust it will respect my property rights?

If reputation effects are key to assessing the costs of restructurings, it is important to know if the default was "unavoidable" or not. Grossman and van Huyck (1988) introduced the concept of "excusable default" which they define as a distress situation for which the debtor is not responsible. Grossman and van Huyck suggested that the market would provide relief in such circumstances making debt contracts much more flexible than usually thought. Of course, if a debt default is excusable or not is unobservable, which leads to a second observation: the harsher the haircut the less justifiable the restructuring becomes and the larger the costs of default. Cruces and Trebesch (2013) show in an ample base of haircuts that the larger the haircut the stronger markets punish

¹¹ The literature of sovereign debt is too large to reference here. Good summary references include Reinhart and Rogoff (2009), Abbas et al. (2019), Sturzenegger and Zettelmeyer (2007), Uribe and Schmitt-Grohé (2017).

¹² See Borensztein and Panizza (2009).

¹³ See Fuentes and Saravia (2010).

the country going forward (they find that each 20 points of additional haircut leads to a higher financing cost of 150 bps, which declines over time but exhibits substantial persistence).¹⁴ To make this long story short, we are saying that defaults impose a larger cost the more unjustifiable the default is. This is an important point because if the default is perceived as avoidable, the reputation effect may still be there regardless of the fact that the restructuring was voluntary.

The Cruces and Trebesch (2013) result is relevant because an area that has been less explored in the literature is the effect of restructurings on private sector wealth. There is of course, a literature on the impact of restructurings on output (see for example Sturzenegger and Zettelmeyer (2006)), but little on the value of private sector assets. Without attempting to fill this gap here, we can think of a quick back of the envelope estimate.

In order to do so we need an estimate of private wealth and an estimate of the impact of the restructuring on that valuation. One way to approximate this number would be to use the change in cost of capital resulting from the restructuring and assessing how that change affects the value of private sector wealth. The change in the cost of capital may be related to the change in government spreads before and after the restructuring. A simple growth model suggests that the equilibrium capital output ratio equals

$$\frac{\mathcal{K}}{\Upsilon} = \frac{\alpha}{r+\delta} \tag{1}$$

where \mathcal{K} is he capital stock, \mathcal{Y} is output, α the share of capital, r the interest rate, and δ the depreciation rate. The reader can play with the numbers he or she may think reasonable. But a change in the discount factor would depress the desired amount of capital in the economy. This decline is an underestimate of the short run reduction in value: if the stock of capital has to fall, then prices need to fall below their steady state value to induce the desired reduction in the stock of capital. As we will see, we do not need to compute the short run effect to make our point, we will find that the long run effect on its own turns to be much larger than any possible savings obtained in public debt.

4.2. Argentina

In August 2020 Argentina reached an agreement to restructure its debt. The process ended after a grueling, and at moments, nerve-breaking negotiation that pushed bond values into the low 20s.

A two-year recession had increased debt yields over time while Argentina implemented a sharp fiscal adjustment within the context of an IMF led program. However, the primary elections of August 2019 signaled that a new government would come in. The Peronists, that had won by a significant margin those primaries, had campaigned on the idea that debt was unsustainable and that something had to be done. Their success brought panic in the market that saw bond prices plunging.

When the new government finally came in office in mid December of 2019, there were a series of back and forth overtures. The government received a proposal from bondholders to extend maturities and provide interest rate deferral for 2020. Initially the government suggested it would go this way, but eventually shifted to a tougher stance.

After much discussion, and now with the COVID-19 crisis as background, on April 21st of 2020 Argentina filed with the SEC a first restructuring proposal, which, assuming a 10% exit yield, implied a value for the new debt of around 40 cents on the dollar. This haircut was not the result mainly from a reduction in capital (which was reduced 3% for longer term bonds, and up to 10% for shorter maturity bonds), but mostly by pushing payments

¹⁴ In a similar vein, Asonuma et al. (2014) find the result that restructurings that avoid a default are associated to lower output costs.

forward and reducing coupon rates. Prior to this offer, the government had remained current on all its dollar debt obligations as a way of conveying its willingness of reaching an amicable solution.

The deal also included a novel change in the application of collective action clauses.¹⁵ According to the proposal the government would choose which bonds to include in the restructuring ex-post. This would allow to apply supermajority collective action clauses even when the majority thresholds were not attained for the entire stock of debt entering the exchange.¹⁶ This implied that the government could restrict the bonds to be restructured to those in which the majority threshold was attained. After restructuring 100% of those bonds, it could offer a second exchange with slightly better conditions. As this would carry now the support of 100% of the previously restructured bonds, the majority thresholds would be more easily accessible, particularly if the government could, in a sequential manner, continue to choose the set of bonds so that the conditions were met. The government could thus advance in a series of successive steps restructuring bonds one or more at a time (hence the name of "Pacman" for this strategy).

The proposal was rejected by the bondholders, but the government decided to push ahead anyway. To strengthen its negotiation power during this period the government missed payments on several bonds, the first one the day after presenting the proposal, and therefore 30 days later was in default. The initial acceptance deadline was extended on the 8th of May, when it received a 13% acceptance rate. This low level of acceptance forced the government to sit in the negotiation table again, a process that required to extend the deadlines 5 times until a final agreement was reached.¹⁷

Finally, the government improved its offer to around 54 cents on the dollar (again valued at a 10% exit yield) by means of a smaller cut in capital for short term bonds, increasing coupons, paying PDI and imposing high participation thresholds that made the Pacman rules inconsequential. Still, however, average coupons would fall to about half.¹⁸

The final offer obtained a participation of 99% both in the local and foreign exchanges, thus triggering collective action clauses and allowing for an exchange without holdouts. ¹⁹ What is the assessment of this exchange? What kind of debt relief did it obtain? And then, what benefits or costs did it obtain as a result?

As explained in the previous section, to provide an answer we need to assess first how unsustainable Argentina's debt was. Table 4 gets us through the exercise by splitting Argentina's debt and providing a quick debt sustainability analysis. Starting from a total of 323 billion dollars in gross debt we net out intra-public sector debt, which the government owes to itself, and domestic debt in pesos.²⁰

Collective action clauses force the restructuring on all bondholders if a certain number of bondholders agree to a restructuring. While they were standard in London law bonds, they were not common in NY law bonds. NY courts, had a long tradition of not allowing changes in the payment terms of the bonds unless with unanimity, a doctrine that was presented as a way of avoiding any possibility of changing the relative seniority of bonds and equity in corporate bonds – a company could issue proxy bonds and use them to change the terms of payments in favor of equity holders. This doctrine had been extended to sovereign debt. After the Argentina default, collective action clauses became common in NY law sovereign debt. These clauses implied that once a certain number of bondholders on a specific bond agreed to a restructuring the changes applied to all holders of that bond. This strategy, however, did not provide safety against specific bondholders acquiring a large enough participation in specific bonds that allowed them to block the triggering of the collective action clause for that bond. The solution was the inclusion of "supermajority" clauses which stated that in a restructuring if a certain percentage of bondholders considering all series agreed to a restructuring, then it applied irrespective of the level of acceptance within each individual bond. It became customary to add traditional bond by bond clauses and supermajority clauses in debt covenants.

¹⁶ See Bolton et al. (2020a) and Gelpern et al. (2020) for a detailed explanation.

¹⁷ This initial offer was strongly criticized but may have been part of the negotiation strategy.

¹⁸ The government in parallel remained mostly performing on domestic currency debt, and rates eventually came down in that market. It also offered local law dollar debt the same terms as for international law debt. This improved the institutional strength for this market also bringing yields down.

¹⁹ One peculiarity of the (local) exchange was that it included a number of bonds that were only held by the Central Bank with face value of 13,800 million. By merging these bonds together with the general pool of the bonds it enables the Central Bank to use these bonds, as described by an investor, by "bleeding" them into the market for sterilization or exchange rate intervention. Thus, the exchange had implicit a sizable dilution of the original offer through a potential increase in the debt stock equivalent to about 15% of the restructured debt.

²⁰ Peso debt is being rescheduled at a rate of inflation +2%. As Argentina's GDP has grown around 2% during the last 40 years, this debt poses no sustainability issue. IMF (2020) provides a summary of these numbers.

Table 4. Argentina's Debt Sustainability

	"Nominal Value (In USD Bn)"	(as % of GDP)
Total Debt	323	80.75
Intra Public Sector Debt	117	29.25
Net Debt	206	51.5
Domestic Peso Debt	36	9
Total Foreign Currency Debt	170	42.5
Multilaterals	73	18.25
Total foreign currency private sector debt	97	24.25
Average interest rate on foreign currency debt		5.50%
Expected Growth Rate		4%
Required Primary Surplus		0.60%
2019 Primary Surplus		-0.40%

Note: Computation assumes GDP 400 bn

Dollar denominated debt carries an average interest rate of 5,5% and nominal GDP may grow 4% in dollars (2% for the average real growth Argentina has experienced over the last 20 years and 2% to take into account US inflation). With a GDP of 400 billion, the 170 billion of foreign currency debt mounts to 42.5% of GDP and requires a primary surplus of 0.6%. Considering that Argentina finished 2019 with a primary deficit of 0.4%, attaining sustainability did not appear an impossible feat. We can thus safely say that Argentina, while maybe liquidity constrained, did not face a solvency issue. This is relevant because, to the extent we accept this hypothesis, Argentina's restructuring appears to be better explained by unwillingness to pay rather than by need.

What was the benefit of the restructuring? Fig 12 shows the debt obligations (interest plus capital) before and after the restructuring. From these flows we can compute the haircut as well as the debt relief. The haircut measures the change in value when comparing the two cash flows at the exit yield.²² Debt relief computes the savings but at an "equilibrium rate" which is typically lower than the exit yield. Debt relief provides a measure of the reduction in the value of debt in normal times, and may be a better description of the true savings.²³ Using the exit yield of 11.5% the haircut in this restructuring was of 43%, whereas using the average spread since 2005 of 9,8% as an "equilibrium" the debt relief does not differ much at 37%.

²¹ The GDP estimation is controversial as it is unclear which FX should be used to convert the peso GDP to dollars. At any rate, the 400.000 billion represents a reasonable level. Q2 2020 GDP for Argentina was 310 billion at the official exchange rate.

See Sturzenegger and Zettelmeyer (2008) and Cruces and Trebesch (2013).

²³ See Sturzenegger and Zettelmeyer (2007). The concept of debt relief is typically smaller than the haircut and can even be negative if countries extend maturities at above equilibrium rates.

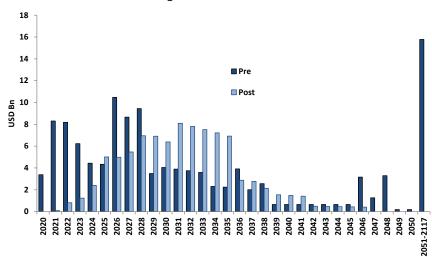


Figure 12. Argentina's 2020 Debt Restructuring

How could we evaluate the benefits and costs of this restructuring? One way to do so is to compare the savings of the restructuring with the costs to the private sector. The savings are pretty clear. With a haircut of 43% on 97 billion in debt, the reduction in NPV is 41.7 billion. While there are no official statistics, we may assume that roughly half of that decrease applies to residents holding Argentina's debt, so that the net benefit for residents is slightly above 20 billion.

What is the effect on the value of private wealth? As we mentioned one way to approximate this is to estimate the change in the capital output ratio. Using (2) and assuming an r of 8% and a depreciation rate of 8%, the capital output ratio is 1.875 for a share of capital of 30% and 3.125 if the share of capital is 50%. One rough estimator of the increase in the discount factor is to compare the spread in government debt before the primary elections and the exit yield of the restructuring. This change adds up to 2.23% (see Figure 13) which decreases the desired stock of capital output ratio to 1.64 in the first case and to 2.73 in the second case.

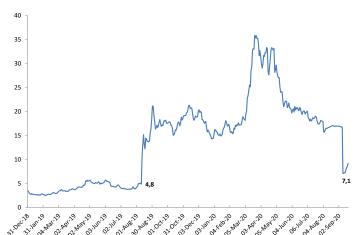


Figure 13. Argentina's Spread vs. Latam

In the case of Argentina with a GDP of 400.000 billion dollars, this entails a fall in desired long-term capital of between 94 billion and 157 billion depending on the capital share. As explained above this number is an underestimate of the short-term loss, indicating that the net gain from the debt restructuring most likely was negative.

²⁴ The r equal to 8% is an estimate that adds a 3% premia to sovereign spreads, likely an underestimation

Why do these numbers provide such a negative assessment of the cost-benefit of Argentina's restructuring? Basically, because the savings are small because the debt that was restructured was small and a large fraction was owned by residents themselves. In addition, the fact that the default was difficult to justify, implies that the credibility effect was large depleting the value of all of private wealth. In fact, Argentina has seen a collapse in its stock market throughout the year.

4.3. Ecuador

Ecuador followed a similar path to that of Argentina, though avoiding an explicit default. Ecuador's fiscal situation was somewhat more compromised than that of Argentina. An EFF for 4.2 billion agreed with the IMF in 2019 had gone off track and the deficit had remained relatively unwieldy. Market access was seriously compromised even prior to the COVID outbreak. Then in early 2020 Ecuador was affected by a double shock: the collapse in the price of oil, its main revenue source, and COVID which had hit Ecuador with particular strength in the initial weeks of 2020. As the situation deteriorated on April 13 the government issued a consent solicitation to delay around 811 million in payments through August, providing a time lapse sufficiently long, it hoped, to reach an agreement with creditors. The solicitation was quickly approved by an overwhelming majority of creditors.

There were several reasons for this support. First, that Ecuador had already done an adjustment in its fiscal accounts, moving its overall deficit from a peak of more than 8% in 2016 to around 3% in 2018 and 2019. Second, that Ecuador paid an amortization in early April, even in spite of the difficult short run scenario (at the same time announced it would use the 30 day margin for interest while it worked out a solution). This signaled the willingness of the government not to impose large haircuts on investors and to avoid a default. Thirdly, that debt to GDP stood at around 40%, thus implying that with an intelligent re-profiling debt could be serviced.

Of course, the fiscal situation deteriorated in 2020, and market access initially closed. In May the Fund granted, under the Rapid Financing Instrument, a 643 million loan, a sign that the IMF would provide a supportive environment for the economy going forward.

Eventually the negotiations continued and an agreement was reached in July with an overwhelming majority of creditors. This, however, did not occur without hiccups. In Contrarian Emerging Markets LP v. Republic of Ecuador a hedge fund sued the government in an attempt to block the proposal two days before the debt offer expired. The case was promptly dismissed by Judge Caproni of the Southern District of New and the proposal could move along.

Eligible bonds with an original face value of 17.4 billion were compressed in three bonds maturing in 2030, 2035 and 2040. Coupons suffered a reduction of about 42%, maturities were extended more than 10 years and capital was reduced about 9%. PDI was paid in the form of a 2030 bond issued separately. Figure 14 shows the cash flow of interest and capital before and after the restructuring. The debt relief was significant at 45% and given the high yields of Ecuador's debt at 11,9% (computed using the yields between 2004 and 2018) delivers a similar debt relief. Shortly after the agreement the Fund approved an EFF for 6.5 bn, in order to smooth the transition.

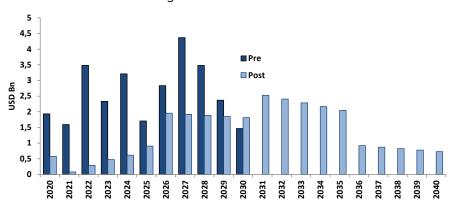


Figure 14. Ecuador's 2020 Debt Restructuring

How about our assessment of the cost and benefits of Ecuador's restructuring? Notice that the exit yield for Ecuador's debt restructuring, is actually below 11.9%, the average yield of Ecuador's debt between 2004 and 2018. If we use the same calculations as for Argentina, that is adding a 3% to the spread and using a 8% depreciation rate, the change from 11.9% to 11.5% actually reduces the discount factor, thus crowding in capital by somewhat less than 2 billion if the capital share is .3, and about 3 billion if the capital share is .5. In short, to the extent that yields did not change, neither does the valuation of private capital. The 45% debt reduction on 17.4 billion in debt adds close to 8 billion to the gain.

Of course, this computation is arbitrary. In the second half of 2019 the yield on Ecuador's debt had been 9%, so that the 11.5% exit yield again shows, relative to that rate a large increase. If using this 2.5% increase the fall in the desired capital stock ranges between 16 or 27 billion depending on the capital share.

In summary, the impact of a deterioration in the financing conditions and risk assessment on the private sector is likely to have a larger effect than the savings obtained through the debt renegotiation, though in the case of Ecuador, as argued, it may be difficult to conclude if this cost existed or not.

4.3.1. An Assessment

The cases of Argentina and Ecuador allow several conclusions. First, that it is feasible to restructure the terms of the bonds, thus showing that the collective action clause mechanism served its purpose. While the mechanism had already been used in several smaller restructurings within the region, these cases show that they could be used for larger debt stocks as well. In this dimension, the experiences can be deemed very successful.

Second, the Argentina case shows that a restructuring is feasible even under a situation of non-distress. Of course supermajority thresholds have to be reached, but the fact that they were (handsomely) reached in these restructurings poses the question of whether debt restructurings will become a more common occurrence in the future, and what kind of punishment the market may have to impose ex-ante on the possibility of "unjustifiable" debt exchanges. If this implies a new risk for sovereign debt going forward remains to be seen. If it does, it may put the asset class in a tailspin: more ex-ante risk, implies a higher cost, and the higher cost implies that there is a larger incentive to restructure later on, and so on ...

Third, that it is not clear that the debt restructurings entailed a net benefit for the countries when taking into account the impact on resident's wealth. As already discussed in the literature, the negative effect of a restructuring is directly related with how "excusable" the default is. The case of Argentina provides an example of how a large haircut obtained in public debt may come at the price of a larger cost in terms of private wealth. To the extent that total wealth of residents is the objective there is not a clear case for debt restructurings. This result, in the case of Argentina, is compounded by the fact that the amount of restructured debt was relatively small relative to GDP, which naturally reduces the size of the benefit.

In the case of Ecuador, it is more difficult to precise if there was an increase in discount factors as a result of the debt restructuring. To the extent that there was, that cost is likely to be larger than the savings on debt, as debt to GDP to be restructured did not reach 20% of GDP.

Fourth, and on a smaller note, the attempt of Argentina to overrule the collective action clauses will probably lead to an improvement in their writing in the future, precluding the use of the Pacman approach, further strengthening the mechanisms for sovereign debt restructurings.

In all, the analysis suggests that while restructurings are feasible, perhaps even more than initially perceived, they are not cost free, and due to their impact on private sector wealth they are not so easily justified, even when haircuts are large and participation rates very significant as in the two cases discussed here.

5. Policy Options

The above analysis allows some preliminary conclusions:

- 1. Countries have used sovereign debt financing increasingly in recent years and have continued to do so this year.
- 2. After an initial retrenchment in early 2020 debt flows have remained available to Latam countries.
- 3. Debt sustainability does not seem to have been a problem coming into the crisis. It seems it will neither be a problem coming out of it.
- 4. Argentina and Ecuador show that standstills and debt relief are feasible, even in situations of questionable distress.
- 5. While debt restructurings are feasible, if difficult to argue that they provide benefits that are larger than the costs.

With these facts in mind it is difficult to see the need for a major upheaval of financial markets in the form of a general preemptive restructurings or outright defaults, less so the need for a change in international financial architecture.

Recent proposals for changes in debt contracts appeared early on when the uncertainties associated both to the outbreak and the availability of capital were at its height. As these uncertainties quelled so did the calls for deep reform.

But this does not mean that there are no lessons or policy implications. In what follows we try to review some of the proposals that have been discussed this year and add a few thoughts of our own

5.1. Official Lending

It is a historical fact that during upheavals official debt increases, compensating the possible retreat of private debt (see Horn et al. (2020)). Thus, it was predictable that in the context of COVID-19, multilateral financial institutions increased their support. The IMF stepped up the use of the Rapid Credit Facility, the Rapid Financing Instrument, the Flexible Credit line and the Catastrophe Containment and Relief Trust (though from this last one only Haiti was a beneficiary in the region). By September the amount granted in the region had summed up to 50 billion; however, this support was less than 1% of the region's GDP. The IADB increased the support via the Contingent Credit Facility for Natural Disaster Emergencies with a cap on the smaller of 100 million or 1% of GDP. In either case the scope of official lending appears limited.

In April G20 countries agreed to a temporary debt service standstill on bilateral official loan repayments from a group of 76 of the poorest countries (the so-called IDA countries plus Angola). Yet, Gulati (2020) estimates that this standstill was equivalent to 2% of the potential financing shortfall of low and middle income countries in 2020.

These solutions, while well intended, appear difficult to scale up on short notice, and official lenders don't have the muscle to compensate private capital flow swings. This is the reason why the discussion shifted to a discussion of potential improvements that may allow to provide better insurance quickly and encompassing both public and private creditors.

5.2. Property Rights

During a health crisis such as that of this year, the economy moves to a "hibernation" state where you cannot produce and you cannot or don't want to consume.²⁵ It's as if the economy chooses not to operate or to do so at a reduced scale during this period. Lockdowns are the way this choice is implemented. But lockdowns, because they focus on the health of workers, typically define quite well the constraints to the use of labor, while a much fuzzier approach is taken relative to the use of capital. In other words, labor may enter a standstill forced by regulation while capital obligations, including debt payments, remain undefined.

In that context there is a discussion to be had on how to handle payments to capital during lockdowns. For example, if the state does not allow a worker to go to work, why does it at the same time allow its landowner to charge him his rent? It appears that the lockdown for the worker should somehow correlate with the lockdown in some of the obligations this worker has. Of course, this is difficult to implement because not all workers are affected the same way but does not mean the issue should not be addressed ex-ante. It seems natural that a correlation should be established between the restrictions imposed by the lockdowns on certain players and the obligations of those players with other parties. This appears both an uncomfortable and necessary discussion to be had in anticipation of future events.

Applied to a country, the analogy is clearer and the implementation perhaps more straightforward. If a country is quarantined it makes sense to quarantine the debt payments that were to be funded with the GDP that is no longer produced. But this is the standstill proposal to which we now turn.

5.3. Standstills

Early in the year a distinguished set of colleagues argued in what was later referred to as the "Bolton proposal" that a standstill in debt payments was called for by the severity of the crisis. ²⁶ The pledge was motivated by the fear that countries may be caught in the need to divert payment from health to interest. At the time of the proposal, as mentioned above, official bilateral debt to poor countries was granted a standstill for the year, thus providing an initial coordinated signal in this direction.

Yet this idea cannot be arbitrarily implemented, nor can it be expected that the market will graciously provide such relief (in fact in Ecuador the market allowed for a standstill but the final agreement acknowledged the PDI for this period). Gelpern et al. (2020), Bolton et al. (2020a) and Bolton et al. (2020b) propose an alternative. In a nutshell their proposal is to set aside the payment of interest so that it can be used for pandemic related spending. To avoid any opportunistic behavior this spending would be supervised by international organizations. This proposal, however, lost traction over the following months as the COVID-19 outbreak did not develop the explosive characteristics that initial SIR models predicted.

The proposal simply translated to the scope of sovereign debt, a policy that is quite common in other settings. Standstills are common in banking and tax regulation. They are used, for example, when a state or region is deemed a "disaster area". Typically, banking regulation puts a stay on contractual arrangements such as credit provisioning and interest payments. Classifying a certain area as a "disaster area" also entails stays in tax payments and produces automatically a deferral of deadlines. So when a trustworthy body can be found to establish when this "disaster" situation occurs, a similar approach could be included in sovereign debt.

²⁵ See, for example, Sturzenegger et al. (2020).

²⁶ See Bolton et al. (2020b).

On a cautionary note, Hatchondo et al. (2020) make the point that if shocks are large enough standstills are improved upon by a transaction that includes some debt relief. The reason a restructuring increases the value for all parties is because as debt becomes more difficult to pay (and the standstill just pushes the problem forward) the risk of default increases. Beyond a certain debt threshold a haircut that makes debt sustainable is better for all, very much as when a private company restructures its debt to recover profitability. This is the point also made by Guzman et al. (2016): if debt restructurings do not guarantee sustainability, they do not help solve the issue at hand. If shocks are small, on the other hand, the benefits of the standstill are small as well and countries may prefer to avoid any re-profiling.

This leaves relatively little room for implementation of standstills as they appear to be dominated by inaction if the shock is not too large, and by restructuring if the shock is large enough.

Still this does not mean that clauses aimed at taking into account this type of phenomena should not be considered. Pre-arranging for a standstill in the face of catastrophic events could be included in future bond covenants to the extent that a neutral organization or objective indicator can be found to trigger the clause. For example, allowing debt to be postponed or rolled over at a low interest rate if world growth is less than a given threshold can be easily included in future lending agreements. Multilateral financial institutions should spearhead this effort, perhaps including them in their own covenants a version of contingent debt to which we now turn.

5.4. Contingent Debt

It seems all too natural to issue debt that is contingent on some risk factors or some specific outcomes. A clause producing a standstill in the case of a pandemia, a natural disaster, a world recession, or a spike in the VIX index could be examples of this.

Contingent debt has been extensively analyzed in academic and policy circles. They are classified in those in which interest and/or principal is tied to a given event (linkers), those where the size of the payments is tied to certain events (floaters) and those that delay maturity upon the triggering of certain events (extendibles). (See IMF (2017) for a review).²⁷

While the idea makes perfect sense, so far they have not gained much traction for several reasons: a) first because contingent payment entails the valuation of an "insurance" premia in the bonds which markets find difficult to price so end up charging a high price; contingent debt can be expensive²⁸; b) some of the contingent clauses are subject to important moral hazard problems, not only in terms of policy (you may change policies to force the triggering of the clause) or in data manipulation as when Argentina allegedly manipulated its growth data for 2013 to avoid paying its GDP indexed bond. c) It provides an improvement only if investors can diversify their risk cheaper than a sovereign can, an assumption that we would be hard pressed to think holds regularly. It may occur in the face of very idiosyncratic shocks but not necessarily if these are strongly correlated with global shocks.

Mitigation for some of these problems can be thought out. For example Gelpern et al. (2020) proposes the challenging idea of using a UN Security Council Resolution, under Chapter VII of the UN Charter, as "used in 2003 to temporary shield Iraq's assets from creditors, bolstered by domestic legal measures in the United States and the United Kingdom" as an exogenous trigger to avoid moral hazard issues.

Buchheit and Gulati (2020) suggest a COVID-codicil, that is, to introduce a series of rules for which collective

²⁷ The debt standstill discussed in the previous subsection is an example of a linker, where payments depend on the triggering of a specific event.

In some cases the remedy may be worse than what it was supposed to fix. An example is Argentina's F(loating)RAN bond, issued in the 1990s and that had a payment tied to country risk. When a few years later Argentina defaulted this bond started accruing rates of around 50% yearly, so that a 300 million initial offering ended up costing 6 billion dollars a few years later.

action clauses are facilitated (i.e. require smaller majorities) within very specific events, a very clear time frame and the participation of a third party such as the IMF.

While from a conceptual point of view the framework is clear, so far markets seem to prefer splitting risks in instruments that focus on one specific risk, so that the bundling in one instrument remains challenging and taxing.

Many legal frameworks include the concept of "force majeur", an unexpected change in the conditions under which a contract has been signed, allowing for change. While some authors have suggested the use of "force majeur", we believe its use in sovereign debt would generate too much uncertainty and is unlikely to stand in court, particularly when most countries remain current on their payments. Thus, this approach should be discarded in favor of trying to build contractual clauses that specify the type of events and risks to be covered.

5.5. Debt Buybacks

Stiglitz and Rashid (2020) have suggested the possibility of debt buybacks as a way of reducing debt burdens. ²⁹ This approach can be thought as a specific form of debt restructuring: one where the compensation to creditors is cash. ³⁰ One common critique to this approach is that the debt buyback would push the price of debt upwards becoming self-defeating, but the same is true of any restructuring and yet sizable haircuts have been obtained. In our view, this appears not to be a strong criticism.

But regardless of the cost-benefit of pushing for a large haircut that we discussed above, the problem with this proposal is the availability of funds to do such buybacks. The fact that debt restructurings typically issue debt at below market rates, implies that cancelling debt with cash really provides no distinctive benefit to the debtor, and has thus been less used in recent times, except perhaps as "sweateners" in some debt deals.

5.6. Maturity of Debt

Up to the late XIXth century most of sovereign debt was issued in the form of consols, i.e. perpetuities that could be repurchased at par at any time. When the gold standard was abandoned these instruments were discontinued: shorter maturities acted as a commitment mechanism for better fiscal behavior, particularly to avoid the possibility of the governments defaulting on the principal through higher than expected inflation.

Inflation adjusted bonds would allow to recreate the structure of the traditional consols. What advantage would this financing strategy have? We see a few. First, a perpetuity would provide an optimal allocation of debt burden across generations as would be suggested in any optimal planning setup. The structure of consols also reduces the risk of debt events because it avoids the need of abrupt changes in financing requirements. For example, the steep step up in the coupon payments of the recent Argentine restructuring leads to abrupt changes in the financing needs that generates additional risk. Finally, the lack of rollovers also reduces the risks of the debt itself and the vulnerability of a withdrawal of funding. Thus, while a consol structure would not provide the kind of insurance effects that we discussed above it would reduce distress.

With the risk of inflation out of the way with inflation indexed bonds, why are these bonds not used? One simple answer is cost. As maturities extend a positively sloped yield curve means that long term financing is more expensive than short term debt and there is no longer debt than consols! As we mentioned above the upward sloping yield curve derives from commitment and dilution problems associated to long term debt.

²⁹ The canonical paper is Krugman (1988) who first proposed the idea that debt relief can be beneficial for both parties.

³⁰ In the 80s some debt buybacks were also made in exchange for equity of state owned enterprises.

However, we would like to argue that the consol framework could lead to a more optimal level of debt. The reason for this is that short term debt actually distorts the perception of the cost of debt by reducing it. Shafir et al. (1997) show that when faced with two streams of income, one that is larger in real value but lower in nominal value, people tend to get confused and choose the payment which has larger nominal streams. Applied to debt this implies that the perceived cost of long-term debt is larger than that of short term debt, even if in present value long term debt may be cheaper. For example, when comparing a debt that pays a 5% interest rate for 10 years with a 100 year bond that pays 4% for 100 years, Shafir, Diamond and Tversky results suggests that people would choose the 5% interest rate bond which has total payments of 150 vs a payment of 500 in the century bond. Yet the century bond is cheaper.

Thus, the use of short-term debt "biases" the perception on the costs of debt to the downside, a bias that is larger the shorter the maturity of the debt. The use of perpetuities changes the perception of the cost of debt, and would, arguably lead to much lower use of debt. Lower levels of debt, in turn, would provide a stronger position to use debt at moments of distress.

In the 1990s the asset class of sovereign debt developed as a "creation" nudged into existence by the support of the US treasury that guaranteed the capital of Brady Bonds. In the same vein long term consols could become a new innovation that can be explored, why not, in multilateral debt.

5.7. Summing Up

Back in 2000, in the face of substantial debt defaults, there was a large debate on whether a concerted multilateral or multinational mechanism should be implemented to deal with sovereign debt distress. On the other side of the aisle was the contractual view, the idea that contracts could contain a number of clauses that would allow the required flexibility for successful restructurings. The contractual view carried the day and has allowed for sovereign debt markets to grow in strength over the years, while allowing for occasional debt restructurings.

2020 put this framework to test. For starters, the market continued to function relatively normally, and financing remained open and available. At the same time, several restructurings were completed successfully. In fact, if anything, we could say that the framework allowed restructurings even when sustainability was not obviously at stake.

This relative success, however, does not mean that the system cannot be improved upon. First of all, a discussion of property rights upon disruptive events such as those experienced this year is well justified. If an economy suffers a mayor upheaval, there is a discussion to be had on what contracts and property rights should be enforced and which should be paused, debt among others. The COVID-19 crisis showed this was an issue we were utterly unprepared for. Including covenants identifying catastrophic events under which payment may become contingent or delayed, exploring the role of multilaterals providing independent identification of these events, and exploring longer term maturities as a way of reducing risks at moments of distress or correcting the underestimation bias produced by short term debt are possible avenues that remain open for exploration.

What is clear is that sovereign debt is well an alive, and while always subject to improvement, it has done the job quite well.

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Policy Responses to the Pandemic for COVID-19 in Latin America and the Caribbean: The Use of Cash Transfer Programs and Social Protection Information Systems

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Abstract

The COVID-19 pandemic has made evident the unfulfilled promise of social protection in Latin America and the Caribbean (LAC). Governments in LAC have used cash transfer programs (CTPs) to cushion the social and economic effects of the pandemic. In this document we describe how these programs have served as a vehicle to reach vulnerable populations. We show that LAC countries have used their existing social protection information systems to reach new populations, as well as to deliver cash benefits. Governments' responses were conditioned by the programs' current coverage and the registries' interoperability with other sources of information. Specifically, we analyze the responses to the pandemic distinguishing the ways in which countries innovated with their programs, along with the benefits' coverage and size. Additionally, we study social information systems: reviewing the characteristics of both social registries and single beneficiary registries (existence, coverage, and interoperability).

We found that 64 CTPs were used in the region (in 24 out of 33 countries), 37 of which were emergency bonuses (implemented in 21 countries). However, more than half of the interventions were directed at a small proportion of the population (directly benefiting less than 10% of it) and consisted of total additional benefits lower than a minimum monthly wage. We show that most CTPs in response to the pandemic used pre-existing information, both to register and select the beneficiaries (81% of the programs) and to route the payments (73%).

Based on this analysis, we suggest three tasks for the coming years: to consolidate social protection information systems, to foster the use of this information for the design, implementation and evaluation of public interventions, and to rethink the role of CTPs as part of social protection systems.

1. Introduction

The COVID-19 pandemic has made evident the unfulfilled promise of social protection in Latin America and the Caribbean (LAC).¹ In this region, the right to health is not secured for everyone, many households' income is especially vulnerable to a decline in economic activity, and losing a formal job means an immediate loss of income and contributory social security benefits. In this context, LAC governments have responded to the pandemic with interventions that seek to reduce its economic and social effects, particularly on people living in poverty or who have seen their income drop (Lustig et al., 2020). Some interventions are social benefits activated in case of an unforeseen event (such as illness, or the loss of a job), that depend on contributory payments and membership to a social security institution: for example, unemployment insurance. Others have consisted of measures for people to keep their jobs – such as wage subsidies, reductions on social security contributions, or loans to businesses. Finally, the most frequent intervention has been the use of existing or new cash transfer programs (CTPs) to reach the most vulnerable or unprotected population, which are seldom covered by contributory social security schemes (Rubio et al., 2020).

Although the benefits and impact of CTPs are not equivalent to those of social protection systems, they are instruments already in place in these countries. Through them, it was possible to reach the population almost immediately, addressing one of the most generalized consequences of the pandemic: loss of income. While these programs have been devised as secondary to securing social protection, the large number of workers in the informal economy of the region (53%) has made CTPs a type of intervention frequently used by governments (Cecchini et al., 2015). More importantly, these programs already had information systems and channels to deliver payments, with which governments were able to reach and deliver social benefits to a especially vulnerable sector of the population. At the same time, these virtues reveal the main shortcoming of CTPs: they exclude informal workers who were not living in poverty, or those who had a formal job but lost it during the pandemic.

The extent to which governments have used CTPs has depended on their political preferences and their fiscal capacity. Nevertheless, the scope of these measures has also depended on governments' capacity to identify populations and deliver social benefits. This capacity is associated with the information they have about people. In this document, we analyze how CTPs have been used to address the COVID-19 pandemic's economic and social consequences. Specifically, we focus on how governments created or adapted this type of programs, as well as on how they used social protection information systems for those purposes.

We argue that, although the effectiveness of these interventions to compensate for people's income drop is determined by each program's design attributes (e.g., payments' amount, frequency of delivery, and coverage), they are predetermined by governments' capacity for identifying the population in need. We explain how existing CTPs served as a vehicle to identify and provide social benefits to the most vulnerable population, with greater or lesser success depending on these programs' coverage prior to the pandemic and on their records' interoperability with other sources of existing information.

We found that 24 out of 33 countries innovated in their CTPs with new programs (emergency bonuses), vertical expansions (increasing social benefits' size), horizontal expansions (incorporating new beneficiaries into existing programs), or adaptations (bringing forward payments or changing its modality). Creating new programs was the most frequent type of intervention: 21 countries implemented 37 new emergency bonuses (57 percent of innovations). For countries with available information, we found that more than half of their interventions were directed at a small proportion of the population (directly benefiting less than 10% of it) and consisted of additional total benefits lower than a monthly minimum wage. Finally, the analysis shows that most of the CTPs

¹ Social protection implies guaranteeing welfare for everyone. Sometimes, this occurs through contributory social security –with programs usually tied to employment– and, other times, through social assistance —with non-contributory and generally targeted programs— (United Nations, 2018).

that respond to the pandemic also used existing information, both to register and select the beneficiaries (81% of the programs) and to route the payments (73%).

In the next section, we explain social protection information systems and their main attributes. Then, we describe the different scenarios that people faced to get access to extraordinary cash benefits by their governments, according to the pandemic's impact on their income and the social protection regime to which they belong given their employment status. After that, we explain our methodology for analyzing how governments used CTPs and information systems during the pandemic. Later, we show the results of this analysis, distinguishing the ways in which countries innovated with their programs, the coverage and size of the benefits provided and the quality of their social protection information systems. Finally, we summarize the findings and suggest three agendas to consolidate the role of CTPs and social information systems as part of social protection systems in LAC.

Social protection information systems

The decline in households' income caused by the pandemic has resulted in the deployment of different policy instruments, particularly CTPs, by governments around the world (ECLAC, 2020a; Gentilini et al., 2020; Rubio et al., 2020). Their effectiveness in counteracting the consequences on households, however, has varied among countries. Even if there were economic resources and political will to support the population, the implementation of this type of programs requires extensive administrative capacity, which is different in each case (López-Calva, 2020).

The administrative capacity is largely determined by governments' ability for identifying and providing benefits to the population in need (Lodge & Wegrich, 2014; Wu et al., 2015). Therefore, social protection information systems have the potential to become powerful platforms for inclusion (Leite et al., 2017). This is especially true in countries where social benefits are provided by different sources, and not predominantly by an integrated social protection system. In these cases, information systems can help in responding more efficiently –by reducing administrative burdens for both citizens and bureaucracies— and more effectively –to reach the people to which they are seeking to provide social benefits—.

When the provision of social benefits is fragmented, it is the citizens who –carrying out administrative procedures with different agencies— end up bearing the costs (of time and money) (Moynihan & Herd, 2010; Peeters & Nieto 2020; Chudnovsky & Peeters, 2019). But updated information systems also allow bureaucracies to make processes more efficient: they facilitate the task of identifying the target population by having information about people's socioeconomic characteristics, from which they can determine who is eligible to each social benefit and where they are located (Leite et al., 2017) (see Box 1).

Box 1. What are social protection information systems?

Social protection information systems are usually comprised of several sources of information: registries of contributory social security institutes, social registries —socioeconomic information on potential beneficiaries from social assistance programs—, and single beneficiary registries—information on those who are benefited by social programs (Beazley et al., 2019; Lindert et al., 2020)—.

The more integrated the systems are, the better they will be at facilitating the provision of a wide range of goods and services to target populations. Integrated social protection information systems are more than a list of (potential) beneficiaries; they are registries that articulate three different processes: identification, intake and registry of possible beneficiaries, and assessment of needs and conditions to determine their eligibility.

When these systems work, agencies responsible for social programs can make decisions about people's eligibility, provide benefits to them, and know how their socioeconomic conditions are evolving (Leite et al., 2017). Although it is difficult to have information in real time, these systems tend to be updated with single beneficiary registries, which keep records of the population that receives social programs (Barca, 2017; Chirchir & Farooq, 2016).

A good information system is usually comprised of social registries, (single)² beneficiary registries of social assistance programs, and administrative registries of contributory social security and health services. Social registries must have mechanisms to intake and assess the needs of potential beneficiaries to social assistance programs (Barca, 2017; Beazley et al., 2019; Chirchir & Farooq, 2016). There are two types of social registries (Leite et al., 2017; Lindert et al., 2020): those used by governments to actively gather information on the living conditions of households or individuals, through censuses or targeted searches in territories with greater poverty; and those that operate on demand, when people who require social assistance provide information to be registered with the possibility of being beneficiaries in the future. Most LAC countries have a combination of both.

Single beneficiary registries, which systematize information about people who already receive (at least) one social program (Barca, 2018; Chirchir & Farooq, 2016), allow governments to identify which people receive social programs and enable coordination among various programs that seek to reach the same person and avoid duplication. They also have information on payment methods (which can be used by other programs), thereby reducing administrative burdens for both government and individuals. When they are interoperable with social registries, single beneficiary registries can better track people's social needs.

Social registries and single beneficiary registries may also have interoperability with other non-social registries or administrative records (Chirchir & Farooq, 2016; Lindert et al., 2020). They may be interoperable with single identification systems (identity cards), to identify individuals within a given population. They may also be interoperable with other administrative registries such as social security tax or civil records, which helps to avoid program's duplications and to detect people that, given the changes in their income, have become eligible for social assistance. Finally, there could be interoperability with information collected through population censuses and surveys, which would enable the systematization of information about the conditions of specific territories and, during an emergency, complement the assessments made from social registries or single beneficiary registries. Of course, interoperability does not guarantee updating information in real time and, therefore, it does not guarantee timely responses.

To be useful, information systems must have complete and updated information, with good coverage and mechanisms for validating and updating the information (Barca & O'Brien, 2017; Beazley et al., 2019). Similarly, it is important to know how this information is used: how many programs or institutions use or report into the system, as well as whether the information is mandatory or optional when designing and implementing social programs.

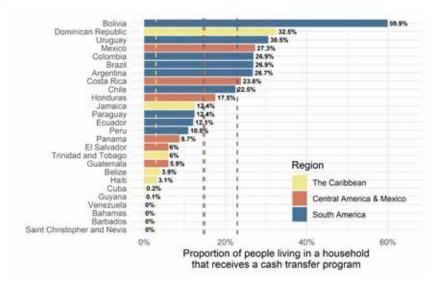
The fragmentation of social protection systems in LAC implies that people's social information is dispersed: for some people, their information is kept in contributory social security institutions' registries and, for others, the information regarding their social conditions is available in the records of one or many non-contributory programs. In these cases, the need for coordination and exchange of information between government agencies and levels of government is essential to provide social benefits. In these cases, governments face greater difficulties when obtaining the specific socioeconomic characteristics of the general population: particularly when, due to a crisis, workers migrate from one system to another. Even in countries with (non-contributory) health systems that, for their operation, have registries of a vast proportion of its population, such as Colombia, Ecuador, Mexico or Peru, their usefulness for targeting new social benefits will depend on governments' capacity to link such registries to other sources of information. The more fragmented the provision of social benefits, the greater the need for the information systems to be integrated.

² As mentioned by Leite et al. (2017), the literature on social protection information systems often uses interchangeably the terms single, unique, unified and integrated to talk about information systematization processes that are a common gateway for multiple programs or a collection of standardized information in the same database.

People's experiences in fragmented social protection systems

In LAC countries, social protection is mainly guaranteed through a contributory social security system while others rely on non-contributory programs (universal and targeted), including CTPs. Although the number of these programs has significantly increased in the region, the importance they have as a component of social protection regimes varies among countries (see Graph 1).

Graph 1. Percentage of people in Latin American and Caribbean countries living in a household that receives a cash transfer program, 2017–2018



Note 1 (calculations): this calculation is the sum of the percentage of people living in a household that receives a national conditional transfer program, as well as the percentage of people receiving a non-contributory social pension.

Note 2 (visualization): dotted lines indicate subregional averages (in colors) and overall (gray).

Note 3 (dates): in general, the reporting year for the countries is the most up-to-date information for 2017 or 2018; however, in the case of Barbados and Bermuda is 2014; for Saint Kitts and Nevis and Saint Vincent and the Grenadines is 2015; of the Bahamas, El Salvador (Apoyo a Comunidades Solidarias), Ecuador (Bono Joaquín Gallegos Lara y Complemento del Bono de Desarrollo Humano) and Venezuela is 2016. The information for Mexico is from 2019 and for Costa Rica (Crecemos) is from 2020 because these countries have recently created programs.

Source: authors' elaboration with data from ECLAC (2020b y 2020c).

These differences are relevant to understand the relative importance of each of the sources that make up the social protection information systems in LAC countries. For those with contributory social security systems with broad coverage, the importance of CTPs' (single) beneficiary registries, for example, will be less than that of the contributory social security registries. Because contributory social security is tied to employment, in these cases governments could find out relatively quickly who has lost their job or who has had a reduction in their salary: both scenarios must be registered in the system of social security so employers stop paying their contributions. In contrast, when contributory social security coverage is narrow, guaranteeing social protection depends mainly on non-contributory social programs. When the latter have broad coverage, the relative importance of the single beneficiary registries, for example, will be greater than that of the registries of contributory social security institutions.

Providing social protection requires governments with instruments capable not only to identify and deliver social benefits to the population they already have registered, but to react to changes in their working conditions, formality, and income. This provision demands for clear and efficient intake and registration processes, that allow for updating persons or households' socioeconomic information. Reaction to changes in socioeconomic conditions is even more important in an emergency, when these changes occur for a vast number of people, almost simultaneously.

The COVID-19 pandemic has triggered changes in socioeconomic conditions for many people (see Table 1). There are, for example, people who had a formal job and access to contributory social security and that, due to the crisis, lost their employment, (most or all of their) income and social security benefits. There are also those whose informal job allowed them to generate a certain level of income enough for being excluded from social assistance, but that lost their job and income with the pandemic, and lack social benefits —whom López-Calva (2020) refers to as the missing middle—. For those in these two groups, having social protection depends on governments' capacity and flexibility to identify and incorporate them, since they are not automatically covered by a CTP. Third, there are people who were not covered neither by contributory social security nor by social assistance programs and who before and after the pandemic would need to be targeted by a public intervention—the hidden poor in terms of López-Calva (2020)—. Finally, there are people who did not have social protection, but whose living conditions do not depend, before or after the pandemic, directly on public interventions. Along with this group, there are people who already had contributory social security or social assistance and that, after the pandemic's impact, maintain the same living conditions: either they are still entitled to contributory social security benefits because they keep their jobs or they continue receiving the benefits of a social program because their socioeconomic characteristics have not changed.

Table 1. Population and different experiences before COVID-19

Social protection of people before COVID-19	Population without income change due to COVID-19	Population with income decreased due to COVID-19			
	Population before COVID-19	Population in poverty before COVID-19	Non-poor population before COVID-19		
With contributory social security coverage	They maintain their formal employment and contributory social security benefits	They lose their formal employment and social security benefits. Their level of poverty or vulnerability is worsened	They lose formal employment and social security benefits. They can fall into poverty or vulnerability due to the pandemic		
Without contributory social security coverage, but with social assistance coverage	They maintain their informal employment. They continue to receive social assistance	They lose their informal employment. They continue to receive social assistance. Their level of poverty or vulnerability is worsened	They lose their informal employment. They continue to receive social assistance. They can fall into poverty or vulnerability due to the pandemic		
Without contributory social security or social assistance coverage, but identified in the social registry	They maintain their informal employment. They do not benefit from social assistance programs	They lose their informal employment. They lack social protection, and the level of poverty or vulnerability is worsened. Easily identifiable to receive social assistance	They lose their informal employment. They lack social protection and may fall into poverty due to the pandemic. Easily identifiable to receive social assistance (missing middle)		
Without contributory social security or social assistance coverage and without being identified in the social registry	They maintain their informal employment. They do not benefit from social assistance programs (includes the hidden poor)	They lose their informal employment. They do not benefit from social assistance programs. Their level of poverty or vulnerability is accentuated (hidden poor in worse conditions)	They lose their informal employment. They do not benefit from social assistance programs. May fall into poverty or vulnerability to the pandemic (missing middle)		

Source: authors' elaboration based on López-Calva (2020).

In the following pages, we analyze how LAC countries responded through CTPs to the COVID-19 pandemic. We also explain the use they made of their social protection information systems to reach and provide benefits to the population.

Methodology

The purpose of this analysis is to explain how countries have been able to respond to the COVID-19 pandemic in terms of social protection. We focus on CTPs and on the social information systems they have used to identify and deliver social benefits to the population. For that purpose, we analyze the responses made by LAC countries and the specific characteristics of the social information systems of each country to see how they shaped policy responses.

The first section, regarding the CTPs implemented during the pandemic, is based on previous work that systematized these responses (Blofield et al., 2020; ECLAC, 2020a; Gentilini et al., 2020; Rubio et al., 2020) and the review of governments' websites, information provided by the authorities through social media, and press releases.³ The analysis focuses on the use of CTPs (conditional or unconditional), particularly on programs that are new or that modified some design attribute in response to the pandemic. So, we excluded already existing unmodified programs, as we assume that they were not used by governments as vehicles to serve the population affected by the pandemic.⁴ Likewise, we excluded responses that required affiliation to a contributory social security system, those that –instead of delivering money or vouchers– delivered goods or food, or that guaranteed basic infrastructure services, as well as those granting credits or subsidies in order to preserve employment or prevent businesses from closing.

To determine the different ways in which these programs were modified to respond to the pandemic, we categorized them based on the typology of social policy responses in emergency contexts developed by Oxford Policy Management (2015) (see Table 2).

Table 2. Categorization of innovative responses to the pandemic

Variable	Definition	Categories
Innovation	Innovative attribute of the CTPs	 New program: intervention designed in response to the pandemic Vertical expansion: increasing the payments' size to all or some beneficiaries Horizontal expansion: increasing coverage Adaptation: CTPs' payments brought forward or changes in the delivery mechanism⁵
Information to identify and register	Use of existing information to select beneficiaries	v. 6
Information to provide benefits	Use of existing information of payment methods to deliver the transfer	- Yes ⁶ - No

Source: authors' elaboration.

Then, for the analysis of these countries' social protection information systems, we use the analytical categories defined by Barca & O'Brien (2017) and Lindert et al. (2020): a) existence of a social registry, along with population coverage rates; b) existence of a single beneficiary registry; and c) interoperability with other information systems.⁷

³ The characteristics of the studied programs are those reported by each country.

⁴ The complete compilation of the programs and information systems —along with their code— is available at the online repository (qithub.com/pCobosAlcala/CashTransfers_COVID19).

⁵ We do not consider as adaptation the decision in some existing programs to suspend the conditionality of transfers to school attendance, since it was due to the closure of educational centers (Blofield et al., 2020).

⁶ As some programs had mixed approaches, that is, they used existing information while establishing new mechanisms to gather new information, the categories can be understood in the following dichotomous way: programs that at some point used existing information or programs in which the entire selection or payment methods was completely new.

⁷ The data collected corresponds to what is reported by the countries themselves in public documents or on their social information platforms.

Once policy responses and their respective information systems are analyzed, we compare them in order to identify both the alternatives and the limitations that each country had when designing and implementing their CTPs during the emergency.

Cash transfers as an instrument against the pandemic

To reduce the chain of contagion, LAC countries established measures to restrict mobility in public, work, or educational spaces. This decision implied a significant reduction in economic activity, which affected people's income. To offset this effect and secure basic living conditions, governments implemented various policy responses: new programs, vertical expansions, horizontal expansions, and adaptations (see Table 3).

Given the limited coverage of the contributory social security systems in most countries of the region,⁸ CTPs were the best available option to reach people. By early August 2020 (five months after the first cases were detected in the region), 24 out of 33 LAC countries had used 64 CTPs to respond to the COVID-19 pandemic.⁹ However, the number of programs is not the best indicator for assessing the magnitude of the response. The scope –in terms of coverage and size of the social benefits– of these interventions also matters. For this reason, in this section we study, first, how governments created and modified their CTPs. Then, we analyze their scope to put these efforts into perspective.

Innovations in CTPs as response to the pandemic

To face the pandemic, most countries responded with new CTPs. In total, 21 countries created 37 new programs. In general, these programs were extraordinary bonuses –by early August, most of them had transferred cash benefits one, two or three times— aimed at compensating for the temporary loss of income during the lockdown, as well as to facilitate people staying in their homes. Although these programs have new names, target populations and payments size, they were built on existing social information or payment methods.

Besides creating new interventions, LAC governments also increased the payment size of existing CTPs: 17 programs in 7 countries were vertically expanded. These responses implied increasing the size of the transfers for people who were already beneficiaries. For example, Jamaica increased the payment size of PATH, an existing CTP, to make up for the school meals that students stopped receiving when schools closed. This type of response is administratively simple because the programs already had information of their beneficiary population in their registries and had in place payment methods with which the population was used to.

In other cases, governments expanded programs horizontally, that is, they increased the coverage of existing CTPs. This type of innovation was the least frequent (only three programs innovated in this way). The Bolsa Família program in Brazil extended transfers to people who were already on the social registry (Cadastro Único), but who were not yet beneficiaries as they were on the waiting list. Similarly, Guatemala doubled the number of older adults selected monthly to begin receiving non-contributory pensions with the potential effect of protecting a group especially at risk in the pandemic. Finally, Belize expanded the coverage of its CTP named Boost, by using the information of another program: their food assistance's beneficiary registry. The three programs that expanded their coverage used pre-existing information to register and select new beneficiaries, although in the Brazilian case additional online mechanisms were adapted so those who were not in the social registry could also request the benefit.

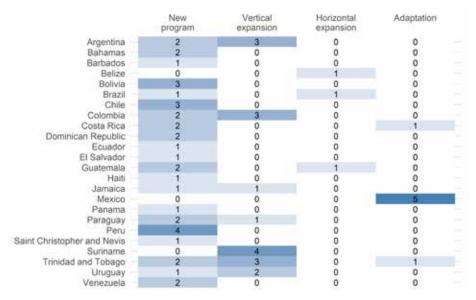
⁸ The need to respond to the pandemic has made it clear that countries with broad coverage in their contributory social security systems have fewer people in need and greater capacity to implement an intervention in response to the pandemic, and vice versa (Oxford Policy Management, 2015). The population with contributory social security has guaranteed a protection floor that makes them less vulnerable to a drop in income and to lack of access to health due to an emergency. In addition, this population has the possibility of being identified and targeted to receive new or better government social benefits, since they are already in social security registries. For this reason, countries with low levels of coverage have a narrower margin —in administrative terms— to respond quickly and effectively to the emergency, but a greater need to do so, since there is a greater proportion of their population whose income and general welfare are particularly vulnerable to the economic or sanitary crisis.

⁹ As explained before, those CTPs that continued to operate regularly, without any modification, were excluded from the analysis, as they cannot be considered part of the response to the pandemic.

Finally, some countries made only minor adaptations. Costa Rica and Mexico brought forward the delivery of cash benefits of existing programs, without modifying coverage or payment size. Similarly, Trinidad and Tobago switched

in kind benefits (food) for cash transfers. This type of intervention used information from their beneficiary registries and, except in the case of Trinidad and Tobago, used the same payment methods.

Table 3. Number of cash transfer programs in Latin America and the Caribbean to respond to COVID-19, by form of innovation



Source: authors' estimation and elaboration. The complete list of programs is in Table 4 and the compilation with all the variables is available at the online repository (github.com/pCobosAlcala/CashTransfers_COVID19).

Coverage and payment size of CTPs

Beyond the number and type of innovation, to better understand policy responses, we need to assess coverage among the target population and the size of the transfers. With very few exceptions, most of the interventions were not very ambitious: they directly benefited less than 10% of the population with a total additional payment lower than each country's monthly minimum wage.

In Graphs 2 and 3, the horizontal axis represents coverage, understood as the number of direct beneficiaries (households or individuals) divided by the total population of a country (The World Bank, 2020a).¹⁰ The vertical axis shows the additional social benefits divided by the country's monthly minimum wage in Graph 2 (International Labor Organization, 2020) and by monthly GDP per capita in Graph 3 (The World Bank, 2020b).¹¹ Some emergency bonuses (newly created programs) were the most ambitious responses. The Auxílio Emergencial program in Brazil is not only the intervention that in absolute terms had the largest number of direct beneficiaries (80 million [Rubio et al., 2020]), and in which the number of these beneficiaries as a proportion of

¹⁰ In the case of programs that had a horizontal expansion (that is, that expanded their coverage), only the number of people or households benefited due to the pandemic is considered.

¹¹ On the one hand, when programs were new, the amount reflected in the graph is equal to the total social benefit from April to early August. On the other hand, when the programs expanded the number of benefited people or households (horizontal expansion), the transfer considered in the graph reflects the social benefit received only by the new population. Finally, for the programs that increased the size of the transfers (vertical expansions), the graph only considers the amount added to the existing program. In all cases, when the social benefit depended on family composition or income level, the average transfer was considered for the graph. The adaptation programs do not appear in the graph because they do not represent increases in coverage nor amounts.

the population represents a higher percentage (37%), but also in which the payment size was one of the highest (1.73 monthly minimum wages) in the region. In contrast, Bolsa Família enrolled new beneficiaries who were on the waiting list (1.2 million families [Rubio et al., 2020]), but without modifying payment size (they paid the same amount of money that was regularly delivered, which is equivalent to one third of the monthly minimum wage). This was possible because Auxílio Emergencial is a temporary program, whereas Bolsa Família's benefits to the newly enrolled population will continue after the pandemic.

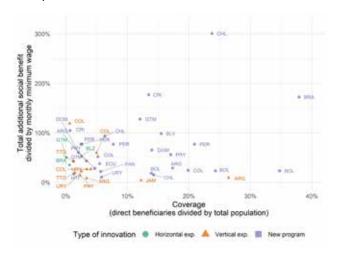
This situation is similar to what happened in Guatemala where —on the one hand— the government expanded horizontally its non-contributory pension program (to a relatively small number of people), but —on the other hand— implemented a new temporary program: an extraordinary bonus, higher than the monthly minimum wage, to a larger number of people.

The programs with vertical expansions (those that increased the size of social benefits for people who were already beneficiaries) did so with relatively low additional amounts of money. For example, Argentina used its universal allowance programs (Asignación Universal por Embarazo and Asignación Universal por Hijo), which have broad joint coverage (26% of the population) to transfer an additional but relatively small social benefit (\$46 dollars, the equivalent to 9.7% of the minimum wage [Rubio et al., 2020]). Conversely, Colombia and Suriname stand out for the magnitude by which they increased the size of their program's cash transfers. In the case of Colombia's Jóvenes en Acción it was of \$98 additional dollars, delivered monthly during the state of emergency, and in Suriname's children's allowance program, a 6-month cash benefit of \$134 extra dollars (monthly delivered). However, both programs had very limited coverage (296 thousand direct beneficiaries in Colombia and 45 thousand in Suriname (Directorate National Security, 2020; Gobierno de Colombia, 2020; Vishmohanie, 2019)).

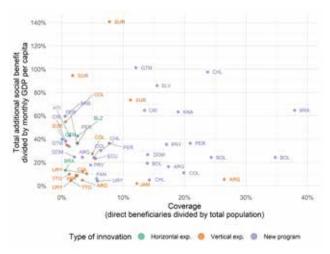
Finally, there were countries, like Mexico, Costa Rica and Trinidad and Tobago, that adapted their CTPs, but did not increase the payments nor expand their coverage. The objective, in these cases, was to give families disposable income during the pandemic.

In Graph 3, we present information similar to that of Graph 2, but with monthly GDP per capita as a reference to compare the total additional payments' size. In this graph, it is possible to include Caribbean countries (because there is not comparable information regarding their minimum wage). The trends are similar to those of Graph 2: programs are concentrated in the lower part of the graphs (transfer sizes are, for the most part, below 60% of monthly GDP per capita) and it is evident that new programs are the ones that had the greatest coverage.

Graph 2. Proportion of direct beneficiaries and total additional benefits divided by monthly minimum wage in the cash transfer programs in response to COVID-19



Graph 3. Proportion of direct beneficiaries and total additional benefits divided by monthly GDP per capita in the cash transfer programs in response to COVID-19



Note 1 (calculations): the additional social benefits are the vertical expansions or new average benefits during the time that they were provided, for the programs with information available for both axes. However, some programs mentioned that social benefits would be implemented for the duration of the state of emergency, so we considered them as if they had lasted three months (one benefit per month).

Note 2 (calculations): coverage corresponds to the population benefited by the innovation.

Note 3 (calculations): in the case of the Asignación Universal por Embarazo and Asignación Universal por Hijo programs in Argentina, coverage is the sum of both programs and they are represented as if they were a single program.

Note 4 (calculations): in the case of horizontal expansions, the social benefit is the usual payment, but only for the new incorporated population for a period of three months.

Note 5 (interpretation): it is important to mention that any interpretation of these data should consider that the programs have different designs, in some cases directed towards families and in others towards individuals, as well as universal or targeted approaches towards people who lost their income. The intention of Graphs 2 and 3, then, is to show an overview of the programs using similar metrics with the intention to have an understandable idea of LAC responses, without considering the details of each one.

Note 6 (dates): GDP per capita is from 2019 (The World Bank, 2020b). The minimum wage dates are 2011 for Haiti; 2012 for Belize; 2013 for Costa Rica, Ecuador*, Guatemala*, Jamaica, Mexico*, Panama*, and Trinidad and Tobago; 2015 for the Dominican Republic* and Paraguay*; 2017 for Argentina* and Colombia*; 2018 for Brazil, Chile*, Costa Rica*, El Salvador*, Peru* and Uruguay*; and 2019 for Bolivia* (International Labor Organization, 2020). The minimum wage information source for the countries with an asterisk contained information in local currency, so the payments were converted to dollars in mid-October 2020.

Source: authors' estimation and elaboration with data from the International Labour Organization (2020) and The World Bank Group (2020a, 2020b). The complete compilation of the programs and information systems is available at the online repository (github.com/pCobosAlcala/CashTransfers_COVID19).

The different characteristics of these responses, shown in Graphs 2 and 3, reflect previous policy decisions, regarding populations to be prioritized (as families in general, the poorest people or those who lost their job) and policy objectives to be pursued (e.g., to cushion drop of income or to guarantee a minimum income). These decisions respond to political priorities, but are also explained by the capacities of each country. For example, the decision on the magnitude of programs' vertical expansions depended on budgetary capacity, but the extent to which countries expanded their programs and created new ones was facilitated by the information they already had to identify and target beneficiaries. In the following section we describe how the different LAC governments used their social information systems to respond to the pandemic.

The use of existing information to respond to the pandemic

Social protection information systems made it possible to quickly respond during an emergency where there were few alternatives. The region's social registries already contained information on 227 million people. While these information systems did not guarantee effective responses, they did facilitate them. For example, those who have been affected by the pandemic and are covered by social protection systems could be identified to receive new or better social benefits, since they were already in the social information systems.

These social information systems had differences in their coverage, in the quality of their information and in their interoperability with other registries, all of which affected their potential use. Based on available data and

information reported by national governments, we analyze these systems by identifying which social protection information systems each country has and, then, how CTPs used them to respond to the pandemic (see Table 4).

Information systems for CTPs

We identified sixteen countries with social registries in LAC, twelve with single beneficiary registries and six with systems that are interoperable with other sources of information (other than identity cards). Although not all countries use their information systems for all their social assistance programs at all levels of government, they are common in the region, particularly in the operation of social assistance programs with the highest coverage. Likewise, seven social registries have a mixed mechanism for filling in the information: both active searches from the government and on demand applications from potential beneficiaries.

Table 4. Ways in which CTPs used information systems to respond to COVID-19

Country	Social protection information system prior to COVID-19	Program name	Type of innovation	Pre-existing information used for register, selection and transfer
Social registry,	Asignación Universal por Embarazo	Vertical expansion	Beneficiary registry of the same program	
	Asignación Universal por Hijo	Vertical expansion	Beneficiary registry of the same program	
Argentina	single heneficiary	Ingreso Familiar de Emergencia	New	Pre-existing information was not used
	interoperability	Pensión No Contributiva	Vertical expansion	Beneficiary registry of the same program
		Tarjeta Alimentaria	New program	Registries of beneficiaries for registration and selection
		Unemployment Assistance for COVID-19	New program	Pre-existing information was not used
Bahamas	Bahamas -	Unemployment Programme for Self- Employed	New program	Pre-existing information was not used
Barbados	-	Vulnerable Family Survival Programme	New program	Pre-existing information was not used
Belize	-	The Boost Programme	Horizontal expansion	Beneficiary registry for registration and selection
		Bono Canasta Familiar	New program	Beneficiary registries for registration and selection
Bolivia	Social registry and single beneficiary registry	Bono Familia	New program	Social registry for register in the program and selection
	. 3 ,	Bono Universal	New program	Financial and labor information for register, selection and payment
Prozil	Social registry	Auxílio Emergencial	New program	Social registry and beneficiary registries for register in the program, selection and payment
DIAZII	Brazil Social registry	Bolsa Família	Horizontal expansion	Social registry for register in the program, selection and payment
	Social registry, single beneficiary	Bono de Apoyo a los Ingresos Familiares — Bono COVID	New program	Social registry and contributory social security information for register in the program, selection and payment
Chile	registry and	Bono Independiente	New program	Fiscal information for selection and payment
interoperability	Ingreso Familiar de Emergencia (IFE)	New program	Social registry for selection and payment	

		Colombia Mayor	Vertical	Beneficiary registry of the same program
Colombia Social		·	expansion	beneficiary registry of the same program
		Compensación del Impuesto sobre las ventas (IVA)	New program	Social registry for selection and payment
	Social registry	Familias en Acción	Vertical expansion	Beneficiary registry of the same program
		Ingreso Solidario	New program	Social registry for register in the program, selection and payment
		Jóvenes en Acción	Vertical expansion	Beneficiary registry of the same program
		Pensions' payments brought forward	Adaptation	Beneficiary registry of the same program
	Social registry,	Bono Proteger	New program	Pre-existing information was not used
Costa Rica	single beneficiary registry and interoperability	IMAS	New program	Social registry for register in the program, selection and payment
	incroperability	Programa Pa' Ti	New program	Contributory social security information and beneficiary registries for register in the program, selection and payment
Dominican Republic	Social registry and single beneficiary registry	Programa Quédate en Casa	New program	Social registry for register in the program, selection and payment
Ecuador	Social registry and single beneficiary registry	Bono de protección familiar	New program	Social security information for selection and payment
El Salvador	Social registry, single beneficiary registry and interoperability	Programa de transferencias	New program	Pre-existing information was not used
		Adulto Mayor	Horizontal expansion	Conventional mechanisms of register and payment
Guatemala	-	Apoyo al Comercio Popular	New program	Municipal information of commerce for register and selection
		Bono Familia	New program	Electricity consumption information for selection
Haiti	Social registry	Transferencias monetarias	New program	Social registry for register in the program, selection and payment
		CARE	New program	Pre-existing information was not used
Jamaica	-	PATH	Vertical expansion	Beneficiary registry of the same program
		Becas de Educación Básica Bienestar para las Familias	Adaptation	Beneficiary registry of the same program
		Beca Educación Media Superior Benito Juárez	Adaptation	Beneficiary registry of the same program
Social registry and single beneficiary registry	single beneficiary	Beca Educación Superior Jóvenes Escribiendo el Futuro	Adaptation	Beneficiary registry of the same program
		Pensión para el Bienestar de las Personas con Discapacidad	Adaptation	Beneficiary registry of the same program
	Pensión para el Biene- star de los Adultos Mayores	Adaptation	Beneficiary registry of the same program	

Panama	Social registry and single beneficiary registry	Panamá Solidario	New program	Labor and social security information for selection
		Ñangareko (Programa de Seguridad Alimentaria)	New program	Beneficiary registries, labor and social security information for selection
Paraguay	Paraguay Social registry	Programa Pytyvõ (Subsidio de Emergencia Sanitaria)	New program	Beneficiary registries, labor and social security information for selection
		Tekoporã	Vertical expansion	Beneficiary registry of the same program
		Bono Yo me quedo en casa (Bono 280)	New program	Social registry for register in the program, selection and payment
Peru	Social registry, single beneficiary	Bono Familiar Universal	New program	Social registry and beneficiary registries for register in the program, selection and payment
reiu	registry and interoperability	Bono Independiente	New program	Social registry and beneficiary registries for register in the program, selection and payment
		Bono rural	New program	Social registry and beneficiary registries for register in the program, selection and payment
Saint Kitts and Nevis	-	COVID-19 Relief Fund	New program	Pre-existing information was not used
		Financiële Bijstand Mensen Met Een Beperk- ing	Vertical expansion	Beneficiary registry of the same program
Suriname	-	Financiële Bijstand Zwakke Huishoudens	Vertical expansion	Beneficiary registry of the same program
		Algemene Kinderbijslag	Vertical expansion	Beneficiary registry of the same program
		Algemene Ouded- agsvoorziening	Vertical expansion	Beneficiary registry of the same program
		Disability Assistance Grants	Vertical expansion	Beneficiary registry of the same program
		Food Support	Vertical expansion	Beneficiary registry of the same program
Trinidad and Tobago	-	Public Assistance	Vertical expansion	Beneficiary registry of the same program
Tobago		Rental Assistance Grant	New program	Pre-existing information was not used
		School Feeding Programme	Adaptation	Beneficiary registry of the same program
		Temporary Food Support Card	New program	Pre-existing information was not used
	Social registry,	Canasta de Emergencia	New program	Beneficiary registries and social security information for selection
Uruguay	single beneficiary registry and interoperability	Plan de Equidad Social	Vertical expansion	Beneficiary registry of the same program
		Uruguay Social	Vertical expansion	Beneficiary registry of the same program
Venezuela		Bono Disciplina y Conciencia	New program	Social security information for selection and payment
CHCZGCIG		Bono Especial Quédate en Casa – Sistema Patria	New program	Social security information for selection and payment

Note (-): the dash indicates that there is no information on the portals of the countries to determine the answer. Source: authors' estimation and elaboration. The complete compilation of the programs and information systems is available at the online repository (github.com/pCobosAlcala/CashTransfers_COVID19).

As shown in Table 2, LAC countries used social registries, (single) beneficiary registries, and other information systems to target vulnerable people (enrolling them based on certain socioeconomic characteristics) or to avoid duplications (reaching more people who were not receiving existing CTPs). Programs in Chile, Costa Rica, Ecuador, and Peru used them for the first purpose: they targeted vulnerable people, without necessarily excluding those who were already beneficiaries of some program. In some other cases, such as Colombia, the Dominican Republic, Peru, Panama and Paraguay, interventions used them to target beneficiaries, to avoid duplications and, except for Paraguay, to automatically enroll and notify people of their new benefit. Finally, in Bolivia and Brazil, the new programs used information from other beneficiary registries to generate a new registry of beneficiaries who were targeted to receive an extraordinary benefit during the pandemic. In this sense, Brazil stands out because, through the Auxílio Emergencial program, it had reached 59.3 million people by the end of May 2020, less than two months after being launched (Blofield et al., 2020).

In other cases, existing registries had limited coverage, making it necessary for the programs to add new people to them. Thus, some LAC countries have innovated in their intake and registration processes for identifying new potentially eligible population. Caribbean countries such as the Bahamas, Barbados, Saint Kitts and Nevis, as well as Trinidad and Tobago, took advantage of electronic mechanisms, such as emails or platforms, to implement on-demand registration processes. In the same vein, Argentina, Brazil, Chile, Paraguay, Peru and Uruguay established online platforms so that people could request their enrollment into the programs (or by phone for people who did not have internet access). Once again, Brazil stands out: Auxílio Emergencial complemented the information from existing registers with on-demand applications via online, telephone and face-to-face mechanisms, with 96 million applicants registered by the end of May, of which 61% were accepted into the program (Blofield et al., 2020).

Social information systems were also used to deliver social benefits. Countries that already had people's banking information were able to transfer benefits more easily, through bank cards in which they already received some other social benefit, or the accounts they had in social registries. This was the case in Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, and Peru. Both Haiti and Uruguay used mobile apps to cash in benefits in certain places,¹² whereas Guatemala sent codes to mobile phones to withdraw money at ATMs. Finally, Panama and Paraguay designed mechanisms for cashing in the extraordinary social bonus in supermarkets through the information contained in their national identity cards.

Social information systems have also been used to notify the beneficiaries of the transfer they would receive. Most of the countries set up online platforms so that people could find out if they had been selected to receive social benefits from a program, and even some, such as Colombia, Costa Rica and Paraguay, notify them by cell phone.

Graph 4 shows that the use of existing information was frequent for responding to the pandemic: 52 out of 64 programs used existing information to identify and select people, as well as to make payments (47 out of 64). All vertical expansions (17), horizontal expansions (3), and adaptations (7) used existing information to identify and select people and almost all programs used already existing payment methods (25 out of 27). This was administratively viable because they are programs with operating processes already at work. Similarly, most of the new programs used existing information to identify and determine who was eligible (25 out of 37), and pre-existing payment methods to deliver the benefit (22 out of 37). Thus, although these were programs with new target populations, objectives or structures, they built on previous efforts to systematize information and payment methods that facilitated their implementation.

¹² Although with major differences in terms of coverage (both due to the population's connectivity limitations and the existence of administrative records with people's contact details), which allows a more limited scope in the case of Haiti.

Type of information for registration or selection

Adequation

New program

Venturi equ

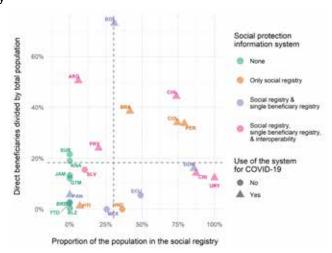
Graph 4. Use of existing information and payment methods by innovations in CTP

Source: authors' estimation and elaboration. The complete list of programs is in Table 4 and the compilation with all the variables is available at the online repository (github.com/pCobosAlcala/CashTransfers_COVID19).

Information systems' quality: coverage and interoperability

In this section, we analyze the quality of information systems used by the CTPs implemented to respond to the pandemic. To do so, Graph 5 shows, on the horizontal axis, the proportion of people whose information is included in each country's social registry —an indicator of the quality of social protection information systems—. The vertical axis represents the sum of people or households that directly received cash transfers in each program divided by each country's population. This metric should not necessarily be interpreted as total program's coverage because, in some cases, people could be benefited from more than one program and, in others, programs were targeted to households rather than individuals. Finally, the colors of the graph indicate the existence of the components of the social protection information systems, while the type of figure (triangles or circles) shows whether a country used this information system.

Graph 5. Use of information systems in response to COVID-19 and sum of direct beneficiaries divided by the population of each country



Note 1 (countries without information): non-visualized LAC countries do not present information on CTPs with any new characteristics, their social benefits or coverage, nor the social protection information system. The information for Belize, Jamaica and Trinidad and Tobago only contains those of the programs with data in both axes

Note 2 (calculations): the vertical axis corresponds to the sum of direct beneficiaries for each program. If a program provided two or more payments, we only included one. Population data is for mid-2019.

Note 3 (visualization): dotted lines represent the average for each axis.

Note 4 (sources): the components and data correspond to those reported by each country.

Note 5 (interpretation): any interpretation of these data must consider that the programs have different designs, in some cases directed towards families and in others towards individuals, as well as universal or focused approaches towards people who lost their income. The purpose of Graph 4, then, is to show an overview of the programs using similar metrics in order to have a basic understanding of LAC responses, without considering the details of each one.

Source: authors' estimation and elaboration with data from The World Bank Group (2020a). The complete compilation of the programs and information systems is available at the online repository (github.com/pCobosAlcala/CashTransfers_COVID19).

As seen in Graph 5, in the upper-right quadrant there are countries with an above-average proportion of the population in the social registry and of direct beneficiaries divided by the population. Chile –with one of the best social protection information systems in the region– managed to reach a relatively high number of direct beneficiaries with information it already had about them. This was also the case in Brazil, Colombia, and Peru, that used social registries with good coverage for targeting or for vertically expanding the existing CTPs. Bolivia, with a social registry with an average coverage, reached the highest proportion of its population with three new programs. Moreover, its single beneficiary registry allowed it to use the information of people who already received a benefit to respond with the Bono Canasta Familiar program.

Countries with below-average social registry coverage, but with above-average proportion of direct beneficiaries divided by the population are in the upper-left quadrant. Among them, two stand out —Argentina and Paraguay—, which have the three components of social protection information systems: a social registry, a single beneficiary registry and interoperability with other sources of information. These countries responded with both new programs and vertical expansions. In contrast, despite not having robust social protection information systems, Suriname responded with vertical expansion of existing programs, and Saint Kitts and Nevis with a relatively ambitious new program.¹³

In the lower left quadrant are the countries that had social registries with low coverage and a low proportion of direct beneficiaries. Most of these countries (mostly also in the Caribbean) do not have developed social protection information systems. However, some of them, such as Jamaica and Guatemala, reached a proportion of direct beneficiaries similar to El Salvador, a country with the three components of social protection information systems. In this quadrant, Mexico stands out because, despite having a single beneficiary registry and a social registry, it was one of the few LAC countries that did not expand or create a new CTP, limiting its response to bringing forward payments for five existing programs.

Finally, the lower-right quadrant shows countries with above-average social registry coverage, but relatively fewer direct beneficiaries. There are two groups in this quadrant. The first, Honduras and Ecuador, had a limited response (without cash transfers in Honduras), despite having certain elements of their social protection information systems that would have facilitated this type of programs. The second group —Costa Rica, the Dominican Republic and Uruguay— has below-average direct beneficiaries with very good social protection information systems, although they are also countries with general good indicators of social protection, which may explain why they did not rely heavily on CTPs.

Yet it is necessary to analyze these interventions in context; not only as part of each country's budget, but also in how timely and sufficient the individual transfers were to compensate for the income losses caused by the pandemic (for a study that addresses this point for ten Latin American countries, see Blofield et al., 2020). Furthermore, it will be necessary to assess their effects on poverty, inequality, or social mobility. Although it is soon to determine such effects, it is expected that these variations will partly explain differences in their capacity to offset the drop of households' income (Lustig et al., 2020).

¹³ Saint Kitts and Nevis is the country with the smallest population among those studied in this article.

¹⁴ For this article, we consider the new social registry of the Government of Mexico (Censo del Bienestar) and the single beneficiary registry that reports in its official portal (Gobierno de México, n.d.-a, n.d.-b, n.d.-c).

Social protection information systems have facilitated rapid responses through monetary transfers, but there are other variables that limited how governments implemented extraordinary measures in the pandemic: fiscal capacity, digital divide or banking penetration and, in general, legal and administrative constraints for the expeditious execution of innovative measures. However, it is clear that any ambitious CTP in response to any emergency becomes more feasible when governments have integrated, up-to-date, and good quality social information systems.

Conclusions

Facing the unforeseen, massive, and diverse social and economic effects of the shock generated by COVID-19, governments around the world have built, adapted and scaled-up their policy interventions. Governments in LAC have used social protection instruments to cushion the social and economic effects of the pandemic: they have used CTPs as a vehicle to reach the vulnerable population, and for this they have used their social protection information systems to identify or enroll people who should be benefited. The quality and usefulness of these instruments varies between countries, as not all have complete and updated social information systems, nor were they able to deploy them to deal with the pandemic. As Blofield et al. (2020) explain, once governments decided to act, some of them faced delays due to not having updated information or agile enrollment mechanisms.

Most countries showed innovation capacity to respond to the pandemic. Forms of innovation varied across LAC, but emergency bonuses were the most frequent measure: 21 countries responded with 37 new CTPs. However, the number of responses is not equivalent to the programs' sufficiency: it is also important to know coverage rates and size of the payments to estimate whether they were adequate. In this regard, more than half of the programs for which information is available did not directly benefit more than 10% of the population and did so with lower total additional benefits than a minimum wage (or less than 60% of the monthly GDP per capita for countries with non-comparable minimum wages).

The pandemic has highlighted the importance of having information systems in place for implementing programs in a swift way: almost all vertical expansions, horizontal expansions and adaptations were supported by pre-existing information to identify, enroll or deliver social benefits to the population. The major finding, however, is that also the new programs used existing information: 25 out of 37 programs used it to identify and enroll people, while 22 of them used on-going payment methods. This pre-existing information, contained in social protection information systems, is a very useful tool: social registries in the region have socioeconomic information on 227 million people, which is a key input for any intervention.

Social information systems and, in general, CTPs are relevant even beyond the pandemic. LAC countries have three tasks in this regard in the coming years. The first task is to consolidate good social protection information systems: with broader coverage, updating mechanisms, and more complete and interoperable information. In a context of social protection models based on a mix of contributory and non-contributory schemes, integrating information is the only way to track people, thus being able to protect them when they lose their jobs or migrate from a formal into an informal one, and vice versa.

Furthermore, these systems must have more complete information about the population —including georeferenced data—, as this gives greater flexibility for program design and implementation. In some countries (such as Brazil or Chile) the already available information showed the enormous potential of information systems to enable decision-making, to identify populations, and to deliver payments. In others, as in many Caribbean countries, the pandemic forced decisions to be made with new information, which may become the starting point for the development of solid information systems in the coming years. In sum, the availability and quality of information systems will broaden governments' capacities —both for the day-to-day operation of programs, and for innovations generated by new social protection policies or by unforeseen problems that require swift responses—.

The second task is to promote that this information is effectively used to design, implement, and evaluate public policies. As more government programs and agencies value social information systems, their updating will be a shared task and more actors will collaborate and monitor their proper functioning. This is not up to a single ministry, agency or level of government; it is a shared responsibility for all those involved in the provision of social protection to achieve the interoperability of existing information to facilitate decision-making. Of course, it is not just a matter of making information available, but of taking advantage of it in policymaking.

The use of these systems may be fostered by making compulsory their use for programs to select beneficiaries, as it may be a starting point for coordination processes for integral responses. These systems could also reduce administrative burdens for both bureaucracy and citizens by integrating information and preventing two agencies from requiring similar information from citizens. Ideally, these systems would also allow agencies to coordinate with each other to track beneficiaries through their life cycle, to complement efforts, or to use single payment methods.

The third task refers to rethinking the role of CTPs as part of social protection systems. These programs have been crucial in cushioning the economic effects of the pandemic on the most vulnerable population. However, these programs should be more than instruments to deliver money to a certain population; the effectiveness of CTPs depends on their specific design attributes: therefore, specific decisions about the size of the benefits, periodicity of the transfers or payment methods, among others, will have differentiated effects on people (Bastagli et al., 2016).

It also implies placing cash transfers —conditional or not— as only one of the many possible social protection interventions to face risks on health and income. Indeed, CTPs should be understood as temporary responses to the crises derived from the pandemic, and not as substitutes for comprehensive social protection systems. Developing these systems remains a challenge in LAC countries. It will not be possible to build solid social protection systems in the region if they are based only on CTPs. The next unavoidable discussion will be the financing of these systems, since the ambitious CTPs promoted in some LAC countries are not financially viable for longer periods, unless there are significant fiscal reforms.

The LAC region has been severely affected by the COVID-19 pandemic. This phenomenon has shown the diversity of progress among these countries in reducing poverty, inequalities, vulnerability, as well as the different administrative capacities to respond to new adversities. Although some of the responses and tools used by governments in the face of the pandemic make it possible to find elements that work —such as social registries and payment methods— and others that need to be improved—such as quality of information and scope of the responses—, the pandemic should also serve to reinvigorate the discussion on developing comprehensive social protection systems that have the capacity to benefit all people according to their specific conditions—regardless of their employment— and to react to changes in their life cycle and their employment status.

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THE SOCIO-ECONOMIC IMPLICATIONS OF THE COVID-19 PANDEMIC: IDEAS FOR POLICY ACTION



Cross-sectional visions

The COVID-19 pandemic is one of the most serious challenges humanity has faced in recent times. Alongside the cost of lives and the deep health crisis, the world is witnessing an economic collapse that will severely affect the wellbeing of large segments of the population in the years to come. To promote a collective reflection that offers guidance for the response to the COVID-19 health crisis and its economic and social effects on our societies, the UNDP Regional Bureau for Latin America and the Caribbean launched the series of documents compiled in this book.

The first volume reflects on aspects of the problem common to all countries. The second is a compilation of country-specific analyzes that address the particular situation faced by some economies in the region. UNDP offers both volumes as an input to the current public policy debate under the conviction that solutions based on evidence, experience and reasoned political intuition, will be essential to moderate the shock and build back better.

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