

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

Luis Felipe López-Calva and Marcela Meléndez (editors)



V2 Country Notes



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

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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 countries 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.

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



¹ www.ft.com/content/5a55dc6b-b5fd-47a2-b845-8cea8ea731a0

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 patterns. 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 Martín 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

Chapter	Authors	Focus
Chapter 1: Venezuela	Daniel Barráez and Ana María Chirinos-Leañez. UNDP Venezuela	Pre-existing macroeconomic crisis and associated challenges to finance additional public spending.
Chapter 2: Honduras	Andrés Ham	Simulations using household-level surveys to assess the impact of alternative cash transfer programs on poverty.
Chapter 3: Peru	Miguel Jaramillo and Hugo Ñopo	Households' vulnerabilities, through analysis of their main source of income generation: work.
Chapter 4: Argentina	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.
Chapter 5: Jamaica	Manuel Mera	Need to redirect fiscal effort towards the most affected, to optimize policy response.
Chapter 6: Uruguay	Alfonso Capurro, Germán Deagosto, Federico Ferro, Sebastián Ithurralde and Gabriel Oddone. CPA Ferrere.	Transmission channels and potential adjustments to the government's policy response.
Chapter 7: Colombia	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.
Chapter 8: El Salvador	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.
Chapter 9: Mexico	UNDP México	Analysis of COVID-19's socio-economic impact in light of pre-pandemic conditions, leading to policy recommendations.
Chapter 10: Dominican Republic	Sócrates Barinas and Mariana Viollaz	Simulation using household survey data offering insight on the government's policy response capacity to contain poverty.
Chapter 11: The Bahamas	Manuel Mera	Analysis of pre-pandemic socio-economic situation and government's response, to offer policy recommendations.
Chapter 12: Paraguay	UNDP Paraguay	Labor markets and vulnerable groups, to encourage a collective reflection on how to move towards a more inclusive growth model.
Chapter 13: Bolivia	UNDP Bolivia	How to move forward, in light of the current situation, re-channeling efforts to achieve the Sustainable Development Goals.

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.

The Economic Impact of COVID-19 on Venezuela: the Urgency of External Financing

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Abstract

We briefly describe the macroeconomic performance before the spread of the coronavirus (COVID-19), which is mainly characterized by severe economic depression, economic and financial sanctions by the Trump administration, and tight fiscal space that constrains to undertake additional measures. We estimate three economic scenarios based on different oil price assumptions for 2020. The negative effects of the quarantine on the economy are estimated using the two biggest shocks faced by Venezuela in its recent history. We emphasize the relevance of foreign currency and external financing to mitigate the pandemic's impact. Finally, we discuss the economic measures taken by the government.

Introduction

The spread of the COVID-19 outbreak in Venezuela occurs during a severe economic crisis. The GDP has continually shrunk since 2014. Oil production has also been reduced drastically, going from 3.26 million barrels a day to less than a million a day in 2019. The significant fiscal deficit, the high level of inflation, that reached hyperinflation levels in 2018, and the sovereign default since late 2017, have aggravated the situation. The Trump Administration's financial-economic measures deepen the crisis and impede overcoming it. The absence of fiscal space to undertake measures in response to COVID-19's effects, in terms of public health and at the economic level, emphasizes the relevance of external financing and the evolution of oil revenues. Under the absence of external financial assistance, the government must rely on financing the deficit monetarily to undertake policy actions in response to the COVID-19 shock, which causes a higher level of the inflation rate and depreciation of the Bolivar.

The economic impact of the shock is tied to the high levels of uncertainty regarding the pandemic's evolution and sanitary response, in terms of its magnitude and duration. This uncertainty affects the main variables involved in the economic transmission mechanism for Venezuela: oil prices, disruption of the economic activity and the fall in demand. The reduction of oil prices is a crucial factor to measure the impact of the shock. In the first section, we will compute, based on different oil price assumptions, three economic scenarios for 2020. According to them, considering **Venezuelan oil prices barrel between 10 US\$ and 40 US\$, it would reduce the oil revenue between 9.000 and 17.000 US\$ million in 2020. Such oil reduction would generate a GDP contraction between 14 and 28 percentage points.** The other factors to measure the size of the economic impact are the duration of the economic disruption (a supply-side effect caused by social distancing measures) and the fall in demand (demand-side effect). To measure the effect of COVID-19 shock, we calculated the impact of the two biggest shocks faced by the Venezuelan economy in its recent history: The 2002 oil strike and the 2019 electric blackout. These shocks affected aggregate supply and demand over several months, a similar effect caused by COVID-19 shock. From these shocks, for each trimester of economic paralysis, the GDP would drop between 8 and 10 percentage points

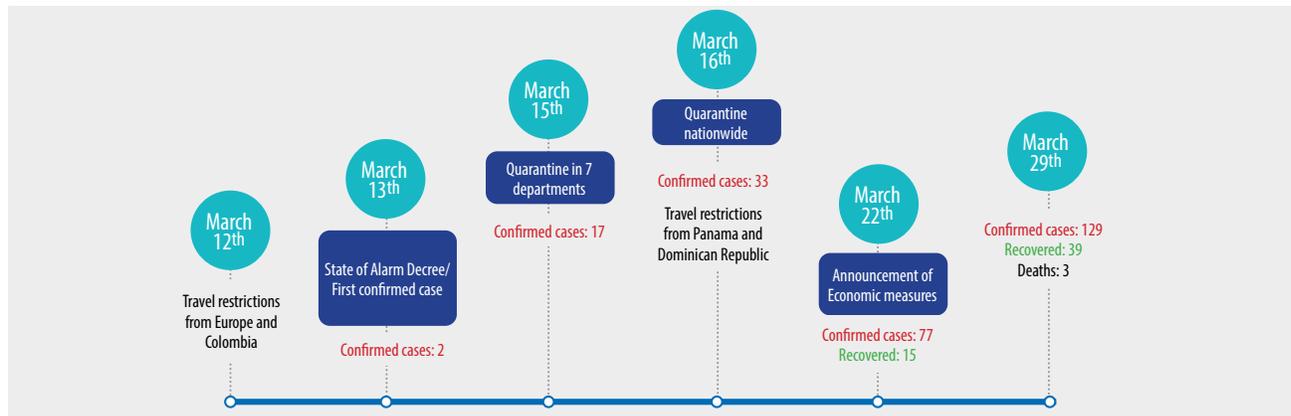
Additionally, social isolation measures will substantially reduce informal workers' incomes. **Labor informality is a threat to properly implement and sustain social isolation, which is the main tool for containing the spread of the pandemic.** Indeed, the expected drop in remittances will emphasize the reduction of the income of the most vulnerable households.

In the second section, we will summarize the measures issued by President N. Maduro on March 22th 2020 ("Plan de protección del Estado Venezolano en tiempos de CORONAVIRUS"), and will briefly mention and classify them according to their main objective: health investment, support for households, or support for firms. We also include additional measures that could be considered to complement and strengthen the measures issued.

1. Transmission channels and macroeconomic impact of the COVID-19

Oil prices are the main transmission channel for the Venezuelan economy.

Even if commodities prices, in general, drop, including those imported by Venezuela, the oil prices fall would be higher than the rest of the commodities. **The disturbance on aggregate supply generated by social distancing measures (i.e. the quarantine) is another important transmission channel for the shock as well. Finally, an additional and pertinent channel is the fall in demand from households and firms due to two factors, reduction of their income and the uncertainty caused by COVID-19 shock.**



Regarding social isolation measures, on March 13th, 2020, the president N. Maduro declared a state of alarm for 30 days and quarantine in seven departments that would be extended to the rest of the country a day after. This quarantine implies the suspension of (non-essential) work and educational activities. Essential activities were related to those associated with the health, foods, and security sectors. A potential extension of the state of alarm or the quarantine remains still open. After the declaration of the state of alarm, additional announcements related to social distancing and economic and measures have been made (Table 5). The next timeline summarizes the main announcements made up to the present day.

Table 1 (2020 scenarios) shows three potential economic scenarios, that were computing assuming, on average, three oil barrel prices: 10 US\$, 25 US\$ and 40 US\$. These scenarios also assume that current financial sanctions are maintained and that monetary financing of the deficit will be proportional to the reduction of oil prices. The main result from all the scenarios is clear and expected: economic damage is proportional to the reduction of oil prices. The decrease in oil revenue can vary between 9.000 and 17.000 US\$ millions. In percentage terms, it implies a reduction between 48% and 83% respect to 2019. Depending on the magnitude of the oil price drop, we expect a sale of international reserves between 1.500 and 3.500 US\$ million. Only the effect of oil price drop causes a contraction of the GDP around 10% and 28%. These scenarios are detailed in table 2, table 3 and table 4 respectively. If the oil price remains at the current level, the result would be a midpoint between scenarios B and C. Nonetheless, the oil market is highly volatile and can move drastically in short periods. Using econometric techniques, we estimate, that for each 10 percentage points that oil prices fall, the economy would be shrinking by 1%. This estimation was computed using data for a period in which production was at a higher level and under more stable conditions. This means that in the current context the result could be even stronger.

The impact of the two remaining transmission channels includes; the effects on aggregate supply and aggregate demand generated by social distancing measures, the effects of international trading and the reduction of consumption by economic agents. These are more complex to estimate. Quarantine measures only allow activities for workers from essential sectors, and the commute to the grocery stores, pharmacies, and health centers. Their impacts on production and consumption are pretty profound. The contractive effect of the quarantine will depend on its duration, especially for the production of goods and services. In that sense, the effects on the demand side could have a more long-lasting effect than those from supply disruption.

For referential purposes, we estimate the impact on GDP generated by the two biggest shocks that caused a significant economic disruption in recent economic history. One of them was the political conflict in 2002, which included the failed coup against Hugo Chávez and the oil strikes. At that time, the contraction of the annualized GDP growth rate (computed from the second trimester of 2002 respect the first of 2003, when the oil strike ends) was 14.3%. Applying econometric methods, we estimate the negative impact of the oil strike on GDP was 12%.

These computations can be considered as an upper bound estimate of the effect on GDP, because, different from current conditions; the oil strike implied the stop of oil exports. The second one was the electric blackout during the first trimester of 2019. During this trimester, GDP rose its contraction at 6.6 percentage points compared to the previous trimester. This event also affected oil exports. The current social distancing measures do not imply a substantial effect on oil production and exports, however, their effect on the rest of economic activity can be similar to these two previous events. Taking as a reference, these two events, on average, **for each trimester of economic paralysis, the GDP would decrease between 8 and 10 percentage points**. The estimation that comes from the reduction in oil price and those from the economic paralysis are not necessarily added mechanically. The effects on GDP caused by the two biggest shocks mentioned previously also included considerable disturbances in oil revenue.

Table 1

Assumptions	2020 Scenarios			2019
	A	B	C	
Oil Prices (US\$/bl, annual average)	40,0	25,0	10,0	59,7
Oil Production (MBD)	755,0	755,0	705,0	985,0
Reduction of oil income (millions of US\$)	9.046,0	12.776,0	16.650,0	10.817,0
Reduction of oil income (%)	47,6	67,3	87,7	36,3
Sale of International Reserves (millions of US\$)	1.500,0	2.500,0	3.500,0	1.022,0
Outcomes	A	B	C	2019
GDP Annual growth Rate (%)	-13,9	-20,8	-28,2	-29,6
Inflation Rate (end of the period, %)	987,0	2.230,0	17.693,0	6.819,0
Imports (millions of US\$)	9.906,0	8.160,0	5.474,0	10.786,0
Annual import reduction (%)	8,0	24,2	49,2	15,8
International Reserves (end of the period, millions of US\$)	6.476,0	5.476,0	4.476,0	7.976,0

Additional economic and social effects

Other economic and social effects demand attention. The most urgent one is the impact on informal workers. Social isolation measures affect informal worker's activities and their income. In combination with small and medium-sized businesses (SMEs), they become more vulnerable because of social distancing measures. **This jeopardizes the implementation and sustainability of the quarantine, the major tool to attack the pandemic.**

Reduction in remittances. Remittances have gained a significant role during the crisis, as a source of income for households. According to Ecoanalítica, remittances reached up to 2.700 US\$ million in 2018 and, at least, 3.500 US\$ million in 2019. Indeed, Meganalisis estimates 26% of Venezuelan households received remittances at the end of 2019. This implies for each US\$100 of monthly remittances, more than 2.500 US\$ millions of remittances in annual terms. Those senders that are formal workers or beneficiaries of social programs could continue sending remittances. For remaining senders, this will be a real challenge.

Disruptions in gasoline supply. The drastic fall in the gasoline supply will end up affecting the distribution of goods and services and public transportation. This disruption could threaten the domestic food supply.

The lower level of foreign currency availability could reduce food imports, especially for the public sector, and affect the CLAP program (government's food distribution program), which is the main current non-monetary transfer.

Table 2. Scenario A. Oil price: 40 US\$/bl - Venezuela: Main Macro-Economic Aggregates

Description	Units	Years		Variation rate %	
		2019	2020	2019/2018	2020/2019
		Real Sector			
Constant prices					
GDP	Bs.S 1997=100	222.003	191.234	-29,6	-13,9
Private Consumption	Bs.S 1997=100	155.415	139.718	-28,1	-10,1
Investment	Bs.S 1997=100	12.654	9.984	-48,5	-21,1
Oil production (official data)	MBD	985	755	-35,3	-23,3
Foreign oil sales	MBD	891	681	-35,0	-23,5
Foreign oil sales	MM USD	18.993	9.947	-36,3	-47,6
Oil Price	USD/BI	59,7	40,0	-3,7	-33,0
Current Prices					
GDP	MM Bs.S	298.742.261	3.424.950.333	8.674,2	1.046,5
GDP per capita	Bs.S 1997=100	7,9	6,5	-26,7	-10,7
Monetary Sector					
Monetary Base (end of the period)	MM Bs.S	28.350.848	291.552.956	6.412,6	928,4
Monetary Liquidity (end of the period)	MM Bs.S	39.000.905	422.751.786	4.745,1	984,0
Inflation (annual average)	Index 1997=100	49.035.242.826	684.385.615.514	15.306,2	1.295,7
Inflation (end of the period)	Index 1997=100	150.013.531.354	1.630.979.125.581	6.819,1	987,2
External Sector					
Exports (goods) F.O.B.	MM USD	24.388	15.240	-27,6	-37,5
IMPORTS (goods) F.O.B.	MM USD	10.768	9.906	-15,8	-8,0
Current Account - Goods	MM USD	13.619	5.334	-34,8	-60,8
Reserves (Flow)	MM USD	-1.022	-1.500		
Reserves Balance (end of period)	MM USD	7.976	6.476	-11,6	-18,8
Implicit Exchange Rate (M2/R1)	Bs/\$	4.993	65.280	5.378,8	1.207,5
Parallel Exchange Rate (annual average)	Bs/\$	13.669	178.383	12.731,9	1.205,0
Official Exchange Rate (annual average)	Bs/\$	13.058	173.790	27.429,0	1.230,9

Sources: Central Bank of Venezuela (BCV in Spanish), OPEC and own computations.

Table 3. Scenario B. Oil price: 25 US\$/bl - Venezuela: Main Macro-Economic Aggregates

Description	Units	Years		Variation rate %	
		2019	2020	2019/2018	2020/2019
		Real Sector			
Constant prices					
GDP	Bs.S 1997=100	222.003	175.854	-29,6	-20,8
Private Consumption	Bs.S 1997=100	155.415	128.995	-28,1	-17,0
Investment	Bs.S 1997=100	12.654	8.984	-48,5	-29,0
Oil production (official data)	MBD	985	755	-35,3	-23,3
Foreign oil sales	MBD	891	681	-35,0	-23,5

Foreign oil sales	MM USD	18.993	6.217	-36,3	-67,3
Oil Price	USD/BI	59,7	25,0	-3,7	-58,1
Current Prices					
GDP	MM Bs.S	298.742.261	5.549.737.732	8.674,2	1.757,7
GDP per capita	Bs.S 1997=100	7,9	6,5	-26,7	-17,9
Monetary Sector					
Monetary Base (end of the period)	MM Bs.S	28.350.848	622.837.896	6.412,6	2.096,9
Monetary Liquidity (end of the period)	MM Bs.S	39.000.905	840.831.160	4.745,1	2.055,9
Inflation (annual average)	Index 1997=100	49.035.242.826	1.207.921.899.768	15.306,2	2.363,4
Inflation (end of the period)	Index 1997=100	150.013.531.354	3.495.028.023.019	6.819,1	2.229,8
External Sector					
Exports (goods) F.O.B.	MM USD	24.388	11.493	-27,6	-52,9
IMPORTS (goods) F.O.B.	MM USD	10.768	8.160	-15,8	-24,2
Current Account - Goods	MM USD	13.619	3.333	-34,8	-75,5
Reserves (Flow)	MM USD	-1.022	-2.500		
Reserves Balance (end of period)	MM USD	7.976	5.476	-11,6	-31,3
Implicit Exchange Rate (M2/RI)	Bs/\$	4.993	153.548	5.378,8	2.975,4
Parallel Exchange Rate (annual average)	Bs/\$	13.669	401.334	12.731,9	2.836,0
Official Exchange Rate (annual average)	Bs/\$	13.058	306.235	27.429,0	2.245,2

Sources: Central Bank of Venezuela (BCV in Spanish), OPEC and own computations.

Table 4. Scenario C. Oil price: 10 US\$/bl - **Venezuela: Main Macro-Economic Aggregates**

Description	Units	Years		Variation rate %	
		2019	2020	2019/2018	2020/2019
Real Sector					
Constant prices					
GDP	Bs.S 1997=100	222.003	160.551	-29,6	-27,7
Private Consumption	Bs.S 1997=100	155.415	116.251	-28,1	-25,2
Investment	Bs.S 1997=100	12.654	6.897	-48,5	-45,5
Oil production (official data)	MBD	985	705	-35,3	-28,4
Foreign oil sales	MBD	891	642	-35,0	-27,9
Foreign oil sales	MM USD	18.993	2.343	-36,3	-87,7
Oil Price	USD/BI	59,7	10,0	-3,7	-83,3
Current Prices					
GDP	MM Bs.S	298.742.261	25.861.640.564	8.674,2	8.556,8
GDP per capita	Bs.S 1997=100	7,9	5,9	-26,7	-25,1
Monetary Sector					
Monetary Base (end of the period)	MM Bs.S	28.350.848	4.745.458.355	6.412,6	16.638,3
Monetary Liquidity (end of the period)	MM Bs.S	39.000.905	6.169.095.861	4.745,1	15.717,8
Inflation (annual average)	Index 1997=100	49.035.242.826	684.385.615.514	15.306,2	12.763,8
Inflation (end of the period)	Index 1997=100	150.013.531.354	1.630.979.125.581	6.819,1	17.693,0

External Sector					
Exports (goods) F.O.B.	MM USD	24.388	7.603	-27,6	-68,8
IMPORTS (goods) F.O.B.	MM USD	10.768	5.474	-15,8	-49,2
Current Account - Goods	MM USD	13.619	2.129	-34,8	-84,4
Reserves (Flow)	MM USD	-1.022	-3.500		
Reserves Balance (end of period)	MM USD	7.976	4.476	-11,6	-43,9
Implicit Exchange Rate (M2/RI)	Bs/\$	4.993	1.378.261	5.378,8	27.505,0
Parallel Exchange Rate (annual average)	Bs/\$	13.669	2.107.317	12.731,9	15.316,5
Official Exchange Rate (annual average)	Bs/\$	13.058	2.096.413	27.429,0	15.954,7

Sources: Central Bank of Venezuela (BCV in Spanish), OPEC and own computations.

2. What choices does the country have to face the COVID-19?

The economic policy steps implemented by China, by the most affected countries in Europe and those suggested by multilateral organizations, rely mainly on fiscal actions. Under the current macroeconomic situation, the fiscal space for Venezuela is extremely tight. Any fiscal measures will be tied to foreign currency availability, which also involves export revenues and external financing. Income from non-oil exports is less than 10% of total exports, so they are not an alternative in the short run. A “fire sale” of public assets (for instance, refineries inside and outside the country) is not a feasible choice because of the sanctions. As a result, **under the absence of external financing, the state will rely on financing the fiscal deficit monetarily to accomplish fiscal measures (i.e. those that do not involve foreign currency), with a subsequent rise in inflation and depreciation of the bolivar.**

The external financial assistance from multilateral organizations requires a negotiation between N. Maduro’s government, the National Assembly presided by J. Guaidó and the National Assembly presided by L. Parra. This financial aid should focus on urgent investments in health, sanitation and social programs for vulnerable populations and SMEs.

The second external financing option comes from **bilateral financing with the Russian and Chinese governments.** This could take different forms: debt refinancing (in terms of loan maturities and/or new loans), loans of goods and services, and /or liquid loans.

The financial aid from non-financial multilateral organizations, such as United Nations (programs, agencies, and funds) to deal with the crisis, albeit limited, is important to enhance the response to the shock from a sanitary perspective

The main economic actions to face the crisis can be summarized in three large groups: investment in health/sanitation, measures to preserve household purchasing power (demand-side measures) and actions to support the productive sector (supply-side measures). From supply-side measures, we distinguish those that support essential activities during quarantine and those that impact inactive SMEs. Policy actions to strengthen the “inactive businesses” are addressed to reduce the negative impact of the quarantine and boost their probability of survival after the crisis.

In terms of SMEs, the contractive impact of economic paralysis will seriously harm them. Nonetheless, the firms, that have survived and carried the adverse macroeconomic conditions during the last recent years, will probably be more resilient due to their strategies to operate under complex scenarios.

The next table shows the announcements made by President N. Maduro on March 22th 2020 (**“Plan de protección del Estado Venezolano en tiempos de CORONAVIRUS”**) and classified them according to the type of measure.

Table 5

Measure	Type
1 Payroll payment through the Patria system (6 months)	Supply measure (non-essential sector)
2 Suspension of rent payments (inactive businesses and households) with compensation for property owners (6 months)	Demand (households) and supply-side measure (non-essential sector, businesses)
3 A plan for the agro-alimentary sector to guarantee CLAP program	Supply-side measure (essential sector)
4 Maintain social transfers through the Patria system	Demand-side measure
5 Free Metro pass for health workers	Supply-side measure (essential sector)
6 Prohibition of the interruption of telecommunication services	Demand-side measure
7 Extension of import taxes exemption (6 months more) [4]	Supply-side measure
Banking System Measures	Type
8 Suspension of credit payments (capital and interest) for six months.	Supply and demand-side measure
9 Suspension of past-due loan payments (six months)	Supply and demand-side measure
10 Efficient credit allocation to SMEs	Supply-side measure (non-essential sector)
11 Government loan guarantees to essential sector	Supply-side measure (essential sector)

[4] This measure was initially issued in September 2018, and it has been systematically extended since then.

An urgent call for a health and sanitation investment plan could complement previous measures. However, the absence of external financing will complicate to undertake it. From table 5, the experience of payroll payments through the Patria¹ system during the electric blackout (2019) can be used as a guide. The suspension of rent payments, if the compensation property owners does not occur expeditely, it becomes in a transfer among private agents (from the landlords to the tenants) in unfavorable conditions to the property owners. The high inflation would rapidly vanish the nominal compensation in real terms. A similar outcome is observed with measures associated with the banking system. They are transfers from the banking system to their clients. Indeed, the only way in which the banking system will grant new loans to SMEs, given the reduced operating income, would require a decrease in the high level of reserve requirements. The expansion of banking system vulnerability in Venezuela, considering contractive oil shocks, has been studied by the literature.²

We also propose the following complimentary initiatives to strengthen the measures announced by the government:

- » Supply-side measures:
 - » From a credit perspective, **the reduction of reserve requirements** (i.e. estimated around 58 billion Bs-782 US\$ million- on March 13th, 2020) will boost credit banking. This action will not imply any public expenditure, but it will relieve liquidity restrictions (SMEs and households) and promote banks' intermediation activities. This release of the reserve requirements would strengthen the credit measures announced without increasing bank fragility.
 - » **Implement faster mechanisms for compensating the property owners and telecommunications firms**, due to the suspension of rent payments and the prohibition of interrupting telecommunication services.
 - » From fiscal perspectives, countries have implemented **the postponement of tax payments and other fiscal contributions**. These initiatives would have positive effects (especially of the Income-tax-ISLR in

¹ Online platform that registers all the beneficiaries of unconditional monetary (BONOS) and non-monetary (CLAP) transfers. According to recent estimates, CLAP's implicit transfers would be approximately 1.533 US\$ million in 2019.

² Chirinos-Leañez, A. C. Pagliacci. (2014). *El Sistema financiero venezolano. ¿Qué compromete su desempeño?* Revista de Análisis Económico, Vol 29, No 2, pp.47-74.

Spanish) on businesses and households. Nevertheless, as we pointed out, they would reduce fiscal income, and create incentives to finance the deficit monetarily. In short, more inflationary pressures and depreciation of the currency.

- » **Demand-side:** Targeted social transfers to the most vulnerable population are crucial. Targeting is also necessary for SMEs. Since schools are closed during the quarantine, the resources addressed to the school food programs (PAE for its acronym in Spanish) could be transformed into compensatory transfers.
- » **Measures on the health sector: Dissemination of an urgent plan (detailed) of action for the health sector,** that could be submitted for consideration of international fund donors. The COVID-19 pandemic situation could change the reluctant attitude of external financial providers' about Venezuela.

The monetary and non-monetary transfers recommended by multilateral organizations and implemented by countries around the world have been applied in Venezuela for many years. Inevitably, the fall of oil income and economic contraction will hit the social protection system. The limited fiscal space makes unlikely the rise of social transfers as a response to the COVID-19 pandemic. The discussion must focus on how maintaining their levels. We expect an erosion of socioeconomic indicators without external financing.

Finally, we emphasize the COVID-19 situation is dynamic, changes continuously and involves a lot of uncertainty. National governments and multilateral organizations are in a permanent learning process that includes exchanging experiences. The economic, financial, and social measures that we consider suitable for current conditions will be adapted to the evolution of the pandemic.

Social and Economic Impact of the COVID-19 and Policy Options in Honduras

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* I am grateful to Alejandra Hernández Qun, Sergio Membreño Cedillo, Marcela Herrera, and Mara Rodríguez for useful documents and access to data to better understand and describe the current situation in Honduras. This document has benefitted from useful comments from Marcela Meléndez, Luis Felipe López-Calva and Santiago Levy. Given the rapidly changing nature of the COVID-19 pandemic, the information in this report may be subject to change. The views expressed in this paper do not necessarily reflect the views of the UNDP or Universidad de los Andes. Any errors or omissions are solely attributable to the author.

Abstract

This policy document describes the current situation regarding the COVID-19 pandemic in Honduras. We analyze the internal and external channels of transmission on the Honduran economy, the potential impact on economic growth and labor market outcomes, the current political situation and its interaction with the pandemic, describe and analyze the initial policy responses from the Honduran government, and propose additional policy instruments to deal with the expected negative consequences from the crisis. Results indicate that while the Honduran government has taken measures to mitigate the economic impact of the crisis at the national, household, and individual level; there remains a high chance of economic downturn. The data also indicate that within the current proposed measures, informal workers and firms are being excluded from aid, although they represent almost 80% of the workforce. We conduct simulations that consider extending existing cash transfer programs, supplementing labor and remittance income to households, and also consider a universal income transfer to all Honduran households. Overall, the findings suggest increases in poverty rates, but also imply that well-targeted policies may help mitigate the negative impact of the COVID-19 pandemic on the welfare of the Honduran population.

1. Introduction

The current situation across the world is unprecedented. The COVID-19 pandemic has affected many dimensions of life and will undoubtedly have important downstream effects on the welfare of the global population over the next few months. This report aims to describe the current situation in Honduras, analyzes potential impacts on economic performance and the labor market, and summarizes recent government policies while also providing additional recommendations to contribute to the conversation on how to mitigate the negative effects of the pandemic.

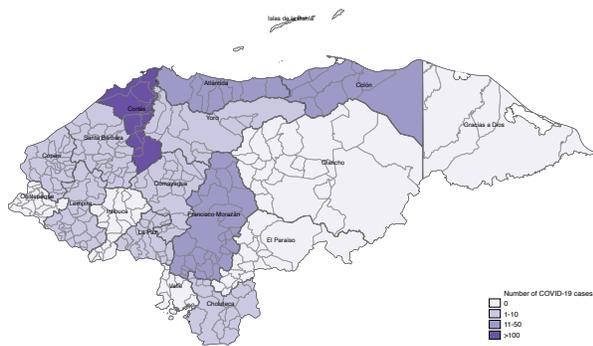
On February 10, 2020, the Honduran government declared a sanitary emergency due to COVID-19 and dengue fever. The first case of COVID-19 in Honduras was confirmed on February 18. During the next few weeks, the Government prepared its response and implemented several policies during the month of March. An information campaign that provided good practices to prevent the spread of the virus through social distancing measures began on March 4th. A travel ban was set in place for airline passengers entering Honduras from high-risk countries on March 11th.¹ On March 13th, schools were ordered to close for a period of 14 days, gatherings of more than 50 people were prohibited for 14 days, the travel ban was expanded to include passengers arriving via air and by sea, and the Government regulated the supply and prices of essential goods.

Starting on March 16, a mandatory curfew was set in place for the capital district, the city of La Ceiba and the department of Choluteca, sites with confirmed cases of COVID-19 at the time. This mandatory curfew was extended nationwide until March 29th by Decree PCM-021-2020. The quarantine is mandatory and enforced by the National Police. Exceptions to the quarantine include grocery and fuel provision, banking activities, and medical emergencies. On the last day of the first curfew, authorities extended the quarantine until April 12th, limiting movement to Mondays, Wednesdays, and Fridays based on the last number of a citizen's identification number.²

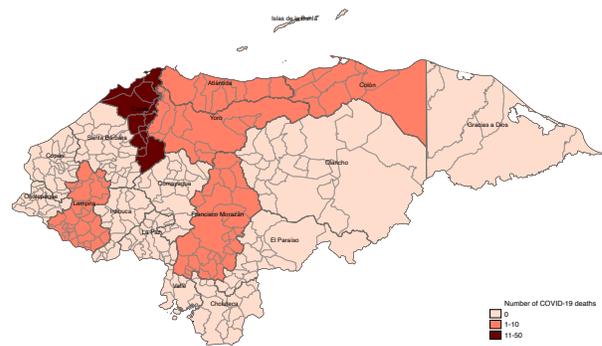
At the time of writing, authorities have established a website that provides citizens with up-to-date information on the state of the virus and any measures being implemented by the Government (covid19honduras.org). As of April 6, the number of confirmed cases is 298, with 22 deaths and 6 recoveries. **Figure 1** maps these statistics by department. The most affected places in Honduras are those that have international airports, receive cruise ships, and experience busy activity with neighboring countries. While these numbers remain at low levels in comparison to some of the most affected countries across the world, expectations are that contagion has not yet reached its peak and that more cases will be reported in the coming weeks and months.

Figure 1. Number of confirmed cases, deaths, and recoveries in Honduras by department

Confirmed cases



Deaths



¹ The countries on the list include China, Iran, Spain, France, Germany, Japan, and South Korea, among others.

² See covid19honduras.org/?q=toque-de-queda-hasta-12-de-abril for the full decree and the table that regulates movement by the last number of the citizen identification card.

Recovered patients



Source: Own elaboration from official government reports on covid19honduras.org.

Notes: Updated on April 6, 2020.

The Government has been devising a plan to reduce the negative impact of the pandemic on the Honduran population. Its first acts have focused on containing the spread of the virus through curfews and strengthening the capacity of the health system to deal with COVID-19 cases. A council of economic advisors has proposed several measures to mitigate the impact on aggregate macroeconomic performance, guarantee basic needs in terms of food to the most vulnerable families, and reducing tax burdens on firms to prevent layoffs during the duration of the pandemic. While these are not the only measures to be undertaken, discussions are ongoing between this council and the executive branch, with the purpose of guaranteeing the livelihood of the most vulnerable Hondurans. These measures will be described throughout this report, and it will conclude by suggesting other policies in order to contribute towards this goal.

The remainder of this report is organized as follows. Section 2 focuses on the channels of transmission of the COVID-19 pandemic. Section 3 focuses on assessing the potential impact of the pandemic on economic growth and the labor market. Section 4 briefly comments on the political situation of Honduras and how it interacts with the pandemic. Section 5 discusses the current measures adopted by the Government and proposes additional policy options to mitigate the potential negative consequences from COVID-19 in Honduras. The last section concludes.

2. Identifying the channels of transmission

The pandemic is expected to have wide-ranging effects across the world. Several external and internal factors may interact with the pandemic. This section describes these factors for Honduras.

Honduras mainly exports primary products, such as coffee, bananas, and palm oil. According to analysis from the Honduran Central Bank using Bloomberg price data (Honduran Central Bank, 2020b), the price of coffee has risen to US\$119.55 per 100 pounds. This price is higher than during 2019, which has a positive effect for producers in Honduras. The same analysis predicts that prices for bananas will fall to US\$15.89 per 40 pounds (from US\$18.50) and predicts similar price behavior for palm oil (a reduction from US\$0.78 to US\$0.56 per kilogram). While the results on prices are mixed for different producers, they are likely to experience negative demand shocks. While internal demand may help some producers place their products, the difficulty in transporting exportable goods to other countries may affect exports for these three commodities.

The pandemic is expected to not only affect aggregate demand and supply chains not only for primary products exported by Honduras, but also on the maquila industry. Maquila has rapidly become the most important export activity in Honduras since the 1990s (de Hoyos, Bussolo and Nuñez, 2008), with the latest calculation estimating that this activity accounts for 4.4% of GDP (Honduran Central Bank, 2019). Honduras mainly manufactures textiles and apparel, but also produces inputs for the harness industry and automobile parts, processes plastics, provides business services to firms, among other activities. The maquila sector employs 150,000 people. Preliminary estimates for 2019 expected growth in exports and job creation from the maquila

sector, a trend that carries over to 2020 projections. However, due to interruptions in the supply chain and negative demand shocks from the COVID-19 pandemic, this sector may face difficulties in achieving these expectations. Given its size and importance to the Honduran economy, this sector is particularly exposed, and may have important consequences in revenue generation and job loss due to the pandemic.

Travel and tourism activities are also important in Honduras and will be impacted because of the rapid reduction in travel across the world. Honduras also receives a large influx of cruise ships to the Bay Islands, whose frequency will likely be significantly affected in the upcoming summer season. Income from travel and tourism activities contribute 14.6% to the Honduran GDP and the sector employs 542,000 people (WTTC, 2019). While the tourism sector was expected to continue growing in the next decade, the drop in international travel will affect these expectations and impact a sector that contributes a large fraction of income for many Honduran households. Domestic travel will also be impacted by quarantine measures, especially over Easter, which is one of the peaks of domestic travel by Hondurans.

Additionally, Honduras depends largely on international remittances. About one million Hondurans are estimated to live outside the country, and many send monetary transfers to their family members. Over time, these transfers have become an important source of foreign exchange for the country, growing 13.1% to US\$5.5 billion in 2019 (Honduran Central Bank, 2020a). 80% of migrants are currently in the United States, almost 8% in Spain, while the remainder are spread out across Latin American and European countries. Migrants are mostly employed in the service, construction, and manufacturing sectors, and send an average of US\$542.70 to their families in Honduras. 54.7% of Honduran households state that this is their primary source of income. These families report using the majority of that income to cover basic needs such as food, housing, education, and health. For 2020 and 2021, the Honduran Central Bank expects lower growth in the amount of remittances from migrants, due primarily to the economic impacts of the pandemic on the economies of the United States and Spain, which account for almost 9 out of 10 migrants. **Figure 2** shows these projections, that suggest a deceleration but not a reduction in the amount of remittances sent to Honduras, from 13.1% to 8 and 7 percent in 2020 and 2021, respectively.

Figure 2. Observed and projected remittances (in millions of US\$)



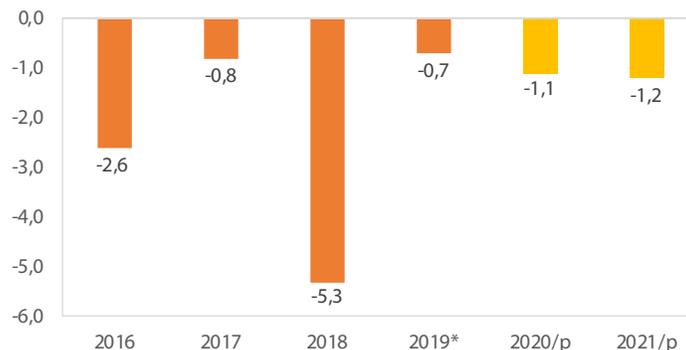
Source: Own elaboration from Honduran Central Bank (2020b).

Notes: *=preliminary estimates, /p=projected.

The sum of these effects on commodity prices, exports, supply chains, tourism, and remittances will have an impact on the balance of payments for Honduras. Exports are likely to fall but may be balanced by a reduction in imports due to the interruption of supply chains across the world. **Figure 3** shows the trends and projections in the current account balance as a percentage of GDP from 2016 to 2021. This balance is expected to be negative for 2020 and 2021, although this represents a smaller deficit than observed in previous years. However, this

depends on how exports and imports fare in the next few months, income from tourism activity, as well as the amount of remittances received from Honduran nationals abroad. Capital outflows from Honduras to other countries are not expected to increase, since they are generally low in comparison to inflows from remittances. Additionally, Honduras will likely benefit from the lower oil prices across the world, since the country does not produce this fossil fuel and imports it from other nations.

Figure 3. Current account balance as % of GDP (observed and projected)



Source: Own elaboration from Honduran Central Bank (2020b).

Notes: *=preliminary estimates, /p=projected.

As mentioned in the Introduction, at the time of writing, Honduras has been in mandatory quarantine for about 14 days, which has been extended for the same amount of time. Mobility has been restricted for individuals and firms have been allowed to operate under specific health and safety guidelines. These measures to contain the spread of the COVID-19 virus will have an impact on domestic economic activity. The Honduran Central Bank expects the monthly economic activity index (IMAE, for its acronym in Spanish), to fall significantly in the next few months. Given the measures in place, measuring this index as usual will face difficulties, so the deceleration will not be directly measurable. Additionally, aggregate demand is expected to fall due to the quarantine and the restrictions currently in place. This will likely affect consumer and business confidence, and potential foreign investment in Honduras due to the recent stock market crash.

While it is difficult to precisely pinpoint how the COVID-19 pandemic will affect international and domestic aspects of the Honduran economy, the Honduran Central Bank seems to consider at this time that it will decelerate expected growth but not become a full-fledged downturn. Based on the evolution of the pandemic in the short and medium-term, these expectations may change.

3. Assessing the economic impact

Economic growth in Honduras was 3.7% in 2018 and 2.7% in 2019. This deceleration in growth can be explained by less favorable terms of trade that reduced investment and private consumption, as well as a drought that affected agricultural production (Honduran Central Bank, 2020b).

The Honduran Central Bank has revised growth perspectives from 2.7% to 1.5%-2.5% for 2020 and between 2-3% for 2021. While other countries have been less optimistic in recalculating their growth projections, these numbers depend on the amount of time in which the world and local economy is at a standstill and individual mobility remains restricted. Inflation perspectives at the time of writing are within planned targets, about 4% for both 2020 and 2021, with an expected variation of ± 1.0 percentage point. Other selected economic indicators are shown in Table 1, taken from the Central Bank's COVID-19 press bulletin (No. 13/2020), published on March 19, 2020.

Table 1. Main macroeconomic indicators for Honduras (observed and projected)

	Observed	Projected	
	2019	2020	2021
Inflation	4.1	4.0 (±1.0)	4.0 (±1.0)
GDP growth	2.7	1.5-2.5	2.0-3.5
Exports	1.5	3.2	5.4
Imports	-3.2	3.9	3.8
Deficit in balance of payments	0.7	1.1	1.2

Source: Honduran Central Bank (2020b). Bulletin 13/2020, March 19, 2020.

Available at: www.bch.hn/download/boletines_prensa/2020/boletin_de_prensa_13_20.pdf.

In response to these uncertain times, the Honduran Central Bank (HCB) has revised their monetary policy to mitigate the potential impact of COVID-19 on the Honduran economy (Honduran Central Bank, 2020b). First, they reduced the monetary policy rate by 0.75 points to 4.50%. Second, the HCB has reduced the interest rate applied to private creditors from 6.25% to 5.50%. Third, it will continue to offer repo transactions to the financial sector, extending their length from 14 to 28 days and reducing rates from 7.00% to 6.25%. Fourth, the HCB set the applicable interest rate for investment at 4.50%. Fifth, it will suspend daily auctions of bonds to grant the financial system more liquidity, expecting to release about 10,600 million lempiras (about US\$428 million).³ Last, the HCB will continue to monitor the evolution of the main macroeconomic indicators and adapt their policy accordingly to mitigate potential negative impacts on their growth and inflation targets, while trying to ensure that the economy does not lose momentum because of the pandemic.

Several of these economic projections depend on the rapid reactivation of the Honduran economy. Given the uncertainty in the duration of the mandatory quarantine in the country, these numbers may be revised by the Honduran Central Bank in the future. While the COVID-19 pandemic is expected to further impact projected growth rates, the curfew has affected normal functioning of economic activity, specifically labor markets since workers have been ordered to remain at home to contain the spread of the virus, in an effort to prevent a collapse of the health system.

Labor markets are expected to be significantly affected by the pandemic. An ongoing study by Gentillini, Almenfi, and Orton (2020) has identified that approximately 106 countries across the world have adopted some form of labor market protection in response to the COVID-19 pandemic. At the time of writing, Honduras has taken initial measures with respect to labor market protection for firms and workers. The measures include tax breaks and a restructuring in fiscal payments for Honduran firms and a one-month subsidy of 6,000 Lempiras (about US\$242) to formal workers who contribute to the social security system. Given the ongoing nature of the pandemic, further action may be required in the short-term to protect vulnerable workers. To this objective, we describe some aspects of the Honduran labor market to gauge the size of the vulnerable population and whether the initial measures taken to protect jobs will reach those that most require them.

According to the most recent household survey from 2019, about 57% of the Honduran population is active in the labor market (INE, 2019). The reported employment rate for 2019 was 54%. The unemployment rate in 2019 was 5.7%. Over the past five years, this rate has remained relatively stable. Given the mandatory quarantine currently in effect in Honduras, most workers are remaining at home. It is unclear whether mass layoffs will occur, with the Government recently allowing private firms to reassign vacation days and national holidays for workers during the state of emergency (STSS, 2020). The proposed employment measures have focused on alleviating tax burdens on firms and supplementing income for formal workers. Despite these palliative measures, there are expectations that the unemployment rate will increase significantly, but there remains uncertainty as to the magnitude of the potential change.

³ This document uses the current exchange rate to convert Honduran Lempiras into US dollars: US\$1=L. 24.75.

While unemployment is relatively low compared to other countries in Latin America (SEDLAC, 2018), it does not capture nuances in the nature of work in Honduras. Approximately 15% of workers are classified as visibly underemployed and 71% as invisibly underemployed (INE, 2019). These figures suggest that a large fraction of the Honduran workforce is attached to the informal economy. In particular, adopting a social security definition for informality,⁴ the number of workers who do not contribute to any form of social protection is 82.4%. This population is highly vulnerable given that they work outside the contributory system and are not covered by the Honduran labor code. Furthermore, these 82.4% workers would not be covered by the one-month subsidy of 6,000 Lempiras that was proposed by the Honduran government on March 30th, 2020.

Despite the recommendations to carry out remote work, not all employees are able to directly translate their activities towards the virtual domain. A potential indicator of at-risk jobs may be determined by analyzing how many workers have access to internet at work and in their homes. Approximately 14.8% of workers report they use internet at work, while 48.5% have access to internet at home. This average, however, varies by worker attributes. **Table 2** shows differences in access to internet at work and home by gender, labor informality, and household income quintile.

Table 2. Internet access by worker attributes

	Internet access	
	At work	At home
All workers	14.8	48.5
Male	14.1	44.9
Female	15.8	53.2
Formal	30.0	61.5
Informal	7.2	42.0
Household income quintile		
1	1.9	17.9
2	8.3	21.5
3	12.4	37.6
4	15.1	46.6
5	24.9	67.3

Source: Own calculations from 2019 EPHPM household survey.

Formal workers often use the internet at work, and more than half have connectivity at home. Informal workers use less internet at work, with just under half reporting access at home. Internet access is related to household income, since 17.9% of workers in the lowest quintile have internet access while 67.3% of workers in households in the highest income quintile are connected. This suggests that employment in low-income households will be impacted more prominently, given that those activities cannot be carried out remotely. Additionally, observing internet access by aggregate economic sectors shows that certain sectors perform more remote work than others. Table 3 shows the share of workers by sector and their use of internet at work and available connectivity at home. 55.7% of Honduran workers are in the service sector, but only 17.7% use internet at work. 30.8% of Honduran workers are in agriculture, with virtually no use of internet at work. Finally, the 13.5% of workers in manufacturing rarely use the internet in the workplace. In general, this further supports that most occupations in Honduras cannot be performed remotely.

⁴ In particular, the report considers formal workers as any worker who actively contributes to any social security in Honduras, and informal workers as those who do not contribute to any form of social security.

Table 3. Internet access by economic sector

	Share of workers	Internet access	
		At work	At home
Agriculture	30.8	3.0	25.2
Manufacturing	13.5	11.2	42.5
Services	55.7	17.7	54.0

Source: Own calculations from 2019 EPHPM household survey.

To further explore what sectors and jobs will be impacted most due to the quarantine, we disaggregate these three sectors using 1-digit CIIU industry classification codes. Table 4 shows the share of workers in each industry, hours worked per week, formality rate, and the amount of monthly earnings in US dollars. Using this classification, almost a third of workers are employed in agricultural activities, followed by retail, personal services, and manufacturing. These four sectors encompass 86.6% of Honduran workers. Most sectors have a full work week,⁵ with average hours ranging from 35 in agricultural activities to about 55 in transport and storage.

Table 4. Formal and informal workers by industry

Industry	Share of workers	Hours worked	Formality	Monthly earnings (in USD)	
				Formal	Informal
Agriculture and fishing	30.53	35.3	2.3	382.30	106.93
Mining	0.35	40.3	17.7	634.80	158.59
Manufacturing	13.52	41.3	34.4	417.76	174.38
Utilities	1.00	43.8	28.0	518.29	244.17
Construction	6.18	45.8	6.7	682.93	216.55
Wholesale retail, hotels, and restaurants	23.86	48.5	12.4	492.18	219.59
Transport and storage	3.02	54.9	11.9	571.01	316.79
Financial and real estate services	2.87	43.4	55.0	589.71	473.11
Personal services	18.66	39.7	35.4	566.70	193.13

Source: Own calculations from 2019 EPHPM household survey.

Formality rates are low in Honduras and vary widely by industry. The empirical definition for formality is the workforce that contributes to the social security system.⁶ Only 17.6% of workers contribute and are therefore covered by the provisions in the labor code. Agriculture and construction are among the industries with the lowest level of formality (2.3% and 6.7%, respectively). Financial and real estate services and personal services show the highest formality rates (55% and 35.4%, respectively). High rates of informality also impact earnings, with formal workers earning up to three times as much than informal workers in the same industry. For instance, while a formal construction worker earns about US\$682 per month, an informal construction worker earns US\$216 per month. Similar differences arise across other industries. This evidence suggests that the majority of workers are not covered by social protection and are therefore vulnerable to lose their jobs and main source of income. Moreover, they would not be covered by the employment protection measures currently proposed by the Honduran government.

To further characterize labor informality, we present a profile of formal and informal workers in Table 5. The table includes demographics, shares across the income distribution, and labor market outcomes. As mentioned

⁵ The Honduran labor code states that full-time employment comprises a five-day work week of 8 hours plus half a day on Saturday, for a total of 44 hour per week.

⁶ An alternative definition is that employed by the International Labor Organization, which classifies as workers as informal if they work in small firms or are self-employed. By that metric, the share of labor informality in Honduras was 66.2% in 2019, which implies that formal workers are the remaining 33.8%.

beforehand, formal workers comprise 17.6% of the workforce while informal workers account for 82.4%. More than half of the informal workforce is male, 37 years old on average, and live in households with an average of four people. Greater differences arise when we look at the share of workers by household income quintile. While 72% of formal workers are in the fourth and fifth quintiles of the income distribution, 50% of informal workers are in the first and second quintiles.

The distribution of workers by industries also presents large differences. While most formal workers are employed in personal services and manufacturing, most informal workers in Honduras operate in agriculture, retail, and to less extent in personal services. These results, together with those for connectivity suggest that informal workers are employed in industries where remote work is less plausible and are thus less likely to continue their activities during the quarantine.

Table 5. Profile of formal and informal workers in Honduras

	Formal	Informal
Demographics		
Males	0.57	0.64
Age	37.69	37.45
Married	0.62	0.52
Household size	4.44	4.85
Household income quintile		
1	0.008	0.252
2	0.068	0.219
3	0.189	0.185
4	0.280	0.173
5	0.441	0.145
Industry		
Agriculture and fishing	0.041	0.366
Mining	0.003	0.003
Manufacturing	0.267	0.108
Utilities	0.016	0.009
Construction	0.023	0.070
Wholesale retail, hotels, and restaurants	0.168	0.253
Transport and storage	0.021	0.032
Financial and real estate services	0.088	0.015
Personal services	0.374	0.145
Self-employed	0.027	0.513
Firm size		
Large (>10 employees)	0.633	0.071
Small (≤10 employees)	0.111	0.908
Public sector	0.256	0.021
Hours worked	47.10	40.39
Monthly earnings (in USD)	515.22	182.82

Source: Own calculations from 2019 EPHPM household survey.

Over half of all informal workers are self-employed and working in small firms with less than 10 employees. Formal workers tend to be salaried employees in large firms or the public sector. Given the government's admission that "small and medium enterprises are likely to be the most affected due to the economic deceleration from

the quarantine” (Government of Honduras, 2020c), once again informal workers seem to be most at risk in maintaining their jobs and income stream due to the pandemic.

Given these statistics, the proposed transfer of 6,000 Lempiras to formal workers would potentially reach 687,453 formal workers and cost approximately US\$166.7 million. However, this would only supplement average income for formal workers. Mean formal sector earnings are US\$515 per month and the transfer is approximately US\$242, implying that it would cover about 47% of formal workers’ earnings for one month. While the transfer would be a great help to that population, this policy would exclude 3,218,413 informal workers to account for the US\$588.4 million they earn, assuming that each worker earns the average informal income of US\$ 182.82 per month.

Overall, the COVID-19 pandemic is expected to have a large impact on aggregate economic performance and labor markets in Honduras. Current projections assume that the pandemic, its corresponding global effects on commodity and oil prices, and the effect on external and internal aggregate demand will reduce potential GDP instead of leading to a downturn. However, depending on the evolution of the COVID-19 pandemic, these expectations may be adjusted in the future.

4. Social unrest

While social unrest has not reached the levels seen recently in other countries in Latin America, Honduras has been dealing with sensitive issues over the past few years. The president, Juan Orlando Hernández, is in his second term after being reelected in 2017. Reelection by a sitting president has been traditionally restricted by the Constitution since 1982, but Hernández successfully ran for a second term in the last elections. These elections were fraught with allegations of fraud, but despite the resulting accusations, these claims were never proved.

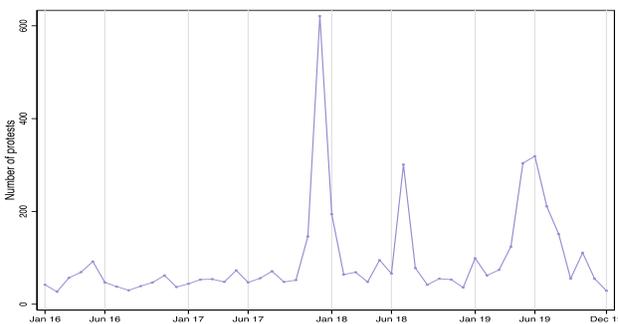
In the past few years, the Government has also faced allegations of corruption and ties to criminal organizations. In 2019, the president’s brother, Tony Hernández was indicted of drug trafficking in the United States.⁷ Although this event has not implicated any government officials directly, its aftermath suggests that state institutions in Honduras have yet to achieve the autonomy or capacity needed to successfully attack criminal networks (InSight Crime, 2019). Several other corruption scandals have plagued the current administration, and the country is ranked as one of the most corrupt nations according to the Corruption Perceptions Index calculated by Transparency International. Recent data from the Barometer of the Americas finds that citizens’ are less satisfied with their democracy and a significant fraction believe the Government is corrupt (LAPOP, 2019).

While this background does suggest that social unrest may be brewing in Honduras at the levels of other countries in Latin America, the population has not mobilized to the streets to voice any concerns during the COVID-19 pandemic. Figure 4 plots trends in the number of peaceful and violent protests in Honduras collected by the National Police. There is a large increase in November and December 2017, just after the elections where Hernández was reelected. Since then, there are two points in 2019 where mobilizations took place. The first took place in May and June, led by teachers and medical personnel that protested an executive decree which they claimed would promote massive layoffs and privatizing health and education in Honduras. The second took place in November, during and after the trial where Tony Hernández was convicted.

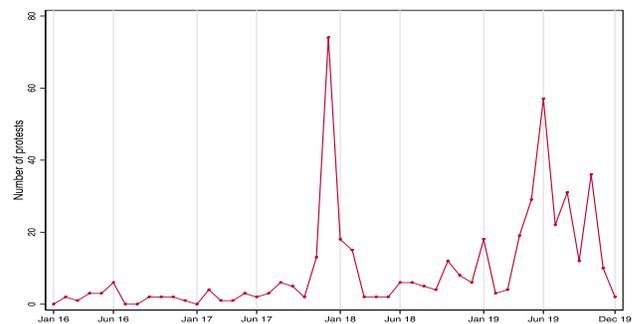
⁷ See www.nytimes.com/2019/10/18/world/americas/honduras-president-brother-drug-trafficking.html, for the full news story.

Figure 4. Trends in protests and mobilizations in Honduras

Peaceful



Violent



Source: Own elaboration from Honduran police records in SEPOL (2020).
 Notes: Data scraped from www.sepol.hn between March 30th and April 1st, 2020.

While social unrest has fallen in the beginning of 2020, the pandemic and quarantine may exacerbate unrest due to potential corruption and impatience of the population during the pandemic. On the one hand, the national police have been granted faculties to enforce the mandatory quarantine. Informal reports suggest that there have been large levels of non-compliance with the curfew measures. In the case of excessive force, the population may respond, as has occurred in other countries with strict enforcement. On the other hand, there have been recent protests from certain groups of the population who are claiming they have no food to deal with the current crisis.⁸

Overall, while social unrest in Honduras is not as severe as in other countries in Latin America, there remain some unsolved issues between the Government and the people. The data on protests suggest that Hondurans were not mobilizing to voice their concerns with these issues in early 2020. While the level of social unrest is not expected to amplify any consequences from the COVID-19 pandemic, there is a potential for conflict as the quarantine carries on and economic conditions become more uncertain. Given the restrictions to mobility in place, protests are not expected to be massive, although as evidenced by recent events and other experiences, they may still occur.

5. Policy options

i. Initial policy responses by the Honduran Government

At the time of writing, the Honduran Government has taken initial actions to mitigate the consequences of the COVID-19 pandemic. Before proposing additional policies, we review these measures.

On March 17th, the Honduran Government shared the first set of economic measures to mitigate the negative effects of the pandemic on Honduran households (Government of Honduras, 2020a). It contemplates four measures. First, it will freeze payments on loans from the Honduran Bank for Production and Housing (Banhprovi, for its acronym in Spanish) for three months. Second, Banhprovi will receive 200 million Lempiras (about US\$8.08 million) to support the construction sector, hoping to benefit 200 families and protect 1,000 jobs. Third, 2,500 million Lempiras (about US\$100 million) in agro-credits will be expedited to guarantee food security among Honduran households, also through Banhprovi. Last, a 51 million Lempira fund (about US\$2 million) will be available for approximately 5,000 small and medium enterprises. Additionally, the Honduran

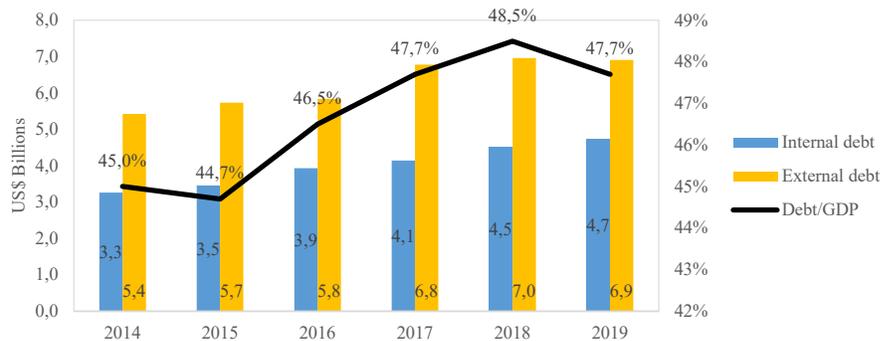
⁸ See www.elheraldo.hn/fotogalerias/1368612-468/fotos-adem%C3%A1s-del-coronavirus-el-hambre-tambi%C3%A9n-acecha-a-los-hondure%C3%B1os, for the full story.

Central Bank announced changes to its monetary policy on March 19th, which were described in detail in Section 1. On March 19th, the Government also passed a decree freezing prices for goods that are part of the basic food basket as well as hygiene and cleaning products, for as long as the COVID-19 emergency lasts.

On March 20th, the president announced a second set of economic measures on a televised address to the nation (Government of Honduras, 2020b). These new set of measures focused on food security for Honduran households and maintaining the production capacity of food producers in order to supply the internal demand for food. First, the Honduras Solidaria (Solidary Honduras) initiative provides 30 days' worth of groceries to 800 thousand vulnerable families. Second, 200 million Lempiras (about US\$8 million) were assigned to agricultural producers in Honduras' "dry corridor", to ensure that productivity does not fall nor production decreases. Third, 190 thousand small agricultural producers will receive a transfer to guarantee their access to agricultural inputs. Fourth, there are no restrictions on the operations of firms in the agricultural sector, but they must employ proper sanitary measures to prevent virus spread. Last, while markets are closed, the producers who sold in those venues may supply grocery stores and supermarkets by delivery.

While the first two set of measures focused on a first response to ensure food security for Honduran households and liquidity for the financial sector to support agricultural producers, the latest set of measures aim to protect firms and jobs in other sectors. On March 26th, the Ministry of Labor authorized bilateral negotiations between firms and workers to count days spent in quarantine as vacations (STSS, 2020). On March 30th, the Government issued further responses. First, small and medium formal enterprises were granted a grace period for 2019 taxes until June 30, 2020. Second, those small and medium formal enterprises that do pay their taxes before April 30, 2020 will receive an 8.5% discount. Third, large formal taxpayers must pay taxes by April 30, 2020. Fourth, tax obligations for 2020 will be rolled out in three payments, due on August 30, October 30, and December 31 of 2020. Fourth, all firms that maintain all employees on their payroll will be granted a 10% deductible benefit on tax obligations for 2020. Any employers who suspend or release workers instantly lose this benefit. Fifth, firms not operating during the quarantine are exempt from paying value added tax. Last, all formal workers who contribute to the social security system and maquila workers will receive a one-month transfer of 6,000 Lempiras (about US\$242).

These initial economic measures were approved by Congress on April 1, 2020, which also voted in favor of procuring US\$2.5 billion to combat the COVID-19 pandemic (Congress of Honduras, 2020). The document states that the Ministry of Finance is authorized to "contract domestic or foreign debt, redistribute or reassign available external funds to this objective, emit bonds in the domestic or international markets, and obtain funds from international creditors at the terms currently available". On March 31st, the International Monetary Fund confirmed that US\$143 million would be provided to Honduras from the existing stand-by (SBA) and credit facility agreements (SBA/CFA) already in place from July 2019. While lawmakers have approved a significant amount of funds to combat the pandemic, the generalized emergency across the world may make obtaining both internal and external funds difficult. Moreover, Honduran debt has been rising in the past few years, as shown in Figure 5. Total debt in 2019 was 47.7% of the country's GDP. Given the need to acquire more funds to combat the pandemic, this debt-to-GDP ratio is expected to rise further in the next years. Icefi (2020a) suggests that debt levels in Honduras are already above the 40% threshold suggested by the international finance agencies and conclude that fiscal policy before the COVID-19 pandemic was on an unsustainable path. Given the emergency and the need to fund the policies described beforehand, it is likely that this level of debt will rise considerably, despite Honduras counting with limited space to increase their debt-to-GDP ratio. While the Honduran Central Bank has already reduced interest rates to guarantee liquidity, there is recent research suggesting that current measures may be insufficient to help control the fallout from the health aspects of the pandemic, economic standstill from quarantines, and demand shocks that affect individual livelihoods (Guerrieri et al., 2020).

Figure 5. Internal and external debt for Honduras

Source: Own elaboration from Ministry of Finance statistics.

Notes: Data obtained from www.sefin.gob.hn/deuda on April 1st, 2020

The measures summarized in this sub-section will likely be complemented by other social assistance measures, within the scope of the emergency decree passed by Honduran Congress. Several institutions have provided suggested responses across the world (Gentilini, Almenfi, and Orton, 2020; IADB, 2020; ILO, 2020), for Central America (Icefi, 2020b), and Honduras (UNAH, 2020). Additionally, civil society has also pronounced concerns about the situation and its implications on the livelihood of vulnerable families and workers, as well as preoccupations with potential corruption and mishandling of funds from the emergency (CGT, 2020; FOSDEH, 2020) All recommendations suggest contemplating short-, medium-, and long-term responses. While Honduras has taken initial steps to consider the first two, there remain policy options that may be considered to mitigate the economic and social impact from dealing with the COVID-19 pandemic.

ii. Additional policy proposals

In addition to the initial policy responses from the Honduran Government to reduce the negative consequences of the COVID-19 pandemic, other options may be considered. Some existing policies may be extended, or new social protection schemes for the duration of the emergency may be implemented. This section briefly proposes some concrete ideas of how additional efforts may be used to consolidate the response to the current crisis through lump sum transfers.

Honduras has implemented some form of conditional cash transfers since 2000. Since 2015, the Vida Mejor program has provided about 10,000 Lempiras (about US\$400) annually to beneficiary households subject to education and health conditionalities. Using data from the 2019 household survey shows that approximately 290,518 households benefit from this program. The first panel of Table 6 shows simulation results that use the existing cash transfer framework in Honduras to grant an additional transfer of 25%, 50%, 75% or 100% to current beneficiary households. The lowest additional transfer would cost US\$29 million, while an additional 100% transfer would cost US\$117 million. In terms of the approved emergency funds of US\$2.5 billion, providing additional cash transfers to current beneficiaries would cost between 1.17-4.69 percent of that budget.

As mentioned previously, Honduran formal workers have access to labor protection under the Honduran labor code. However, there is no unemployment insurance in Honduras (Ham, 2018). While some flexibility has been granted to firms to reassign vacation days while the quarantine lasts and a 6,000 Lempira transfer has been approved for formal workers, these employees account for 17.6% of the total workforce, thus excluding 82.4% of working people. The next panel of Table 6 shows the cost of providing this transfer as planned by the government and also extending the same amount to informal and all workers, as a universal income transfer to workers. While the cost of the proposed one-month transfer is 6.7% of total allocated COVID-19 funds, covering all workers for the same amount of time would come at a higher cost of 37.9% of the total available funds. Naturally, granting transfers to workers for more than one month would increase the costs depending on the

length of the assistance. Some form of social protection for informal workers is necessary since more than 3 million individuals will be excluded from the current policy proposals.

Table 6. Simulated policy options (one-time transfer to beneficiaries)

	Beneficiaries	Transfer (in US\$)	Cost (US\$ millions)	Percent of allocated COVID-19 funds
Supplement to cash transfers (Bono Vida Mejor)				
Additional 25% to households	290,518	101	29.3	1.17
Additional 50% to households	290,518	202	58.7	2.35
Additional 75% to households	290,518	303	88.0	3.52
Additional 100% to households	290,518	404	117.4	4.70
Transfers to workers				
Formal employees	687,453	242	166.7	6.67
Informal employees	3,218,413	242	780.2	31.21
All employees	3,905,866	242	946.9	37.88
Transfers for loss of remittance income				
50% of average household remittance	406,786	271	110.4	4.42
Average household remittance	406,786	543	220.8	8.83
Universal basic income				
3,000 Lempira per household	2,208,653	121	267.7	10.71
6,000 Lempira per household	2,208,653	242	535.4	21.42

Source: Own calculations based on 2019 EPHM household survey.

Notes: The simulations assume a one-time, lump-sum cash transfer to selected beneficiaries. If the transfer will be extended to cover more months, the values should be multiplied by the considered timeframe. For instance, if the transfer to formal employees will be extended to three months, it would cost 3 months x US\$166.7 = US\$ 500 million or about 20% of allocated COVID-19 funds in Honduras.

As mentioned previously, Honduran formal workers have access to labor protection under the Honduran labor code. However, there is no unemployment insurance in Honduras (Ham, 2018). While some flexibility has been granted to firms to reassign vacation days while the quarantine lasts and a 6,000 Lempira transfer has been approved for formal workers, these employees account for 17.6% of the total workforce, thus excluding 82.4% of working people. The next panel of Table 6 shows the cost of providing this transfer as planned by the government and also extending the same amount to informal and all workers, as a universal income transfer to workers. While the cost of the proposed one-month transfer is 6.7% of total allocated COVID-19 funds, covering all workers for the same amount of time would come at a higher cost of 37.9% of the total available funds. Naturally, granting transfers to workers for more than one month would increase the costs depending on the length of the assistance. Some form of social protection for informal workers is necessary since more than 3 million individuals will be excluded from the current policy proposals.

A large sum of the proposed emergency funds will be directed to the public health sector to deal with greater health demand. While some funds will be diverted to prevention, there are structural problems that cannot be immediately resolved. For instance, while 88.3% of Honduran household have access to running water, the frequency of that service varies widely. Moreover, in the current dry season, some households are only receiving water one or two days a week. Given the health recommendations from the World Health Organization that washing hands is key to prevent the spread of COVID-19, this precarious situation in terms of water may exacerbate the contagion in Honduras. Therefore, a program that provides access to clean water is not feasible due to lack of control over supply, which is a structural issue and is complicated by seasonal cycles.

While the interventions so far discussed have focused on maintaining the livelihood of households during the crisis, the Honduran Government has also taken fiscal measures to reduce pressure on firms, particularly small and medium enterprises. However, the policies encompass formal sector small and medium enterprises who pay taxes. The share of these small businesses that are formal is modest, similar to the numbers shown for employees. In that case, while some firms will surely benefit and keep operating, many others will not

receive support. Due to the reduction in internal demand from the quarantine measures, many firms are neither operating nor generating revenue. The proposed fiscal stimulus and flexibility measures will currently benefit formal enterprises. Ensuring the survival of firms with these policies is essential in the medium- and long-term but excludes a large share of firms in a context with high informality like Honduras.

Policy responses at the household or individual level may help both restore the loss of labor income due to the pandemic and to help limit the reduction in internal demand to keep firms operating. While we discussed potential transfers to cash transfer beneficiaries and workers, there are also many households that depend on international remittances from migrant Hondurans (see Section 2). Given the situation in the United States, where unemployment claims have risen, there is an expectation that remittances will fall in the medium-term. As mentioned in Section 2, the average monthly remittance is US\$542.70. Household survey data indicates that approximately 406 thousand Honduran households have a family member outside the country. Additionally, more than half the households that receive remittances state that this is their primary source of income (Honduran Central Bank, 2020a). Assuming that all these households receive remittances, we simulate the cost of a 50% and 100% transfer of the average remittance in the third panel of Table 6. This would imply transfers of US\$110 million and US\$220 million, respectively. It would cost between 4.4-8.8% of the emergency funds in Honduras to grant a one-month transfer to cover the loss of remittance income. Extending the transfer beyond one month would increase costs.

Finally, another consideration to restore income and incentivize aggregate demand would be a one-time universal basic transfer to all Honduran households for one month. Assuming the same 6,000 Lempira transfer given to formal workers to more than 2 million households would cost approximately up to US\$535 million or 21% of the total allocated funds for the COVID-19 pandemic. While this policy may be costly, it would alleviate some concerns that the current proposed measures are excluding a large fraction of the population that works informally or are not targeted for other social protection programs by the Honduran government.

The economic consequences of the COVID-19 pandemic will likely affect poverty rates. Honduras has one of the highest poverty rates in Latin America (SEDLAC, 2018), with above half the population living below the poverty line. Poverty reduction has been modest in the past five years, with a rate of 68.2% in 2014 and 64.7% in 2019 (INE, 2014; 2019). To gauge the potential effect of the crisis on poverty, Table 7 simulates changes in the poverty headcount from three different scenarios assuming reductions in labor and non-labor income. While these simulations assume a generalized reduction in labor and non-labor income sources for all individuals, they suggest potential bounds on the effect on poverty rates using a simple model with minimal assumptions.

Table 7. Simulated consequences of income loss on individual poverty headcount

	Extreme poverty		Moderate poverty	
	Headcount	Difference	Headcount	Difference
2019 Poverty (baseline)	41.7	-	64.7	-
Loss of income from work (monthly earnings)				
25% reduction in monthly earnings	50.6	8.8	74.0	9.3
50% reduction in monthly earnings	64.0	22.3	83.5	18.8
75% reduction in monthly earnings	79.9	38.2	91.5	26.8
Loss of non-labor income (remittances and transfers)				
25% reduction in monthly non-labor income	43.6	1.9	66.7	2.0
50% reduction in monthly non-labor income	46.3	4.6	68.8	4.1
75% reduction in monthly non-labor income	49.3	7.5	70.8	6.1

Source: Own calculations based on 2019 EPHPM household survey.

Notes: The simulations assume a uniform percentage loss for all individuals of 25%, 50%, and 75% of monthly labor earnings and the same reduction in non-labor income from transfers. The Difference columns show the change in poverty rates compared to the 2019 poverty rate baseline estimate.

The share of people below the extreme poverty line in 2019 was 41.7%, while 64.7% have monthly per capita income below the moderate poverty line. The results in the table suggest that loss of labor income will affect poverty rates more prominently than reductions in non-labor income. A 25% reduction in monthly earnings for all individuals would increase the extreme poverty headcount by 8.8 percentage points and the moderate poverty headcount by 9.3 percentage points. A 50% loss in labor income would raise extreme and moderate poverty by 22.3 and 18.8 percentage points, respectively. The most pessimistic scenario contemplates a 75% generalized reduction in labor income, leading to substantial increases in poverty. Loss of non-labor income would increase the extreme poverty rate between 1.9 to 7.5 percentage points and between 2-6 percentage points for moderate poverty. These results, while drawn from simple assumptions, suggest that policy efforts should concentrate on mitigating the potential income loss from work-related activities.

The policy proposals suggested in this sub-section may mitigate these potential increases in poverty. Table 8 shows the effect of each proposal on the extreme poverty headcount for all simulated scenarios, while Table A.1 in the Appendix shows the same results for moderate poverty.

Table 8. Simulated effects on extreme poverty headcount of policy proposals

	Loss of labor income			Loss of non-labor income		
	25%	50%	75%	25%	50%	75%
Poverty rate with no intervention	50.6	64.0	79.9	43.6	46.3	49.3
Supplement to cash transfers (Bono Vida Mejor)						
Additional 25% to households	47.9	62.0	79.0	40.7	43.5	46.5
Additional 50% to households	43.4	56.8	75.0	36.7	39.4	42.3
Additional 75% to households	39.5	52.4	69.6	33.5	35.9	38.7
Additional 100% to households	37.6	49.7	65.7	31.6	34.0	36.8
Transfers to workers						
Formal employees	47.0	56.0	66.0	41.5	44.2	46.9
Informal employees	7.0	10.7	17.0	5.8	6.7	8.1
All employees	4.6	5.7	8.9	4.4	5.2	6.5
Transfers for loss of remittance income						
50% of average remittance	44.7	56.7	70.7	37.8	40.0	42.4
Average remittance	43.2	54.9	68.3	36.7	38.8	40.7
Universal basic income						
3,000 Lempira per household	31.1	41.5	59.8	25.6	27.5	30.8
6,000 Lempira per household	13.7	19.0	29.6	10.6	11.4	12.9

Source: Own calculations based on 2019 EPHPM household survey.

Notes: Poverty rates are calculated using monthly per capita income for each of the simulated scenarios in Table 7, adding the proposed one-time, lump-sum cash transfers to selected beneficiaries described in Table 6. This simulated income is compared to the official poverty lines used by INE (2019).

Under the simulations in **Table 7**, the extreme poverty headcount would rise from 41.7 to 64 percent if monthly labor income falls by 50%. For simplicity, we focus on that scenario, but the results we discuss also apply to the optimistic (income reduction of 25%) and pessimistic scenarios (income reduction of 75%). Granting a supplemental transfer for households that currently receive cash transfers would reduce the resulting increase in poverty from losses in labor income. However, even a supplement of 100% of the transfer would still imply an increase in poverty from 41.7 to 49.7%. However, it would be less than the expected 64% without this policy. Similar results are observed with respect to the loss of non-labor income. However, since this source represents a smaller percentage of total household income, the supplemental transfers would lower poverty rates below the initial observed level in 2019, assuming no loss of labor income occurs.

Proposed transfers to workers to compensate for loss of labor income vary in their effectiveness. The current proposal aimed only at formal registered workers would mitigate the effect on poverty, leading to an increase from 41.7% to 56%, instead of a rise to 64% with no transfers. However, if the transfer were granted to all informal workers but not formal workers, the observed poverty rate would fall to 10.7%. A universal transfer of US\$242 to all workers in Honduras would lead to a reduction in expected extreme poverty rates from a 64% to 5.7%. Similar to the previous set of measures, the reduction in extreme poverty is higher when only non-labor income losses occur.

Support for households due to loss of remittances would mitigate the increase in poverty. Without support, the extreme poverty rate would be 64%, falling to 56.7% with a 50% transfer of the average remittance value (US\$542.70) and to 54.9% with the full average transfer. Finally, a non-targeted universal income transfer of approximately US\$121 for one month would slightly reduce extreme poverty rates (from 41.7 to 41.5%), effectively serving as a safety net. A one-time monthly transfer of \$242 to all Honduran households would reduce poverty rates to 19%. However, as noted beforehand, these two transfers are the most expensive. Moreover, these simulations consider a single one-month transfer's effect on monthly household per capita income. Supposing that the necessary support goes beyond one month, costs would increase to maintain the level of welfare of the Honduran population. While these proposals are not the only potential option, they do frame the challenge of supporting the most vulnerable individuals during this time of emergency.

6. Conclusion

The COVID-19 pandemic will have a wide-ranging impact across the world, with some countries affected more than others. While the number of cases in Honduras remain low compared to other nations, authorities expect that more confirmed cases will surface in the coming weeks. At the time of writing, the mortality rate from COVID-19 in Honduras is 6.7%, one of the highest in Latin America. The first response to the crisis is to ensure proper functioning of the health system and preventative measures to slow down contagion, such as the quarantine and information campaigns. The health system in Honduras is precarious and will likely be overflowed due to higher demand and lack of respirators, masks, and other essential health products to combat the crisis. Humanitarian aid will surely play a role in whether the health system has the capacity to test and treat patients in the coming weeks and months.

While the Honduran Government has taken measures to mitigate the economic impact of the crisis at the national, household, and individual level; there is a high chance of economic downturn. Moreover, as discussed throughout this report, some measures will only reach a small fraction of the population. While the response has been quick, there is a large exclusion of support for informal workers and firms. Given the size of the informal economy in Honduras, many businesses and workers may face partial or complete loss of income, affecting their welfare in a context where 64.7% of the population lives below the poverty line. These effects on households' livelihoods will impact internal demand which will also affect firms, and aggregate economic performance.

In order to face the oncoming consequences, additional policies to those already in place must be considered. While Congress has approved a large sum of emergency funds by acquiring more internal and external debt, it is uncertain if those funds can be raised completely. Moreover, it remains to be seen how those funds are allocated and whether they are effectively distributed to aid the most vulnerable population in Honduras. While the Government has taken leaps towards preparing for the crisis, the uncertainty of the situation may require rapid adaptation to changing conditions to ensure that the economy does not lose momentum, firms do not go bankrupt, workers are able to keep their jobs and source of income, and that the pandemic does not claim too many lives. This report provides some suggestions, but there are different ways to ensure that the emergency funds reach those in need and mitigate the downstream consequences on people's livelihoods due to the emergency caused by the COVID-19 pandemic in Honduras.

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Appendix

Table A.1. Simulated effects on moderate poverty headcount of policy proposals

	Loss of labor income			Loss of non-labor income		
	25%	50%	75%	25%	50%	75%
Poverty rate under scenario	74.0	83.5	91.5	66.7	68.8	70.8
Supplement to cash transfers (Bono Vida Mejor)						
Additional 25% to households	72.6	82.7	91.1	65.1	67.4	69.6
Additional 50% to households	70.2	80.8	90.1	62.5	64.6	67.0
Additional 75% to households	66.6	76.8	86.6	59.1	61.3	63.6
Additional 100% to households	63.3	73.4	83.2	56.0	58.1	60.4
Transfers to workers						
Formal employees	67.4	75.1	83.4	61.3	63.3	65.0
Informal employees	25.9	33.0	42.7	22.6	24.3	25.8
All employees	20.2	25.6	32.9	18.4	19.8	21.1
Transfers for loss of remittance income						
50% of average remittance	67.7	77.3	85.8	60.6	62.8	64.9
Average remittance	64.4	73.0	80.5	57.8	59.4	61.2
Universal basic income						
3,000 Lempira per household	60.0	71.4	83.4	52.6	55.1	58.0
6,000 Lempira per household	41.7	53.6	67.8	35.1	37.3	39.9

Source: Own calculations based on 2019 EPHPM household survey.

Notes: Poverty rates are calculated using monthly per capita income for each of the simulated scenarios in Table 7, adding the proposed one-time, lump-sum cash transfers to selected beneficiaries described in Table 6. This simulated income is compared to the official poverty lines used by INE (2019).

COVID-19 and External Shock: Economic Impacts and Policy Options in Peru

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Abstract

Latin America currently suffers two shocks, independent but related, the impact of the Covid-19 and the shock of commodity prices. Peru, we argue, is a case in which the strongest impact comes from the epidemic. Peru was the first country in Latin America to react with sanitary and economic measures against the coronavirus. The country is in mandatory quarantine since Monday, March 16. This carries very important challenges for all economic actors. Global and national activity has suffered a sudden stop with direct implications in: (i) the income generating capacity of independent workers, (ii) the jobs of formal and informal workers, (iii) the survival of small, medium and large companies. In this note we analyze the situation of Peruvian households facing the pandemic, exploring their vulnerabilities through an analysis of their main source of income generation: work. We also analyze the situation of the companies that employ the workers under analysis. We present an overview of what the government's main actions have been so far and offer some recommendations.

1. Introduction

The current international situation, which also affects Peru, is marked by great uncertainty. We started the year with the prospect of lower growth before two separate but linked economic shocks occurred: the spread of the COVID-19 virus and the collapse of commodity prices (oil and copper in particular are crucial to the region). COVID-19 is affecting all countries in the region in a similar way, although to varying degrees depending on the containment policies they are adopting, producing a negative impact on aggregate supply with a knock-on effect on aggregate demand. The impact of the commodity prices shock will depend on the specific situation of the country's commodity trade balance.

The economic shock caused by COVID-19 increasingly seems to be permanent rather than temporary, with medium and long-term impacts that will only become apparent gradually. In turn, the impact on the price of commodities is also changing over time. Overall, what we are experiencing today seems to be more intense and widespread than anything the sudden stops modelling had predicted.

At the moment, given the high degree of uncertainty, any estimate of the impact of these shocks is very tentative; so much so, that the Peruvian Central Bank (BCR) has postponed the publication of its weekly inflation report containing the principal macroeconomic projections. The Ministry of the Economy and Finance (MEF) was due to publish its update on the multiannual macroeconomic framework on 31 March. As we write, a law is being drafted that will suspend its publication until further notice. Both the Central Bank and the MEF decided, independently, that it is not possible to publish official macroeconomic projections under such circumstances, given the uncertainty at both local and global levels.

Macroeconomic uncertainty also produces microeconomic uncertainty. In our economy, two out of three workers are self-employed or freelance, with only one in three in formal employment. Household budgets are highly volatile. The restrictions on personal and economic freedoms needed to deal with the health emergency have meant an abrupt cutback in the income-generating potential of many households. This will have short-term impacts that, depending on the duration of the emergency, could result in greater impacts in the medium term. Looking at the Chinese experience, quarantine may well last for two or three months. Moreover, there is no clear quarantine exit strategy at the moment, although any exit is expected to be very gradual. What criteria will be used to allow some businesses to open, while others remain closed? At the moment, this is not clear, and therefore the macroeconomic picture is also dogged by uncertainty.

However, it is important at this juncture to contribute to the discussion on the possible impact transmission channels and possible scenarios, based on the evidence available. This will contribute to the creation of short- and medium-term measures allowing us to deal with the crisis and determine the country's position in the new global economic order that may emerge. To that end, this document will analyse the potential impacts on household income at this juncture.

In contrast to other countries in the region, Peru is a net importer of fuel. The fall in oil prices could therefore have a positive effect on its balance of trade. This positive effect could be significant, given that so far this year the price of a barrel of crude oil has fallen by more than 50 percent. However, in a quarantine situation, in which the demand for fuel has dropped sharply, the positive effect of this fall in prices might not materialize.

One of the consequences of the disruptions caused by the coronavirus epidemic is a fall in the price of raw materials in general, and in minerals in particular. Mineral exports accounted for around 60 percent of the country's total exports in 2019. Copper alone accounts for half of Peru's mining exports and about 30 percent of the country's total exports. So far this year, the price of copper has fallen by 20 percent. Although future sales and hedging policies adopted by mining companies must be taken into account when considering the net effect of any price drops, a negative effect is expected. This situation of gold partially counteracts this effect. In terms of exports it is in second place, accounting for 30 percent of mineral exports and 18 percent of total exports. Gold prices have risen by an impressive 10 percent in comparison with last year.

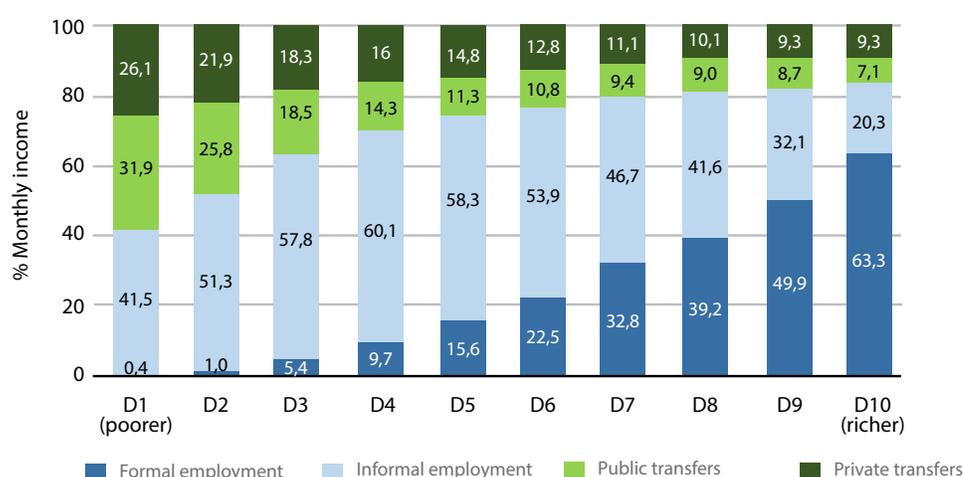
Insofar as it can be noted, the net effect on prices will be negative, although in a situation in which many countries in the region are likely to experience negative price shocks, Peru has a relative comparative advantage. In fact, estimates produced to date by private consulting firm Apoyo Consultoría reveal a reduction of around 20 percent in the balance of trade, from US\$6,614,000 in 2019 to \$5,100,000 for 2020.

The biggest impact, therefore, will be from the COVID-19 virus. The extent of its impact will depend on how it spreads in the country (starting in urban areas and gradually affecting rural areas), the sectors that are most heavily affected (tourism, services and trade), the health policies being implemented to contain it and how long it lasts.

This paper will focus on its effect on households. While the magnitude and duration of the economic shock they face is still uncertain, we aim to respond to the question: How prepared are Peruvian households for the kinds of shocks taking place at the moment? Clearly, a distributional approach to this question is key. We will present a comparative analysis of different household profiles based on the number of wage earners, exploring their strengths and weaknesses when confronted with this type of shock. The source of income of Peruvian households is also crucial to the question posed above. In this context, employment plays a central role, and we will also analyse the role of the companies in which Peruvians work.

In Peru, income from formal employment constitutes about 20 per cent of regular household income, while income from informal employment accounts for almost 50 per cent. The rest comes from other sources of income and transfers both state and private. However, there are significant socioeconomic differences between households. For households in the higher income brackets, formal employment covers three fifths of their budget, while informal employment and other sources of income account for one fifth each. Employment makes up 50 percent of the budget of lower income households, and it is almost exclusively informal. The other half is made up of transfers received from the state and from other households. In relative terms, transfers received from the state constitute almost a third of the total regular income of households in the first income decile (Figure 1a).

Figure 1a¹ Peru 2018: Components of the monthly income of households by deciles of total household income



Source: ENAHO 2018

Note: The data only takes into account the regular monetary income of households. Income from employment is taken as the main and secondary activity. Private transfers include rental income and private donations and public transfers include public funding.

¹ Income from formal employment. Monthly income from formal employment (primary and secondary sources). We used the ratio of work-related income of members of the economically active population (EAP) in formal employment to the total household work-related income.

- Income from informal employment. Monthly income from informal employment (primary and secondary sources). We used the ratio of work-related income of members of the EAP in informal employment to the total household work-related income.

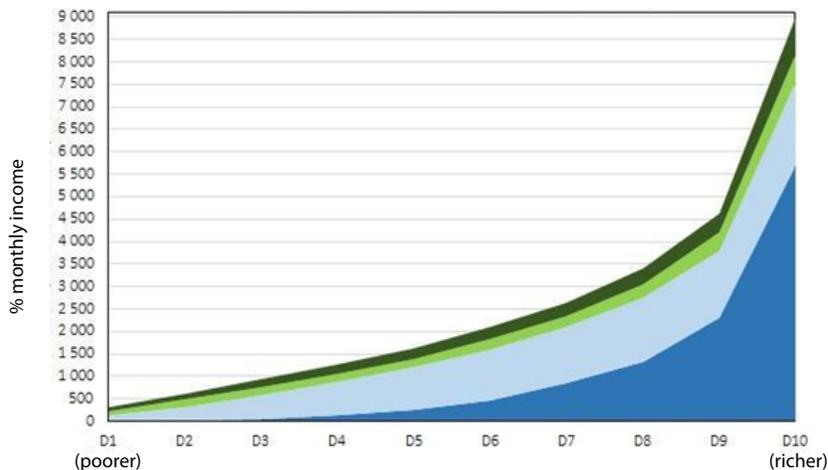
- Private transfer. Monthly income from private cash transfers, property rental and private donations to household expenses.

- Public transfer. Monthly income from state cash transfers (Juntos programme, Pensión 65, gas grant, Beca 18 scholarship and other programmes).

Private transfers include a vast array of diverse sources of income. Private cash transfers and donations are the most common forms of such income in poorer households. Data from the Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza (national survey of households, focusing on living conditions and poverty – ENAHO) do not enable us to ascertain whether these transfers come from a foreign source (remittances) or a domestic source. One way or another, these very probably take the form of transfers from children to their parents or between siblings, cousins or relatives in various forms of solidarity. For the more affluent households, property rental is the main source of this income.

The chart above shows the proportions represented by each of the four regular sources of monetary income. An examination in absolute terms (in Peruvian nuevos soles – PEN) of the same data is also useful (Figure 1b). It shows us that transfers, both public and private, are more or less homogeneous throughout the income distribution spectrum.

Figure 1b. Peru 2018: Components of the monthly income of households by deciles of total household income PEN at Metropolitan Lima prices



Source: ENAHO 2018

Note: The data only takes into account the regular monetary income of households. Income from employment is taken as the main and secondary activity. Private transfers include rental income and private donations and public transfers include public funding.

Since employment is such an important source of income for households, we first ranked households according to the number of wage earners. Then we focused on the socioeconomic profiles of households according to working conditions (type of employment, formal or informal), income and education. Thus, we began with the EAP at the national level and within that category we then distinguished between formal and informal workers. We also introduced urban and rural distinctions, first looking at urban areas since the effects of the epidemic will be concentrated there. The assumption is that different categories of workers will be affected differently by the virus containment policies being implemented by the Peruvian government, reducing the supply of labour.

The approach we have adopted focuses on identifying the sources of income of households associated with the situation of workers in the labour market. We will also present an analysis of the position of households in terms of indebtedness and the potential they have for coping with shocks by means of loans or transfers (from the financial system, other households or the government).

This document is organized into six sections, including this introduction. Section 2 describes the labour market and households in relation to certain basic sociodemographic characteristics and how they relate to the labour market. Section 3 presents the main economic measures that the government has taken so far. Section 4 analyses household income sources to identify their vulnerability to the crisis. Section 5 discusses the role of businesses as employers of the households we analyse in this study. Finally, Section 6 presents some policy options.

2. Profile of Peruvian households and their income

Where does the income of Peruvian households come from? As highlighted above, income mainly comes from employment. So, what types of jobs do Peruvians have? We show below how the workforce is distributed according to its place in the labour market. Table 1 shows the data from the national level and Table 2 shows urban areas only, where the impact of this sudden disruption to economic activity will be felt first.

The national and urban figures show that 4 per cent of workers are employers. Their average income is almost twice that of the rest of the working population, however there are big differences within this group. In effect, those in the lower third of the income distribution within this group have lower incomes than the average self-employed person or freelancer. Public policy treats this lower income third of employers as part of the group of self-employed nevertheless. For all of them, however, it is important to focus on their businesses as generators of employment for the rest of the population. This analysis will be presented in Section 5.

The remaining workers include salaried employees (about half of workers who are not employers), self-employed persons and freelancers (about 40 per cent of non-employers), unpaid family workers and domestic workers (between 2 and 3 per cent of non-employers). Unpaid family workers (UFWs) account for 10 per cent nationally, but in urban areas they only account for 5 per cent. This means that this form of work is much more prevalent in rural areas. Since the virus has arrived in urban areas of the country (and within those areas, in the most affluent districts), the impact of coronavirus is not expected to be as strong in rural areas, at least initially. This will need to be reviewed as we learn more about the patterns of the spread of the epidemic within the country.

Table 1. Distribution of the EAP in employment and average monthly income in PEN, at the national level, 2018

EAP in employment	Women		Men		Average monthly monetary labour income 1/ (PEN)
	Number	%	Number	%	
	7,421,616	100	9,354,867	100	
Employers	186,088	2.5	485,356	5.2	2,475.8
Workers in employment	7,235,528	97.5	8,869,511	94.8	1,162.5
Salaried employees	2,938,095	39.6	4,832,816	54.5	1,480.8
Salaried employees (public)	677,352	23.1	748,651	15.5	2,251.7
Salaried employees (private)	2,260,743	76.9	4,084,165	84.5	1,402.1
With contract	1,097,930	48.6	1,908,451	46.7	1,817.6
Open-ended	211,178	19.2	449,906	23.6	2,581.9
Fixed-term	886,753	80.8	1,458,545	76.4	1,602.1
No contract	1,162,812	51.4	2,175,629	53.3	842.5
Freelancers/Self-employed 2/	2,788,720	37.6	3,493,034	39.4	703.1
Formal 3/	320,661	11.5	351,355	10.1	1,494.5
Informal 3/	2,468,059	88.5	3,141,679	89.9	608.3
Freelancers/Self-employed 2/	2,788,720	37.6	3,493,034	39.4	703.1
Highly-skilled (higher education) 4/	294,025	10.5	407,748	11.7	1,260.8
Low-skilled (up to secondary completed) 4/	2,494,695	89.5	3,085,286	88.3	633.0
Unpaid family workers	1,145,280	15.4	525,712	5.9	0.0
Domestic worker	363,408	4.9	17,604	0.2	716.6

Source: National Institute of Statistics and Informatics (INEI) – National Household Survey (ENAHO), 2018 | Prepared by the author.

Note: 1/ Monthly average monetary income from the primary occupation, whether employed or self-employed

2/ Special Primary Education is excluded from calculations.

3/ The variable situation of informality is reported in the primary occupation in the database of Module 500 of the ENAHO 2018, INEI.

4/ Formal and informal employment levels are approximated based on the level of education obtained.

Table 2. Distribution of the EAP in employment and average monthly income in urban areas, in PEN, 2018

EAP in employment	Women		Men		Average monthly monetary labour income 1/ (PEN)
	Number	%	Number	%	
	5,838,542	100	7,170,124	100	
Employers	168,003	2.9	408,825	5.7	2,687.8
Workers in employment	5,670,539	97.1	6,761,299	94.3	1,286.2
Salaried employees	2,697,788	46.2	4,204,051	62.2	1,565.8
Salaried employees (public)	628,878	23.3	686,205	16.3	2,310.2
Salaried employees (private)	2,068,910	76.7	3,517,846	83.7	1,429.6
With contract	1,071,657	51.8	1,824,971	51.9	1,837.3
Open-ended	209,345	19.5	442,478	24.2	2,596.4
Fixed-term	862,312	80.5	1,382,493	75.8	1,616.8
No contract	997,253	48.2	1,692,874	48.1	904.1
Freelancers/Self-employed 2/	2,184,780	37.4	2,274,823	33.6	852.9
Formal 3/	308,122	14.1	342,791	15.1	1,509.1
Informal 3/	1,876,658	85.9	1,932,032	84.9	740.8
Freelancers/Self-employed 2/	2,184,780	37.4	2,274,823	33.6	852.9
Highly-skilled (higher education)4/	281,874	12.9	374,397.52	16.5	1,300.2
Low-skilled (up to secondary completed) 4/	1,902,905	87.1	1,900,426	83.5	775.8
Unpaid family workers	447,165	7.7	265,540	3.9	0.0
Domestic worker	340,780	5.8	16,699	0.2	710.0

Source: National Institute of Statistics and Informatics (INEI) — National Household Survey (ENAHO), 2018 | Prepared by the author.

Note: 1/ Monthly average monetary income from the primary occupation, whether employed or self-employed.

2/ Special Primary Education is excluded from calculations.

3/ The variable situation of informality is reported in the primary occupation in the database of Module 500 of the ENAHO 2018, INEI

4/ Formal and informal employment levels are approximated based on the level of education obtained.

The segments of salaried employees and self-employed workers segments deserve further attention. One in five salaried employees works for the public sector and the other four work for the private sector. Half of salaried employees have a contract and the other half do not. The vast majority of salaried employees have a fixed-term contract, with less than one in four on open-term contracts. Both types of contract offer protection against dismissal and financial protection against termination of contract may be higher for fixed-term workers: 1.5 times the monthly earnings for each month from their dismissal to the end date of the contract, versus one month's pay for every year worked in the case of workers on open-term contracts. Companies can therefore be expected to wait for these contracts to expire rather than terminating them early. However, fixed-term contracts are typically for short periods: at least 27 percent are for three months or less. It is not possible to ascertain the full extent of this phenomenon because data from spreadsheets do not clearly identify when a contract is a renewal of an existing one. However, the fact that 37 per cent of fixed-term contracts are for more than one year suggests that many of those are renewals. Nine out of ten self-employed workers or freelancers are in the informal segment of the labour market; in other words, they are not registered with the tax authority. This statistic coincides with the proportion of self-employed and freelance workers who do not have a higher education qualification (they also account for nine out of ten self-employed workers and freelancers).

In total, of the nearly 17 million workers in the country, nearly 3 million (one in six) work under textbook conditions. In other words, they have an open-term contract. Our labour market differs substantially from those in developed economies. There are not many formal salaried employees in Peru, and even they experience a high degree of job insecurity. In addition, we have a lot of fixed-term (temporary) contracts and high self-employment (especially informal self-employment). This poses serious challenges when attempting to shape labour policy under normal circumstances and when channelling temporary support in times of crisis such as this.

As reflected in the previous tables, of the nearly 17 million workers in Peru, just over 13 million are based in urban areas. Moreover, there are no substantial differences between the national and urban indicators. Following on from that analysis, we have concentrated on urban areas, where exposure to the epidemic (and, therefore, to the sudden falloff in economic activity) is highest, affecting the vast majority of the country's workers (78 percent).

Apart from the distribution of workers in the labour market, however, it is important to ascertain how the structure of the Peruvian labour market is reflected in household incomes. This means moving from an individual analysis to one that focuses on the household economy. The first step in that direction involves defining households according to how their members are linked to the labour market. Tables 3a and 3b below categorize urban Peruvian households according to the number of wage earners: zero (0.2 percent of the country's households), one (30 percent), two (40 percent), three to four (26.5 percent) and five or more (3.3 percent). We see that the modal household in the country has two wage earners. The proportion of households with one and three wage earners is almost identical.

In households with one wage earner, 31 per cent are in formal employment as their main occupation, similar to the national rate. It is also interesting to note that 15 per cent of workers who are the sole earner in their household have more than one job. In terms of households with two wage earners, 19 percent have both workers in formal employment for their main occupations, 32 percent have one worker in formal employment and the other in informal employment and the remaining 49 percent have both earners in informal employment.

The first thing to note is that households with only one wage earner are more vulnerable than other households. If that sole wage earner loses their job, the shock to household income would be greater than that in other households with more wage earners. Overall, beyond the working conditions of each individual, vulnerability to shocks decreases as the number of wage earners increases.²

There are significant differences in the sociodemographic indicators of households according to the number of wage earners. First of all, the household burden indicator (total number of household members divided by number of members earning an income) decreases steadily with the number of wage earners. Next, indicators of the presence of children under 6 years of age in the home and the presence of students in the home increase with the number of wage earners. The potential impacts of the sudden stoppage to household incomes will differ according to these dependency measures. Some workers may be able to deal with the restriction on going out to work with fewer limitations than others.

Table 3a. Main demographic indicators of urban households by number of wage earners, 2018

Wage earner	No wage earner	One wage earner	Two wage earners	From 3 to 4 wage earners	5 or more	Total
No. of households	16,354	1,942,707	2,648,111	1,975,874	261,438	6,844,483
%	0.2	28.4	38.7	28.9	3.8	100.0
Average household education level 1/	Secondary completed	Secondary completed	Secondary completed	Secondary completed	Non-University higher education	Secondary completed
Household burden		2.3	1.7	1.5	1.4	2.0
Households with children under 6 years old (%)	9.3	11.2	17.4	17.9	27.4	16.2
Households with students (school & university)	24.9	36.6	56.3	67.2	78.3	54.6
% Households in poverty	5.2	16.0	14.2	14.1	13.7	14.4
% Households in extreme poverty	3.6	1.1	0.8	0.7	0.5	0.8

Source: National Institute of Statistics and Informatics (INEI) – National Household Survey (ENAHU), 2018 | Prepared by the author

Note: 1/ The median of the highest level of education among household members is reported by category of the variable number of wage earners.

² In the following section we present an analysis according to the main source of household income.

Table 3b. Main labour indicators of urban households by number of wage earners, 2018

Wage earner	No wage earner	One wage earner	Two wage earners	From 3 to 4 wage earners	5 wage earners or more	Total
Self-employed workers and freelancers 1/	0	471%	40.2%	35.9%	31.9%	40.3%
Informal self-employed workers and freelancers 2/	0	39.2%	34.7%	31.0%	27.0%	34.4%
Formal salaried employees 3/	0	23.5%	26.6%	27.7%	30.9%	26.3%
Annual household monetary income from employment (primary and secondary occupations) 4/(A)	0,0	15,832.9	27,014.5	40,213.5	64,055.1	29,036.1
Annual gross monetary income 5/(B)	0,0	20,573.7	33,614.0	49,030.4	77,871.0	36,010.5
% Work-related income/Gross income (A/B)		77.0%	80.4%	82.0%	82.3%	80.6%
Annual household monetary expenditure 6/(C)	10,757.2	16,881.1	24,558.7	32,573.4	45,101.9	25,465.9
Total annual gross household expenditure 7/(D)	21,883.5	23,342.5	32,428.2	42,380.5	57,204.9	33,668.8
(C/B)		82%	73%	66%	58%	71%

Source: National Institute of Statistics and Informatics (INEI) – National Household Survey (ENAHU), 2018 | Prepared by the author.

Note: 1/ Self-employed workers and freelancers as a proportion of the total number of employed workers.

2/ Informal self-employed workers and freelancers as a proportion of the total number of employed workers.

3/ Salaried employees (public and private) as a proportion of the total number of employed workers.

4/ Gross monetary income received by the household from the primary and secondary occupation, salaried and self-employed. Does not include income from self-consumption and in-kind income from primary and secondary occupations.

5/ Monetary work-related income plus property income and transfers, including taxes.

6/ Expenditure on goods and services involving a cash payment by households.

7/ Monetary expenditure plus self-supply, self-consumption, private and public donations in-kind.

In terms of labour characteristics, of note is the relatively low dependency of households on formal salaried labour, which fluctuates between 23 and 30 percent for the main household wage earners, and the importance of freelance work (self-employment), the bulk of which is informal, about 90 percent. It should also be noted that the data shows that on average household expenditure is lower than income, suggesting that there are no serious debt problems. In fact, approximately three out of four Peruvian households manage to balance their accounts and the rest have surpluses. The percentage of households whose income does not cover their expenditure is statistically zero.

3. Government economic measures

In contrast to the experience of the countries of Europe and North America, Peru has responded quickly to the arrival of the virus. At the time of writing, the measures taken can be classified into three groups: (1) strengthen the health system through investment in care personnel (bonuses), equipment (purchase of intensive care units and other supplies) and infrastructure (implementation of hospitals dedicated to treating those infected), (2) slow the expansion of the virus through a mandatory quarantine (flatten the virus transmission curve), and (3) an economic package of relief for households and businesses.

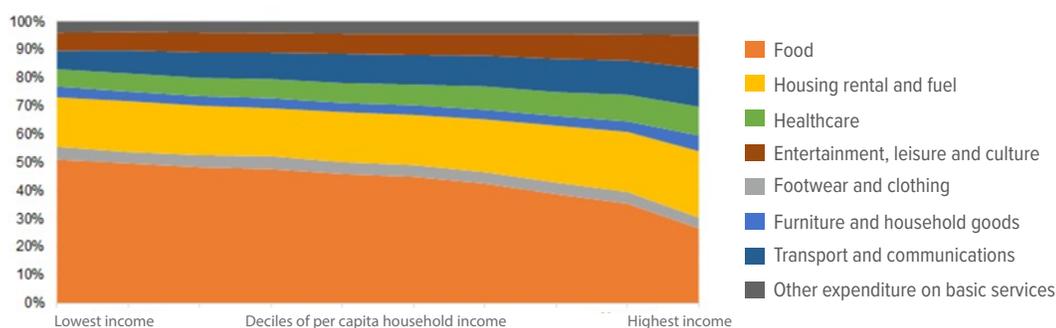
The economic package includes cash transfers to urban households classified as poor and vulnerable, to households of self-employed workers, and to businesses. The register for identification of beneficiary households has taken the Padrón General de Hogares (General Household Register – PGH) of the Sistema Nacional de Focalización de Hogares (National Household Targeting System – SISFOH) as its starting point. This register contains socioeconomic information that indicates if households are poor or vulnerable. The different social programmes and state subsidies implement their targeting on this basis. Of these, the most

important programmes in terms of budget is the JUNTOS national programme of direct support for the poorest, the country's conditional cash transfer programme, but there are several others.³

JUNTOS provides primarily rural coverage, while cash transfers due to this emergency have been targeted, in the first stage, at urban households. In these areas, a family grant of PEN 380 (approx. \$110) has been provided. This amounts to just over 80 percent of the minimum living wage (Remuneración Mínima Vital – RMV). As a reference, 50 percent of workers with informal jobs have monthly incomes below the monthly grant amount (PEN 760); this is the case with only seven percent of formal workers. In addition to a cut-off point depending on urban status, a cut-off is also made according to household income. Households whose head is employed in the public sector (where there will be no labour cuts) are not eligible for the grant. This prioritizes 2.7 million households. Within these 2.7 million lower-income households there are 1.5 million self-employed workers, 1 million wage earners (60 percent of them in informal jobs), 270,000 unpaid family workers and 100,000 domestic workers.

This subsidy covers a significant part of household expenditure (see Figure 2). It is worth noting that among lower-income households, food is the most important item of expenditure. It represents 50 percent of total expenditure, followed by housing and fuel (10 percent).

Figure 2. Urban Peru: Composition of per capita household expenditure by decile, 2018



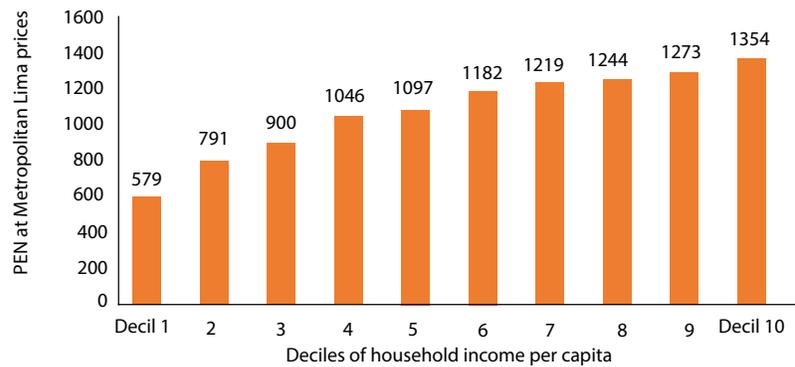
Note: Calculations of per capita household expenditure are based on INEI methodology (2018).

Source: ENAHO 2018.

Household expenditure in PEN is shown below in Figure 3. This shows that the monthly grant of PEN 760 covers almost all food expenditure for the first two deciles of income, 85 percent of food expenditure for the third decile, 73 percent of food expenditure for the fourth decile and 69 percent of food expenditure for the fifth decile.

³ These include: Beca 18 of the Programa Nacional de Becas y Crédito Educativo (Scholarship and Educational Credit Programme – PRONABEC), Seguro Integral de Salud SIS (SIS) – SIS Gratuito (Comprehensive Health Insurance – SIS), Trabaja Perú programme for the generation of inclusive social employment, Fondo de Inclusión Social Energético (Social Inclusion Energy Fund – FISE), severe disability pension, and Mi Vivienda vulnerable housing earthquake protection grant.

Figure 3. Urban Peru: Monthly household expenditure on food by decile, 2018 (PEN at Metropolitan Lima prices)



Source: ENAHO 2018

Note: Calculations of household expenditure are based on INEI methodology (2018).

However, there is an important caveat. Previous statistics assume perfect targeting, which we know is very difficult to achieve on the ground. In addition, the information contained in the PGH makes it possible to identify poor and vulnerable households under normal conditions. The conditions of this sudden stoppage are exceptional and unprecedented in contemporary social politics. It is likely that some households that do not usually qualify as poor or vulnerable are now in financial difficulties, having lost their income-generating capacity.

It is also worth underlining here that the PGH is an imperfect instrument. In these types of registers we are usually concerned about both inclusion and exclusion errors. However, given the coverage of this intervention that reaches more than half of the urban population, the concern about errors of inclusion is of lesser importance. The central concern of targeting is errors of exclusion. At this point it is difficult to understand how many errors of this type there may be in the data. Correcting this problem would require inviting unregistered households to enter their data and be evaluated.

PGH data are imperfect for detecting households that, without being poor or vulnerable, have experienced a sudden stoppage to their income, endangering their ability to maintain a smooth path of consumption. However, there is no doubt that self-employed middle-income workers are a group that could be affected in this regard, especially by the quarantine. That is why a grant has been created for them with a similar amount and frequency as the one for poor and vulnerable households. The households benefiting from this grant have been targeted in such a way that no household receives more than one grant. At the time of writing, this grant for self-employed workers is being disbursed to just over 700,000 homes.

Overall, between the two grants, 3.4 million urban households have been reached. The country has 6.4 million households in urban areas (and 1.8 million households in rural areas). The two household grants are potentially reaching more than half of the country's urban households. The monthly cost of this effort is about 0.8 percent of GDP.

The households prioritized for the Bono 380 do not regularly receive transfers from the state, so bank information is not available for most households. This meant that such households had to be invited to visit banks to receive their grants directly. This has been done in coordination with the country's network of banks, paying attention to the number of people that can be received by each bank per day while maintaining social distancing requirements.

This was also coordinated with the Jurado Nacional de Elecciones (National Elections Board – JNE), which is a body that manages a comprehensive database of the country's citizens. This is the information that is used whenever elections are called. Just as in election situations, each person could consult a website to see if he or she was eligible for the grant or not, and the bank where he or she could receive it.

In addition, there is a measure for workers who have had a formal employment relationship in the past and maintain an individual capitalization account in the private pension system. They are being allowed to withdraw up to PEN 2,000 (approximately \$590) from their accounts. People with balances below PEN 2,000 can withdraw all of their available funds.

For companies, the measures have been aimed at avoiding both payment issues and the mass dismissal of workers. To achieve this, a credit guarantee package has been put in place for up to 98 percent of the new loans that businesses take out in the national financial system. The percentage of the guarantees covered by the state depends on the amount of the loan (the higher the amount, the lower the guarantee, on a scale). The size of the loan is calculated on the basis of the company's contribution to Essalud (workers' health insurance) or average monthly sales. Eligible companies cannot have tax debts owing to SUNAT greater than 1 ITU (PEN 4,300). In addition, companies linked to the financial system are not eligible, nor those that have to pay civil reparations for corruption cases. Beneficiary companies should not distribute dividends or distribute profits, except for percentages paid to their employees, during the term of the loan granted. The duration may be up to 36 months, with a grace period (for both interest and principal) of up to 12 months. This programme has been allocated PEN 30 billion. At the time of writing, the programme funds are just beginning to be disbursed.

In addition, there is also an incentive package that covers 35 percent of the payroll of low-income workers (whose monthly wage is below PEN 1,500 or approximately \$400), not subject to any conditions. Furthermore, given the magnitude of the sudden stoppage and the uncertainties regarding timeframes (both of the duration of the quarantine, of the strategy for the return to normalcy, and of the necessity for potential further quarantines), an Emergency Decree has been issued with measures aimed at "maintaining the employment relationship and remuneration, privileging the agreement with workers." In this context, the "full suspension of work" is permitted only exceptionally, for the suspension of the employment contract for the duration of the health emergency. In other words, the contract remains in force, but all its effects are suspended: the worker does not have to work and the employer does not have to pay salaries. It is also important to note that, although the rule does not indicate this, the Minister of Labour has indicated that full suspension cannot be used by companies that have benefited from the payroll subsidy or guarantee scheme. The company can proceed with this measure after completing a form that sets out its grounds for requesting it. The Ministry of Labour, ex-post, decides on whether the grounds merit the application of the measure or not. In the latter case, the company shall compensate the worker for all wages not received.

This measure is complemented by the continuation of Social Health Insurance benefits for the duration of the suspension and, for workers in the microenterprise labour system, access to a monthly transfer of PEN 760 for workers earning up to PEN 2,400 per month. Workers are also allowed access to *compensación por tiempo de servicio* (compensation for time of service – CTS), which is a system of individual accounts to which the employer deposits twice a year half a month's wages, to the amount of one gross payment per month that work is suspended. Similarly, workers may withdraw up to PEN 2,000 from their retirement pension fund. In addition, the employer may postpone the contribution to CTS accounts for the first half of the year up to November for workers with gross wages higher than PEN 2,400.

The package for companies operating in the financial market is not "one-size-fits-all", but depends on payroll or sales. The labour package, though it appears to be a "one-size-fits-all" measure, will also particularly benefit larger and more formal companies (both characteristics are associated with higher productivity).

Overall, the size of the fiscal stimulus package has an announced ceiling of 12 percent of GDP, but the components are not yet known in detail. It is worth noting that some of the components are cash flows (from the state to households) while others are financial guarantees. In addition, some workers have been allowed to withdraw money from their individual capitalization accounts in the private pension system. In the coming days, it is highly likely that the components of the package will become more fully known. The Ministry of Economy

and Finance has announced that, if the ceiling for the package needs to be raised, they would be willing to do so. All this, like many of the uncertainties surrounding the virus, will become clearer over the coming weeks.

Public indebtedness is currently low (28 percent of GDP), meaning that the size of the package does not seriously compromise the financial viability of public accounts. Yet to date there is no estimate of the impact of the pandemic on the economy. It is impossible to know whether or not the magnitude of the package is appropriate to the current challenge. Quarantine is undoubtedly the measure that will have the greatest impact, both on the development of the epidemic and on household economies. Households are already affected by mobility restrictions, which for most of the workforce limit their ability to work. Below, we analyse which groups of households could be the most affected.

4. The vulnerability of households

The distribution of the main wage earners according to their labour market integration shows a number of differences between households with one or two income-earners (tables 4 and 5). In line with the increased vulnerability of single-income households, the employment rate is higher among the latter (65.8 percent versus 58.1 percent). The rate of salaried employment is also higher in two-income households (51.8 percent versus 43.6 percent). If we estimate the proportion of formal workers in each case, among single-income households it is 32.2 percent while among two-income households it is 35.3 percent. These estimates assume that all employees in the public sector are formal, and that in the private sector having a contract is proof of formality. Finally, the proportion of unpaid family workers is marginally lower among households with two wage earners.

Table 4. Distribution of households with one wage earner, by employment status and average monthly income, at national urban level (2018)

Households with only one wage earner	Number of households	%	Average monthly income 1/	Gross monetary income 2/
	1,942,707	100		
Occupied workers	85,270.95	4.4	2,992.5	3,356.4
Salaried workers	1,129,107	58.1	1,380.5	1,629.5
Salaried workers	491,764	43.6	1,843.3	2,156.3
Salaried workers in the public sector	107,296	21.8	2,661.6	3 012.2
Salaried workers in the private sector	384,468	78.2	1,614.9	1,917.5
With contract	195,468	50.8	2,211.1	2,684.2
Open-ended	50,811	26.0	3,004.3	3,810.5
Fixed-term	130,829	66.9	1,919.0	2,290.1
No contract	189,000	49.2	998.3	1,124.5
Freelancers/self-employed 3/	531,674	47.1	914.9	1,093.9
Formal 4/	88,926	16.7	1,698.1	1,972.4
Informal 4/	442,748	83.3	757.6	917.5
Freelancers/self-employed 3/	531,674	47.1	914.9	1,093.9
Highly-skilled (higher education) 5/	76,451	14.4	1,707.6	2,004.9
Low-skilled (up to secondary completed) 5/	455,222	85.6	781.8	940.9
Unpaid family workers	75,827.01	6.7	0.0	2,005.4
Domestic worker	29,842.07	2.6	815.5	1,536.0
Unemployed workers	728,329.4	37.5	0.0	1,627.2

Source: National Institute of Statistics and Informatics (INEI) – National Household Survey (ENAHU), 2018 | Prepared by the author.

Note: 1/ Average monthly income from primary and secondary employment. It does not include payment in kind or self-consumption.

2/ Income received in cash by the household for work, property rental and transfers, including taxes. 3/Special Primary Education is excluded from the calculations.

4/ According to the Ministry of Employment and Job Promotion's definition of formal and informal employment.

5/ Formal and informal employment levels are approximated based on the level of education obtained.

Table 5. Distribution of households with two (02) wage earners, by employment status and average monthly income, at the national urban level (2018)

Households with 2 wage earners	Number of households	%	Average monthly income from labour 1/	Gross monetary earnings 2/
	2,648,111	100		
Employers	84,034	3.2	3,982.6	4,458.3
Workers in employment	1,741,352	65.8	2,398.8	2,793.5
Salaried employees	901,327	51.8	2,934.6	3,423.4
Salaried employees (public)	208,657	23.2	4,161.8	4,724.3
Salaried employees (private)	692,669	76.8	2,565.0	3,031.5
With contract	338,980	48.9	3,465.2	4,230.1
Open-ended	86,528	25.5	4,571.8	5,898.6
Fixed-term	225,751	66.6	3,083.8	3,667.6
No contract	353,690	51.1	1,702.1	1,882.6
Self-employed/freelance 3/	700,538	40.2	1,813.4	2,106.0
Formal 4/	97,105	13.9	3,098.4	3,674.7
Informal 4/	603,433	86.1	1,606.6	1,853.6
Self-employed/freelance 3/	700,538	40.2	1,813.4	2,106.1
Highly-skilled (higher education) 5/	93,474	13.3	3,075.7	3,758.6
Low-skilled (up to secondary completed) 5/	607,065	86.7	1,619.0	1,851.6
Unpaid family workers	92,141	5.3		1,945.5
Domestic worker	47,326	2.7	2,267.4	2,624.5
Unemployed workers	822,725	31.1	0.0	2,626.6

Source: National Institute of Statistics and Informatics (INEI) — National Household Survey (ENAHO), 2018 | Prepared by the author.

Note: 1/ Average monthly income from primary and secondary employment. It does not include payment in kind or self-consumption.

2/ Income received in cash by the household for work, property rental and transfers, including taxes.3/ Special Primary Education is excluded from the calculations.

4/ According to the Ministry of Employment and Job Promotion's definition of formal and informal employment.

5/ Formal and informal employment levels are approximated based on the level of education obtained.

Analysis of the type of labour market integration shows evidence of the vulnerability of households in the current situation. One distinction that it is important to make in this respect relates to the type of protection that comes with labour market integration. Formal salaried employees benefit from protections set out in the relevant legislation which do not apply to self-employed persons or freelancers. As we can see from the above tables, those workers only account for a small proportion of main household wage earners, at about one third of the economically active population in employment.

However, the number of “protected” people in the workforce may well be even smaller than one third. The category includes workers on temporary contracts in the private and public sectors. This is not insignificant, given that the bulk of employment contracts in the private sector are temporary (fixed-term contracts). How much effective protection there is at present depends on how the duration of fixed-term contracts is distributed. At least 27 percent of those contracts are for three months or less (Jaramillo and Campos, 2019). Moreover, according to data from the Planilla Electrónica, the database of all formal businesses, about 7 percent of employment relationships end each month, while at the same time 8 percent of new jobs are created. In the first quarter, January to April, employment termination rates are seasonally high, fluctuating between 8 and 12 percent (Jaramillo and Campos, 2020). Thus, if recruitment comes to a halt in March and April, which seems realistic, we can expect somewhere between 16 and 20 percent of formal jobs to be lost in these first two months of crisis, purely by virtue of this inertia. It is not clear that this dynamic is affected by support programmes, which do not include any payroll stability conditions. In addition, in the public sector there is an

indeterminate but considerable number of so-called “administrative service contracts” which are essentially fixed-term contracts.⁴

Therefore, only a limited number of households enjoy regulatory protection at the moment. At the other extreme, the groups that have the potential to be hardest hit are uncontracted salaried workers, accounting for 15.6 and 19.4 percent of each household group analysed, respectively, and informal self-employed persons, accounting for 36.5 and 33 percent. As we can see, these two groups represent just over half of all urban households. Formal self-employed persons make up a small group, on which a far smaller portion of the country’s urban households depend. As reflected in the tables above, they tend to be professional workers. This group is expected to be badly affected, even if part of their work can be done from their homes and they are more likely to have savings.

Finally, the unpaid family worker and domestic worker categories will probably suffer the same restrictions on their work as informal self-employed workers, except for those who work in their own homes or the homes of family members, who will face restrictions when trying to sell their products. In the case of domestic workers, those who spend the night in the homes where they work will be less affected than those who commute daily.

5. Vulnerability of firms

In order to protect the incomes of workers, it is vital that we keep companies afloat. This is important not only because of the volume of workers they employ directly, but also because of the indirect employment generated through their demand for intermediate goods from other companies or self-employed workers.

It is no secret that in the Peruvian business sector companies with varying degrees of formality co-exist, both in terms of the employment they generate and their relationship with the state. Table 1 shows the structure of the business sector, according to the Directorio Central de Empresas y Establecimientos (Central Directory of Companies and Establishments), the most comprehensive data source in the sector.⁵ According to this source, in 2015 the formal business sector in Peru consisted of 2,042,992 economic units. As we can see, the total number of production units in the formal sector is less than one third the number in the informal sector. However, their output is four times higher (INEI, 2016a).⁶

With regard to employment, the data are in line with those presented above on the basis of household surveys: formal employment accounts for 27 percent of all employment. Thus, labour productivity is almost five times higher in the formal sector than in the informal sector. As for their legal status, of the total number of formal companies, only 23.5 percent are incorporated as companies, while the rest are only registered as single taxpayers (Registro Único de Contribuyente – RUC).⁷ It should be noted that according to the Planilla Electrónica, the monthly register of company employees, there were around 270,000 registered companies this year. This represents approximately 13 percent of the total number of companies in the formal sector of the Directory. This is important, since any measure of support for formal companies should concentrate on those that report data every month to the Planilla Electrónica, as that would presumably contain the most up-to-date information.

⁴ Citing the Ministry of Economy and Finance as a source, information in the press has suggested that in 2018 there were about 500,000 administrative service contracts in the public sector. That would involve around one third of public sector contracts (Diario Gestión, 12/6/2018).

⁵ A database comprising two information systems: the National Statistical System (used as a basis for the Economic Census and updated annually in line with the Economic Surveys) and the Register of Taxpayers kept by the Peruvian tax authority (SUNAT).

⁶ This section is based on chapter 3 of Jaramillo & Campos, 2020, *La Dinámica del Mercado Laboral Peruano: creación y destrucción de empleos y flujos de trabajadores*, forthcoming.

⁷ Some 76.6 percent are registered as natural persons, 10.9 percent as public limited liability companies, 6.5 percent as individual limited liability companies, 2.6 percent as commercial limited liability companies, 1.5 percent as associations and other types of organization, respectively, and 0.4 percent are registered as civil society organizations (INEI, 2016a).

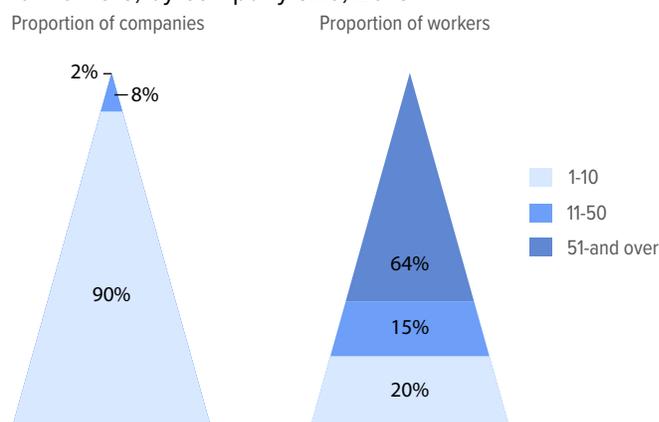
Table 6. Characteristics of productive units in the formal and informal sector, 2015

	Total	Formal sector		Informal sector	
Production units (in thousands)	8,709	2,043	23%	6,666	77%
Firms	480	480		-	
With RUC [single taxpayer registration]	1,563	1,563		-	
Agricultural producers	2,386	-		2,386	
No RUC	4,280	-		4,280	
Employment (in thousands)	15,919	7,004	44%	8,915	56%
Formal employment	4,266	4,266		-	
From 01 to 05 people	23%				
From 06 to 10 people	4%				
From 11 to 30 people	9%				
31 or more people	64%				
Informal employment	11,653	2,738	23%	8,915	77%
From 01 to 05 people	80%				
From 06 to 10 people	8%				
From 11 to 30 people	5%				
31 or more people	8%				
Labour productivity (PEN per employee)	37,850	61,631		13,000	
GDP (in millions of PEN)	602,527	486,842	81%	115,685	19%

Source: National Institute of Statistics and Informatics (2016b). Informal production and employment in Peru. Informal Economy Satellite Account 2007-2016.

Note: The informal sector consists of production units that are not incorporated and not registered with the tax administration. Informal employment refers to jobs that do not receive statutory benefits such as social security, bonuses and paid leave.

Figure 4 shows the distribution of businesses by size, according to the Planilla Electrónica, and the proportion of workers they hire on average in a year relative to the total number of formal EAP workers.⁸ Smaller enterprises (from 1 to 10 workers) account for 90 percent of businesses, but employ only 20 percent of the formal EAP; medium-sized enterprises (from 11 to 50 workers) account for 8% of enterprises and employ 15% of the formal EAP; while larger enterprises (51 or more workers) account for 2 percent of enterprises and employ 64 percent of the formal EAP. Therefore, approximately 1 percent of these businesses generate half the country's formal employment. It is clear that at this juncture support or stimuli that exclude large companies will also exclude the bulk of formal employment.

Figure 4. Proportion of companies and workers, by company size, 2015

Source: Planilla Electrónica | Prepared by the author.

⁸ It should be noted that, although the number of companies making use of the Planilla is only around one tenth of all companies, the distribution of employment by size is similar between the group of companies in the Planilla and the total number of formal companies in the Directory.

6. Policy options

When considering policy options, it is useful to distinguish between two stages in the current crisis. The first stage is characterized by heavy restrictions on the supply of labour as the population in general is under quarantine. In the second stage, many of these restrictions are lifted gradually but the level of economic activity is very low. Different policies are required for each of these contexts. In the first stage, it is not possible to stimulate employment or consumption, since work is prohibited in most activities and household consumption is mainly food. In the second stage it is possible to work, but consumption and aggregate demand are depressed.

The aim in the first stage is to help households and businesses overcome the barriers imposed by the health measures. In households, this means directly supporting basic domestic consumption (food and cleaning items). In companies, this requires measures to support their survival and the preservation of the jobs they generate. In the network of businesses as a whole it is important to ensure that payment chains are maintained. In the second stage, the aim is to stimulate growth in employment and aggregate demand.

Policies for the first stage of the crisis

In the first stage, policies must seek to fulfil two aims. The primary concern is to provide an income to households that had employed workers before the onset of the crisis. The second is to preserve the viability of formal jobs. In other words, preventing businesses from going bankrupt and generating incentives for them to retain their workers.

Table 7 presents a maximalist approximation of the cost of maintaining the work-related income of the primary wage earner in each household. There are 5.1 million urban households in the country where the main wage earner is a private salaried employee or self-employed person. In other households, the primary wage earner is a public sector employee (whose job, we assume, will not be cut), a domestic worker or unpaid family worker.

Household income support is provided according to the employment status of the main wage earner, without making any targeted cuts. Thus, this first cost estimate is maximalist in two ways: (i) it is based on universal support for the income of urban households (100 percent of households), and (ii) it assumes that said support covers the total work-related income of the primary wage earner in each household (100 percent of their income). Cover for contracted salaried employees is the highest cost here, followed by informal self-employed persons and non-contracted salaried employees.

Table 7. Peru: EAP in employment and the primary wage earner in urban households, 2018. Cost of maintaining their income.

	EAP in employment	Work-related income from primary occupation	Total work-related income from primary occupation
Salaried employees (private)	2,973,552	1,749	5,200,320,553
With contract	1,718,496	2,203	3,786,196,160
No contract	1,255,057	1,121	1,407,060,494
Self-employed and freelance	2,127,632	1,193	2,537,303,763
Formal	364,985	1,965	717,339,722
Informal	1,762,647	1,033	1,819,964,962
Monthly total	7,737,624,317		
Quarterly total	23,212,872,950		
GDP 2019	930,705,000,000		
Percentage points of GDP	2.49		

Source: INEI - ENAHO, 2018

Note: The main wage earner is the person in the household who generates the highest work-related income. Work-related income is monetary income from the principal activity.

The key benefits of such a measure are the preservation of formal employment and income stability by supporting household consumption, which will be critical once restrictions on the supply of labour start to be lifted. The cost does not seem so high when compared to the government's 12-point GDP ceiling to support the economy in this crisis, especially when we consider that the Ministry of the Economy and Finance has indicated that it could be raised if deemed necessary as local and global economies evolve.

A more limited strategy of state cash support to households is currently being implemented. This consists of fortnightly payments of PEN 380 for each of the urban households targeted using the criteria set out in the previous section. This includes 3.5 million households. Thus, the cost of this transfer for the same three months of the previous year would be: $380 \times 6 \times 3.5 = 7,980,000$, or 0.86 percent of GDP.

The two options described above provide leeway for the government's policies. Priority would be given to self-employed and informal employees who are not on the Bono380 beneficiary register, but whose lack of income at the moment means that they are very likely to fall below the poverty line.

A different operational strategy is required in order to reach beneficiaries in each group of workers. It could be very simple and direct for formal salaried employees. In fact, the government has already implemented a grant for 35 percent of the payroll value, which is currently operational. The options are to expand the scope of this grant or wait and see what transpires in the formal employment sector before deciding whether there is a case for increasing it.

For informal salaried employees and informal self-employed persons alike, the main difficulty is that there is inadequate registration. This makes operational design complicated. The Seguro Integral de Salud (Comprehensive Health Insurance – SIS) database could be the starting point for reaching this population (beyond the poor and vulnerable households included in the Padrón General de Hogares (General Register of Households – PGH) and some households that are not living in poverty but included nonetheless). Formal self-employed persons could submit their sworn declarations from the last year, and, based on this, a fixed amount could be set and used as a credit against future income tax payments.

There are two important operational details that need to be addressed in the short term to facilitate the implementation of these procedures in the future. Firstly, it is important to identify any errors of exclusion that might affect the PGH. A systematic review of the PGH, with a focus on identifying sources of exclusion problems, is an immediate priority. Secondly, we should consider something Brazil has done when faced with the same circumstances: opening up the possibility of registering on the PGH through a digital platform and application. In the context of this emergency, which makes it difficult to verify information, a registration of that kind would serve as a sworn declaration. If it were subsequently found that a citizen's declaration was inaccurate, any amounts that had been transferred could be charged in the annual tax return.

Secondly, it is important to include in the financial system the vast majority of households receiving grants. To that end, the next time a payment is made over-the-counter at banks, the procedure to open a very basic savings account for each head of household could be included in the payment. In addition, the feasibility of telephone transfers should be explored.

On the business side, as discussed in section 3, the government has already implemented a set of measures to safeguard the health of companies. A subsidy of 35 percent of the payroll value has been implemented, as well as a working capital guarantee fund. More recently, Emergency Decree 038 has opened up the possibility of applying the "perfect suspension of labour", correcting an earlier DU that implicitly prohibited it. The real problem is that if companies are unable to adjust their payroll in this situation, it could cause them to go under or lead to major job losses. At the same time, the criteria for companies to compensate for this stoppage period with leave or to grant leave have been relaxed, as well as to reduce working hours with a consequent reduction

in remuneration, if agreed with the workers. It is essential to monitor the response of companies to these subsidies and to assess how effective they are in preserving jobs and businesses.

As for the guarantee fund, it is too early to assess whether the impact of the incentives for businesses, particularly smaller ones, is enough to get them to use such initiatives. While the rules do not discriminate by type of enterprise (companies versus other forms of organization), it is clear that smaller enterprises have more difficulty in accessing credit in general. Data from the Superintendency of Banking and Insurance indicate that only 12.4 percent of the total credit balance is for micro and small enterprises (MSMEs) and 37.5 percent of the total debtors are MSMEs, even though they constitute 90 percent of formal enterprises. In this context, it is important to maintain proper monitoring of access to this fund. In this regard, it is important to set up a database that is updated daily of the credits covered by this guarantee fund, and the characteristics of the companies using it, particularly their size and sector of activity. This information will help improve the mechanism for credit to reach small businesses and the sectors of activity to which it is intended to flow.

The measures taken so far have reached a significant proportion of urban households: over 50 percent. The expected effect of this measure is to prevent further impoverishment of households that were already poor before the crisis. A comparison of the amount of Bono380 with the income of these families suggests that for the duration of the transfer poverty levels would not shift dramatically unless the income of households in deciles 6-10 falls to a level where their income is below that of the second decile. In one out of every five households this grant covers 100 percent of the food expenses of these families in regular times, while in others it partially covers them. It is important, however, to note that this is a temporary grant and it will only have a passing effect on household income distribution. However, as suggested below, it is likely that the prolongation of the crisis after the restrictions on labour supply are lifted will require some kind of poverty alleviation programme, which would to some extent replace the Bono380.

Policies for the second stage: reactivation

The second stage would come into play once the restrictions on the labour supply are lifted. A reasonable scenario is that the transition to this stage will be gradual and variable across sectors. Restrictions on certain activities (e.g. tourism and public events) will certainly continue for most of the year. In this regard, a crucial issue is health policy and to what extent it will be possible to open up spaces to restart economic activities. By necessity, widespread testing should be put in place, and in some cases could be a requirement for restarting activities, such as meal delivery. The use of adequate protection will also continue to be an issue conditioning many activities. A more sophisticated health policy will require significant public investment to strengthen the capacity of the health sector to act, particularly in early identification and effective monitoring, and closer public-private partnership.

On the other hand, the scale of the policy effort in the second stage will depend on both how long the indiscriminate quarantine continues and how effective the policies in the first stage have been in keeping companies afloat. The implementation of strategies for continuous evaluation of the effects of the measures taken to improve their management and effectiveness is therefore key.

In any case, a high unemployment scenario, tempered by an increase in informal employment, and depressed aggregate demand will in all likelihood be issues to address in this second stage. The natural focus, therefore seems to be on accelerating employment generation. In the context of countries such as Peru, the additional challenge is to make these new jobs formal in character. This stage is much more typical to previous experiences of international economic crises. In such contexts of economic depression, the usual remedies involve wide-ranging monetary and fiscal policies; these should be adjusted to the particular conditions of this emergency. Here we will focus instead on labour market and social protection policies that complement the known tools of liquidity management and management of public spending and taxation.

Labour market policies in a context of economic recession should aim at promoting the expansion of formal employment. Informal employment will also grow, as in the absence of unemployment insurance people will have to generate their own employment. How much informal employment grows will depend on policies to promote formal employment. Restrictions on formal employment relate to the cost of regulation and, in the case of open-ended contracts, difficulties when it comes to terminating employment contracts. Given the political difficulties of reforming labour regulations, consideration should be given to extending the payroll grant at the start of this stage. This would be justified insofar as it allows faster growth of formal employment. One way of implementing this effect is to announce in advance an end date when companies will no longer enjoy this subsidy for newly hired workers, while extending the subsidy for those already hired for an additional reasonable period, which could be between 3 and 6 months.

An additional regulatory restriction on formal recruitment relates to the minimum wage. The minimum wage in Peru is high relative to median earnings; indeed, it is higher than in several European countries (OECD, 2019). Moreover, it is high in relation to wages in the informal sector. Indeed, the cost of a worker with a minimum wage in the formal sector is 20 percent higher than the average wage of an informal salaried employee and 30 percent higher than that of an informal self-employed person. Extending the subsidy to formal contracts is further justified in this situation. In addition, non-compliance with the minimum wage is high. While it is not feasible, and perhaps not desirable, to adjust the minimum wage downward, attempts to raise it even further must be resisted in this context.

In these times of crisis there will also be no lack of well-intentioned voices proposing policies to boost work which, unfortunately, are not effective in improving overall well-being. One group of such proposals is linked to entrepreneurship. Entrepreneurship policies aim to boost the employability of people by encouraging them to create their own jobs (and the narrative further suggests that these new entrepreneurs generate jobs for others). Here it is worth remembering that Peru is a country with an excess of entrepreneurship compared to that seen in countries with similar levels of development. To be more specific, we have an excess of subsistence-level entrepreneurship, with low productivity. Estimates in the literature show that the productivity of a job in an enterprise with fewer than five workers is only six percent of the productivity of a job in a company with 51 or more workers. Improvements to aggregate productivity in the country must correct some of the poor allocations of resources that have been made in the past. This crisis is also an opportunity.

In addition to creating the right conditions for the expansion of formal employment, the reactivation of employment in the future “new normal” should incorporate many of the instruments of active labour market policies. In this regard, it will be important to strengthen job placement centres by improving flows of information that facilitate decisions on (i) job search and (ii) job training and retraining of labour market participants. In the same vein, on-line employment portals should be enhanced, in order to help match labour supply with demand.

Young people are among those most likely to be affected by this pandemic in terms of labour markets. In normal times they already experience higher rates of unemployment and informality, as well as lower rates of participation in the labour market. This is one group that will need more support in joining the labour market. For this group, an internship programme could help improve the transition from the world of education to the world of work, along with a version of the policy package described above oriented towards the young workforce. Another tool that could be of benefit in the early stages of post-quarantine economic recovery is a temporary employment programme. One of the advantages of this type of intervention is that the country already has a programme of this kind, which operates in urban and rural districts with high poverty levels, run by the Ministry of Labour. This means expanding it could be a relatively simple matter. However, its operations should be reviewed. Currently, it is executed by local governments. In the new context, it should be linked to public investment policies that are implemented as part of a tax package to restart the economy. While a Keynesian public infrastructure development programme should focus on formal and specialized private companies, the type of small local labour-intensive work is typically unattractive to this type of enterprise and instead offers a niche for this type of programme.

In this second stage of the crisis, with fewer restrictions on mobility and therefore on labour participation, the need for the Bono380 is reduced. However, as substantial increases in unemployment and informal work are expected, the risk of households falling into poverty increases. This is particularly true in urban areas, which were those affected soonest by the restrictions of the health strategy. The existing social protection network for normal times must be extended. This may be a good time to implement a decisive expansion of the JUNTOS programme to include urban areas.

Since its creation in 2005, JUNTOS has been primarily rural-focused. One important reason for this is that rural poverty has been much higher than urban poverty (today the former is about 40 percent, the latter about 15 percent). This means the targeting has taken a geographical approach. This has hindered expanding the programme to urban areas, where the targeting criterion needs to be different. The “new normal” that the coronavirus pandemic will leave in its wake, with greater urban poverty, will be a good reason to accelerate this expansion.

Another group of well-intentioned policies that generate incentives unsuitable for the long term is support for informal workers. Such interventions emphasize the poorer welfare conditions of informal workers, channelling resources to improve them. While the intention is good, the incentives generated for the medium and long-term have perverse effects. They subsidize the informal status of more workers, perpetuating many of the inequalities and inefficient allocation of resources. This crisis should also be an opportunity for society to internalize the notion that formal employment status brings significant benefits. Policies to support vulnerable workers can more easily reach people and their households if their information is properly updated in tax authority records and they are included within the financial system. In these circumstances, public policies should reach everyone. But after the storm has passed it would also be good to engage in a serious discussion on ways to increase formality in the country.

Social and Economic Impact of COVID-19 and Policy Options in Argentina

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Abstract

This document describes the current situation regarding the COVID-19 crisis in Argentina. It describes the current state of the economy, and the possible channels of transmission that will affect GDP, labor markets and poverty. It summarizes the policy responses carried out by the Argentine government so far and provides some suggestions to minimize the negative impact on employment and poverty. Argentina has entered an early and severe lockdown which has lessened the health sector burden and saved lives. This has seriously deepened the economic crisis Argentina has been suffering since 2018. Compared to other countries in the region, the government has less room to maneuver given its lack of access to international financial markets and compromised fiscal situation.

I. Introduction:

The economic crisis driven by the COVID-19 pandemic found Argentina in an already fragile economic and social situation. When the first case of COVID-19 in Argentina was confirmed on March 3, 2020, the Fernández administration was beginning its fourth month in office and was in the middle of a sovereign debt renegotiation. The economy had not rebounded after two years of recession, inflation was above 50% and poverty affected 35.5% of the population.

Social distancing measures, aiming to flatten the COVID-19 outbreak curve, escalated throughout March, until the government finally announced a strict mandatory shutdown on March 19. Initially it was to last until March 31. However, it was successively extended until May 10, with minor relaxations at the industry level as well as in regions with low population density or with a low number of cases. By April 25, the number of confirmed COVID-19 cases had climbed to 3,780, with 187 deaths. Confirmed cases in Buenos Aires province and city reached 2,246, 59.4% of the total number of confirmed cases nationwide.

With a strict shutdown the government seeks to flatten the COVID-19 curve (the peak is expected for June) and thus gain time to allow hospitals to have the equipment and the human resources needed to cope with the pandemic. By the end of March, there were 8,500 intensive care beds, including private and public hospitals: the government aimed to add 2,000 more before the pandemic's peak. There were also 8,900 ventilators, and the aim was to have 10,000 by the end of April. The government also seeks to get more test kits¹ to be able to identify the asymptomatic population before driving an important relaxation of isolation measures. However, the ongoing shutdown puts most small businesses in non-essential sectors at risk, while the high share of informal workers means that significant financial aid will be needed to prevent a deep social crisis. The dilemma of “economy vs health” is even more challenging for Argentina, given its important fiscal imbalances and high public debt burden, and could turn into a more disruptive crisis.

The report is organized as follows: Section 2 analyses the channels of transmission of the COVID-19 global crisis in Argentina, Section 3 analyses its economic and social impact, Section 4 analyses the potential for social unrest, Section 5 analyses policy interventions and options, and Section 6 concludes.

2. Channels of transmission

2.1. Trade

Argentina will be hit hard by the expected slump in foreign trade as a result of the COVID-19 outbreak. Most of its exports are agricultural commodities, so it has no ability to diversify exports in the short term. Exports of goods & services represented 22.7% of real GDP in 2019, a share that is lower than in other Latin American countries, so the impact of the decrease in foreign trade will be comparatively lower at a regional level. However, exports are an important source of tax revenues (through export taxes) and foreign exchange (though the expected imports' slump allows to predict a foreign trade surplus for 2020).

63.8% of Argentina's exports are concentrated in agricultural commodities and manufactured products of agricultural origin, leaving the country vulnerable to a drop in their prices, particularly corn and soya. Agricultural exports are concentrated in the second quarter of the year (when soya and corn are harvested), which is expected to be the worst quarter due to the pandemic peak. Besides, maize and soya export volumes are expected to decrease in 2020, as dry weather undermined yields and reduced the expected agricultural harvest.

¹ By April 25, 49,905 tests (equivalent to 1,099.8 samples per million) had been carried out. In April the government received 170,000 serological kits and 215,000 PCR tests, with which it seeks to strengthen the strategy to identify and isolate patients, and so reduce the virus' spread. On their part, local researchers at Conicet laboratory are developing a fast, portable test based on CRISPR technology. However, given the world demand for kits, it is highly unlikely that the government can secure the number of necessary kits to increase tests massively.

Export earnings totalled US\$65.1bn in 2019. Primary products accounted for 27% of the total, with cereals (mainly wheat and corn) and oilseeds (mainly soya) representing 77% of them. Manufactured products of agricultural origin accounted for 36.8% of total exports, with meat and oilseed derivatives representing 75.8% of these products.

Nearly two-thirds of exports are sold to countries that are hit hard by the COVID-19 outbreak, including Brazil (16% of the total), the European Union (13.5%), Asian countries excluding China (12%), China (10.8%), the US (6.2%) and Chile (4.7%). China, Asian countries and the EU accounted for nearly a half of agroindustry exports (including primary products and manufactured products of agricultural origin). Brazil was the outlet of 35% of manufactured product' exports.

Foreign trade data for February and March 2020 showed a contraction of exports to Argentina's main trading partners (China, the EU, NAFTA countries and Brazil), showing the effect of the economic downturn in foreign trade flows. Preliminary estimates prepared by local consulting firms projected a decrease of US\$3.4bn in exports for 2020, however given the rapid COVID-19 spread and its effect on Argentina's main trading partners, the decrease will be surely higher, as it will affect both agricultural and manufacturing exports.

Imports totalled US\$49.1bn in 2019. Intermediate goods' imports accounted for 34.9% of the total. Though MERCOSUR countries are the main source of intermediate goods (with nearly a third of them), about half of intermediate goods' imports come from three regions severely affected by the pandemic: NAFTA countries (16.8% of the total), the EU(16.8%) and China (15.9%). China is an important source of industrial inputs for some industries such as electronics and household appliances, textiles and footwear, chemicals and the machinery industry.

Imports of capital goods and its parts & accessories accounted for 37.9% of total imports. Nearly two-thirds of the total come from China (27.7%), the EU (22.4%) and NAFTA (13.8%). However, China and Asian countries have a major role as source of origin of parts & accessories, representing 37.3% of the total, so capital goods' maintenance could face trouble. Brazil accounts for 75-85% of the car industry's imports, so the lockdown in that country will undermine the performance of Argentina's car industry.

2.2. Travel and tourism

The travel and tourism industry has been hit hard by the COVID-19 outbreak. On March 15, the government banned the arrival of non-resident foreigners. On March 17, it announced the suspension of domestic flights and long-distance trains and buses, as well as hotels' shutdown. These measures were lately extended until May 10. On April 26, the government announced that airlines were not able to issue new tickets until September 1, however this measure will be reviewed every two weeks according to the outbreak's evolution.

The travel and tourism industry is an important source of foreign exchange and a significant source of employment and incomes in some regions (such as Patagonia, the Northwest and some North-east provinces). In 2019, 7.4 m foreign tourists visited Argentina, a rise of 6.6% over 2018. In 2019, travel services' income was US\$5.2bn according to INDEC's balance-of-payments figures. Domestic tourism is also expected to be hit hard by social distancing measures. Data from the Tourism Ministry for December 2019 showed that there were 1.7 m passengers hosted in hotels during that month, of which 72% were domestic tourists, which shows the relevance of domestic tourism for this industry. By the end of 2018, there were a total of 15.629 establishments (including hotels, hotels, lodging houses, etc).

The hotels and restaurant industry accounted for 1.6% of GDP in 2018. There is no disaggregated data on passenger transport to know the weight of tourism-related transport on GDP. Data on domestic air transport showed that 15.9m passengers travelled by plane in 2019.

According to data for 2014 (the latest disaggregated data), the tourism industry (including lodging, restaurants, transport and other tourist services) had 1.1 m employees, around 5.4% of total employment.

2.3. Financial markets

In Argentina the worsening of financial indicators had different drivers: increasing global volatility due to the pandemic, investors' fears about the effect of the outbreak in the domestic economy, and doubts about the results of sovereign debt renegotiations.

The impact of capital outflows reflected in the boost shown by JP Morgan's EMBI-AR index, which climbed from 2,035 b.p. on February 19 to 4,269 b.p. on March 24, to remain above 3,600 b.p. since then. Given the existence of foreign exchange controls (there is a US\$200 cap on exchange purchases), the hit in investors' confidence was reflected in the informal market, in which the exchange rate climbed from Ps:US\$83.5 on April 3 to Ps:US\$120 on April 23, driven by fears of a new debt default after the aggressive debt proposal presented by the government (which included a three-year grace period, a 62% reduction in interest payment and a 5.4% cut in capital) was rejected by creditors. Hence for Argentina, the result of debt renegotiation will surely have a greater impact on financial inflows than global turmoil.

Social distancing measures

Social distancing measures escalated after mid-March. On March 12th president Alberto Fernández announced decree 260/2020 declaring a public health emergency. The decree enabled the Health ministry to adopt the measures needed to fight the outbreak, opening the door to the reallocation of funds or the adoption of measures to prevent shortages. The decree included the suspension of flights from Europe, the US, China, Japan, South Korea and Iran for 30 days, though this extension could be longer if needed. It also established a 14-day self-quarantine for those who came from the affected countries (even tourists), as well as those who were infected (or were suspected to be infected) with the virus and these people's inner circles. Those who did not comply with this self-quarantine could be denounced and criminal law (according to articles 205 and 239 of the Penal Code on infectious disease propagation) would be enacted. The decree also established that the government could implement price caps on key inputs such as hand gels and face masks and could take measures to prevent their shortage. The government also suspended large sporting events and cultural activities.

On March 15, the president announced additional measures, including the suspension of school classes, the closure of the country's borders, a ban on mass activities, the closure of cinemas and theatres, and paid sick leave for people at risk (such as those older than 60 years old, and pregnant women).

On March 19, the government announced a mandatory quarantine until March 31, though it was afterwards extended until May 10. The quarantine included mandatory self-isolation for all Argentines, except for those who work in essential services such as health, supermarkets and grocery stores, pharmacies, the food industry, telecommunications, public transport, utilities, broadcasting services, etc. Stores and manufacturing plants of non-essential activities will remain closed. People will be allowed to make their daily purchases, but the violation of the announced restrictions will be considered a crime. The quarantine is nationwide.

Though the quarantine's strictness was mostly kept, it was partially relaxed through the addition of new essential activities. The government announced a new phase, the so-called "managed quarantine", where the lockdown's relaxation will be geographically decided and controlled by local authorities (provincial governors and mayors). Since April 27, regions and towns with a low number of COVID-19 cases or where the outbreak seems to be controlled will be allowed to partially ease the shutdown.

A local consulting firm, Eco-Go, estimated that each day of strict quarantine has a cost of US\$500m, though some others estimated it to be US\$1.0bn. Considering that a strict shutdown was extended for around 5 weeks, and computing a daily US\$500m loss (which could be rather conservative), the cost rises to US\$12.5bn (equivalent to 2.8% of GDP), if only working days are included. The cost will obviously rise as the shutdown is extended.

The economic downturn will boost unemployment and reduce incomes of self-employed people. Uncertainty about the extension of restrictive measures and consumers' fears about its impact on employment and on households' incomes will curb private consumption. Households will prioritize the purchase of consumer staples, rather than non-essential products.

Fears of economic depression and the lack of financing will curb investments, except in those industries that are key to face the outbreak (the food industry, cleaning products, pharmaceuticals, medical equipment).

2.4. The oil crisis

The mining, quarrying, and gas and oil extraction industry accounts for just 3% of GDP. However, the oil industry is important in some oil-producing provinces such as Neuquén and Chubut and has important spill-over effects to some services industries such as the travel industry and IT services.

Energy exports accounted for 6.6% of total exports in 2019, so the oil price slump will not have a significant impact on export earnings. Given that between 2001 and 2017 oil production decreased due to a less favourable regulatory framework, the energy industry has posted a trade deficit since 2011. However, this deficit has narrowed since 2013 to reach just US\$175m in 2019. Given that oil prices are a clear inflation driver, the oil price slump will have a positive effect on the consumer price index.

The most relevant effect of the oil price shock will be the decrease in investments (mainly foreign direct investments), especially in unconventional oil fields such as Vaca Muerta, in Neuquén province, where a price of US\$50 per barrel is needed to make it profitable. Oil companies have claimed for a price subsidy. By now the government has announced the implementation of non-automatic licences to restrict oil imports, however there could be new subsidies in the medium term, which will have an impact on the fiscal deficit. In 2019 energy subsidies accounted for 1.4% of GDP (down from 3% in 2015).

3. Economic and social impact

3.1. Economic growth

“There is a perfect storm brewing in the global economy. Most recessions are caused by a demand shock (think 9/11), a supply shock (think of the first oil price increase) or a financial shock (think Lehman Brothers and the Great Recession). COVID-19 promises to deliver all of the above in a single package”

(Triggs, A. and H. Karas, The triple economic shock of COVID-19 and priorities for an emergency G-20 leaders meeting”, Brookings, March 2020).

There is a triple economic shock: a supply shock (driven by the shutdown of manufacturing plants, retail stores, etc), a demand shock (due to social isolation measures, the rise in unemployment and more cautious consumers) and a financial shock (as consumption declines, liquidity troubles appear, putting companies -especially small and medium companies- at risk). The effect on GDP growth will depend on how long the shutdown will be in place, and that will depend on the epidemic's growth path. However, the effect will be significant, as the crisis is global. There is also a broad consensus among health agencies and experts that the shutdown must be lifted gradually, and that social distancing measures will be in place for a long time, presumably until there is an effective vaccine (which is estimated not to be before the next twelve months), or the population achieves herd immunity (which would take longer than twelve months).

Argentina was already in a vulnerable economic and social situation at the start of the COVID-19 outbreak. In 2018-2019 real GDP accumulated a decrease of 4.6%. Some private estimates show that the economic downturn continued in the first quarter of 2020 (despite the economic package announced in December 2019 that sought to fuel the consumption of the poorest households), while year-on-year inflation remained around 50%. In the fourth quarter of 2019 unemployment was 8.9%, and underemployment was 13.1%. The poverty headcount was 35.5% in the second half of 2019, while in 2019 wages rose by 40.9%, well below inflation. The economic outlook was already dim and depended to a great extent on the results of sovereign debt renegotiation.

Before the pandemic, real GDP was expected to decrease by 1.2% in 2020 and inflation was expected to climb to 40%, according to Central Bank's Market Expectations Survey. However, the contraction will be deeper, due to the global and domestic effects of the COVID-19 outbreak. The shutdown will undermine aggregate supply, while demand will be affected by higher unemployment, lower incomes and growing uncertainty, which will drive a decrease in private consumption. Investment will also be hit hard by financial volatility and an uncertain economic outlook, so the economy will be stuck in a vicious circle of decreasing consumption and lower employment and incomes. According to IMF estimates, real GDP will decrease by 5.7% in 2020, while for the World Bank it will narrow by 5.2%. The Economist Intelligence Unit predicts a steeper downturn (6.7%), while ECLAC estimates a 6.5% decrease.

We can think of two likely scenarios for the Argentine economy in 2020, driven by different assumptions.²

Scenario 1: In this scenario we assume that the early shutdown helps to flatten the COVID-19 curve, so the government can gradually lift restrictions after May, reducing the strictest shutdown to 7 weeks. The scenario also assumes that the government will implement widespread social and economic relief measures during the shutdown, and once it is lifted it will implement stimulus measures to encourage an economic rebound. It is also assumed that the government succeeded in restructuring sovereign debt in the first half of the year.

In this scenario we expect that real GDP contracts by 10% (similar to the decrease in 2002), with a higher decrease in the first half, and milder contractions in the third and fourth quarter.³ Inflation will be about 50%-60%. Supply constraints and monetary expansion will boost inflationary pressures, especially in essential goods. By contrast, the expected decrease in the consumption of non-essential goods will discourage price rises in these industries. Given troubles in the payment system during the shutdown, the rise in the precautionary demand for cash will prevent an acceleration of inflation while a strict quarantine is in place. The fact that social distancing measures will only be lifted gradually (with no economic rebound expected until 2021) will help to keep inflation under control, despite the rapid rise of the monetary base in the first half of the year. A debt restructuring agreement should help the government to issue new debt at least in the domestic market, helping to reduce the monetary financing of the fiscal deficit. In this scenario, the expected trade surplus (driven by a steep decrease of imports) should help to contain pressures in the foreign exchange market.

Scenario 2: In this scenario we have two important assumptions: the government decides to keep a strict quarantine for a longer period, and it is unable to reach a deal with debt creditors. In this scenario both economic and social indicators will worsen. There will be growing social tensions, which would in turn demand higher government funds to prevent riots. In this scenario real GDP will contract by 10-15%, while unemployment will climb well above 20%. Supply constraints will boost prices in basic staples, while growing economic uncertainty

² The two different scenarios result from the fact that the country is still in initial stages of the COVID-19 crisis in a very dynamic setting.

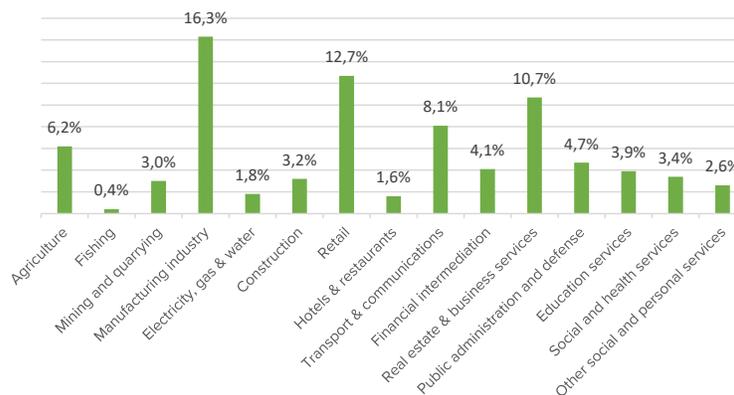
³ This estimate includes, for the first quarter, the 5.4% decrease in economic activity computed by a local consulting firm (Orlando Ferreres). In the second quarter, which is expected to be the worst in terms of the outbreak and the lockdown, the contraction was estimated considering the decrease of electricity demand for each sector during the shutdown (and weighted according to their individual weight in GDP). Agriculture output is expected to decrease, in line with the lower harvest. In the third and fourth quarter the contraction is expected to be a lower (and decreasing) percentage of that of the second quarter, given that the quarantine will be lifted only gradually.

would boost the demand for dollars in the exchange market, putting pressure on the exchange rate, raising the possibility of an inflationary spiral and even a hyperinflation.

3.2. Industry’s performance

Services-producing sectors, which accounted for 52.4% of real GDP in 2018, will suffer a severe slump. Some of the services sectors that will be worst hit by the pandemic (retail, hotels & restaurants, real estate, business services, and other social and personal services – which include cultural and sports activities) accounted for 27.6% of GDP. Transport (especially long-distance public transport) will also be hit hard (transport accounted for around a half of transport & communications). Among goods-producing services, construction will also be hit hard, at least until the crisis is over, and the government is able to boost infrastructure works in an attempt to drive an economic rebound. The outlook for the manufacturing industry (which is the main single economic sector and accounted for 16.3% of GDP) is mixed: those sectors considered essential (such as food and beverages, oil refining, chemicals, medical equipment), which represented around 45% of manufacturing output, will have a better performance than the rest.

Figure 1. Economic sectors Share of real GDP 2018



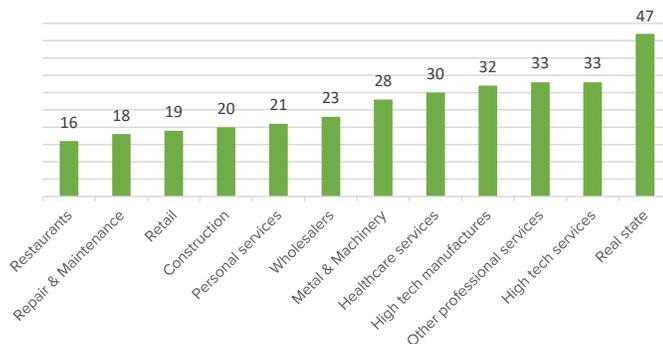
Source: Ministerio de Economía

Some high-frequency figures for the first four weeks of the Argentine shutdown showed different effects across sectors. According to data from CAMMESA (the company that manages the electricity wholesale market), the average daily electricity demand from big users fell by 36.5% compared with the three weeks previous to the shutdown. The food and basic staples industry posted a decrease of just 10.4%, while in the retail and services sectors the contraction climbed to 49.4%. In public services and transport, the decrease in electricity demand was 16.2%. The manufacturing industry showed the biggest slump, with an average decrease of 48.7%, though there are important differences across subsectors: construction (-81.9%), textiles (-80.1%), basic metals and metal-mechanics (76.3%), and the car industry (-74.8%) showed the biggest slumps, while wood and paper (-29%), chemicals, plastics, etc. (-21.9%), and oil refinery (-21.9%) showed the lowest decreases. Electricity demand from mining activity decreased by 28.5%, while that from oil industry by just 2.6%.

3.2.1. Cash and small business

According to a report released by JP Morgan, Chase & Co in 2016 based on 597,000 small businesses in the USA,⁴ half of small businesses hold a cash buffer large enough to support 27 days of their typical outflows. Some sectors that are hit harder by the shutdown, such as restaurants, repair and maintenance, retail, construction and personal services are among those with the lowest cash buffer (with less than three weeks of cash).

⁴ JP Morgan, Chase & Co Institute, “Cash is King: Flows, Balances and Buffer Days: Evidence from 600,000 small businesses”, September 2016.

Figure 2. Cash buffer days by sector

Source: JP Morgan, Chase & Co.

However, this survey was conducted in a country where informality is lower than in Argentina, small businesses have easier access to bank lending and tax pressure is also lower, so the outlook is much worse for Argentine small and medium companies, where the cash buffer seems to be of just two weeks. They are facing trouble to pay wages and could even go bankrupt.

Small and medium businesses in non-essential sectors are facing hard times, with shutdowns of stores and plants, so there are increasing liquidity troubles. The government announced some relief measures, such as programs to subsidize part of workers' salaries, and bank credit lines with lower interest rates to help companies to face liquidity troubles. However, many small and medium companies face difficulties in complying with the eligibility requirements for this financial aid, so there is a great risk of a massive bankruptcy if the shutdown extends longer.

3.3. Social impact

Most workers and employers are expected to lose earnings as a result of the pandemic. Those working in non-essential activities will suffer greater losses. However, those working in essential activities will also feel the impact of a decreasing demand, as those who lose their jobs are likely to reduce consumption spending, while those who still have earnings will also be more cautious.

Among those who will suffer the hardest hit, we can identify the following groups (which are not mutually exclusive):

- » People under poverty and extreme poverty lines
- » Unemployed people
- » Informal workers
- » Low-income self-employees ("monotributistas")
- » Workers of non-essential activities
- » Workers in small companies
- » Owners of small companies, especially in non-essential activities

In this sub-section we present an overview of the current social scenario, through an analysis of Argentina's main social indicators: unemployment, informality and poverty. The detailed overview is expected to provide a useful input for policy analysis and decision-making.

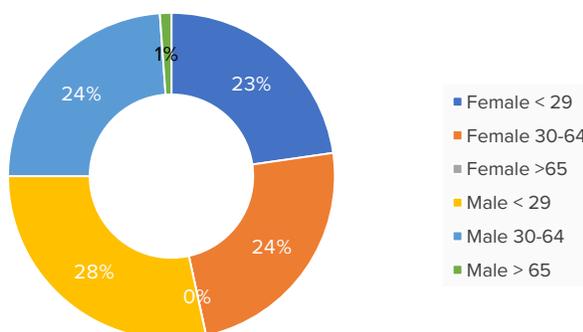
3.3.1. Unemployment

In the fourth quarter of 2019, the unemployment rate was 8.9%, while the under-employment rate (including those who would like to work more hours than they do) was 13.1%, which means that 22% of workers had employment trouble. The lockdown is expected to boost that figure.

The analysis of unemployment data shows important differences concerning gender, age, educational attainment and workers' skills, while it also shows that there is a non-negligible share of unemployed people that have been in that condition for a long time (or they have never worked at all).

Unemployment is higher among men (though this could be hiding the fact that many women decide to self-exclude from the job search due to motherhood, etc), and among those below 29 years old.

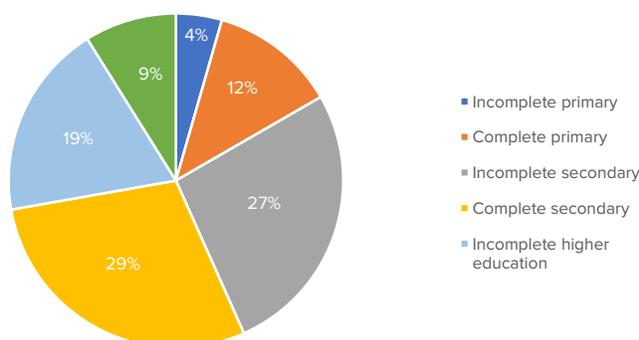
Figure 3. Composition of unemployment by gender and age IV qtr 2019



Source: INDEC.

Unemployment is higher among those with secondary education (both complete and incomplete): they account for 56% of the total. There is an important share of those with incomplete tertiary education.

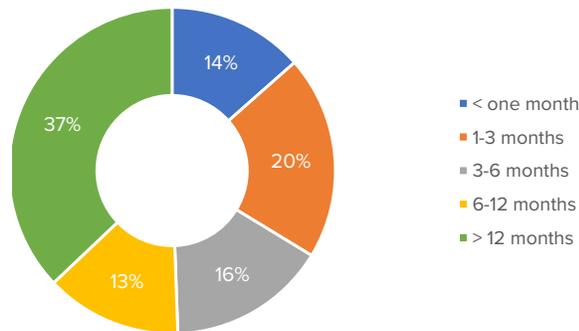
Figure 4. Composition of unemployment by educational attainment IV qtr 2019



Source: INDEC.

Around a half of workers have been unemployed for more than six months, and 37% of them have been unemployed for more than a year.

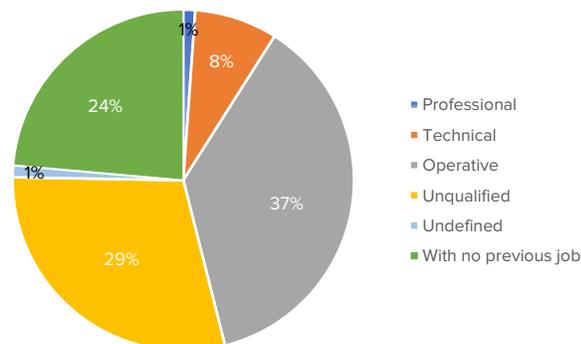
Figure 5. Unemployment by job search time IV qtr 2019



Source: INDEC.

Low-skilled workers accounted for two-thirds of unemployed workers, while an additional 24% are people who never worked (presumably young people).

Figure 6. Unemployment by workers' skills iv qtr 2019



Source: INDEC.

In 2002, the last significant economic crisis, the unemployment rate reached a peak of 21.5% in May 2002, while the under-employment rate peaked at 19.9% in October 2002, showing that around 40% of people had employment trouble.

However, the labour market shows some differences when compared to 2001/2002 that could help to cushion the drop in the employment rate: the share of public employment in total employment is now higher than in 2001. According to data from INDEC'S Census for 2001 and 2010, the number of public employees had increased by 56%. According to data from INDEC, in 2012 there were 2.5 m public workers, which represented 28.4% of total employees, and 23.4% of total workers (including independent workers). In December 2019, public employees totalled 3.2m people, and accounted for 34.7% of total formal employees and 26.5% of the total.

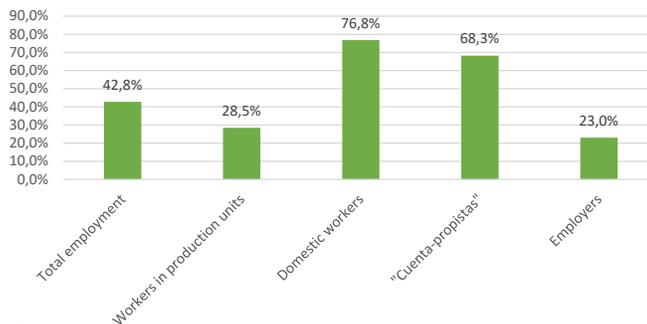
3.3.2. Informality

In December 2019, there were 12.1 m registered workers, of which 8.5 m were private workers. 6.0 m were private sector employees, while the others were independent workers, of which 1.6m were "monotributistas" (self-employees, of which a great part are professionals), 871,000 were "monotributistas sociales" and domestic workers (self-employees with the lowest incomes), and 398,000 were independent workers with the highest incomes. Hence at least there are nearly 2.5 m independent workers (including monotributistas and domestic workers) for whom it will be difficult to go through the shutdown without earnings.

Informal workers are the most vulnerable to a severe economic downturn. Women, young people and the elderly are particularly affected by informality. Their incomes are low, so there is a strong link between informality and poverty.

According to the 2018 National Workers' Survey on Employment, Labour, Health and Security Conditions prepared by the Ministry of Production and Labour,⁵ informality affected 42.8% of total workers. Informality affected 28.5% of those private sector employees who worked in production units, while 76.8% of domestic workers were informal. Among independent workers, informality affected 68.3% of "cuenta-propistas" (mostly non-professional workers, such as street vendors, craft vendors, or repair workers), and 23% of those who were employers.

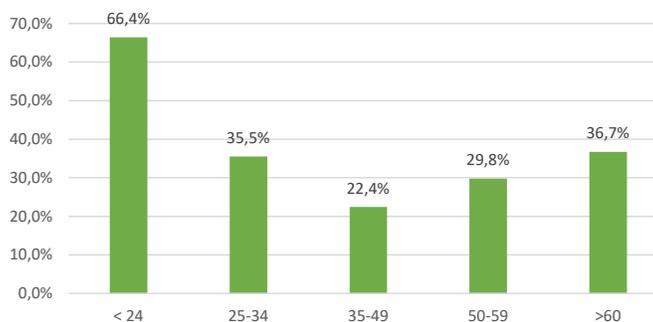
Figure 7. Informality as a share of:



Source: Ministerio de Producción y Trabajo.

Informality was especially higher among the younger and older workers. It climbed to 66.4% for those under 24 years old, and 35.5% for those between 25 and 34 years old. It declined for middle-age workers and climbed again to 36.7% for workers above 60 years old.

Figure 8. Informality according to age groups

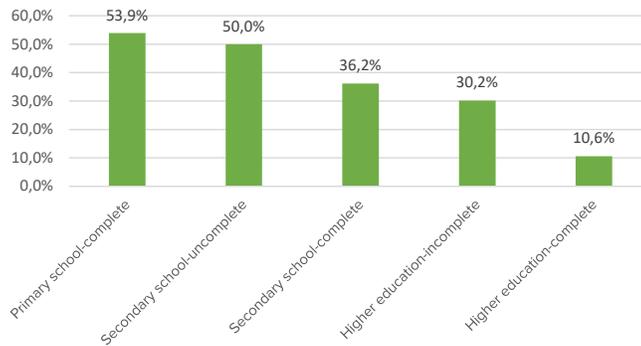


Source: Ministerio de Producción y Trabajo.

Informality peaked to half (or even more than half) of workers with low educational attainment (with primary education or incomplete secondary education). It showed a notable decrease just for workers with complete tertiary education.

⁵ Ministerio de Producción y Trabajo, "Encuesta Nacional a Trabajadores sobre Condiciones de Empleo, Trabajo, Salud y Seguridad (ECETSS 2018)", Ciudad de Buenos Aires, Octubre 2019.

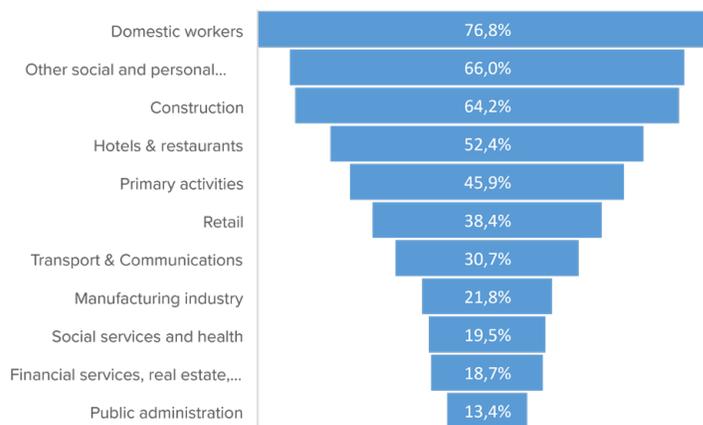
Figure 9. Informality according to educational attainment



Source: Ministerio de Producción y Trabajo.

Informal employment shows wide differences across economic sectors, with domestic workers, social and personal services and construction at the top, while more than half of hotels & restaurants' workers are informal. The retail sector had also a high share of informal workers (38.4%).

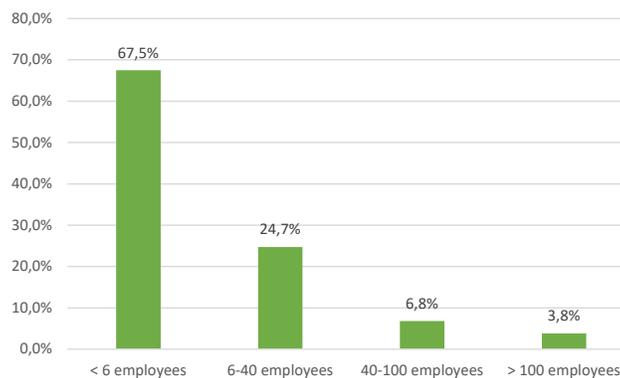
Figure 10. Informality according to economic sector



Source: Ministerio de Producción y Trabajo.

Informality peaked at 67.5% for the smallest companies (with less than 6 workers), while it was just a mere 3.8% in the biggest companies.

Figure 11. Informality according to unit's size

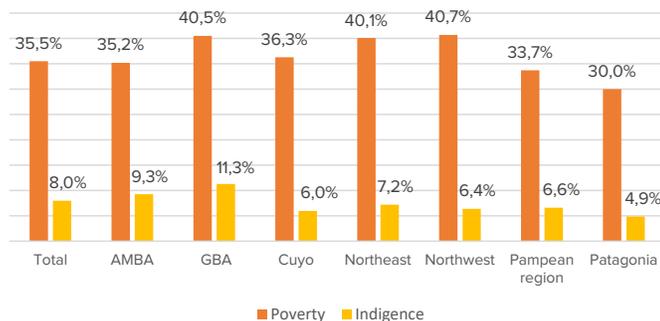


Source: Ministerio de Producción y Trabajo.

3.3.3. Poverty

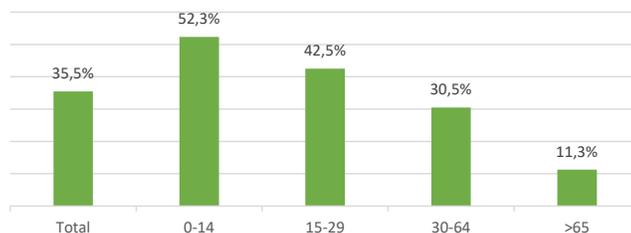
In the second half of 2019, 35.5% of the population was poor, with 8% living in extreme poverty (indigence). Poverty hit harder among children and young people, affecting 52.3% of those under 14 years old, and 42.5% of those between 15 and 29 years old. It was also higher in some regions, such as Greater Buenos Aires (40.5%), Northeast provinces (40.1%) and Northwest provinces (40.7%).

Figure 12. Poverty and Indigence II half 2019



Source: INDEC.

Figure 13. Share of poor by age group

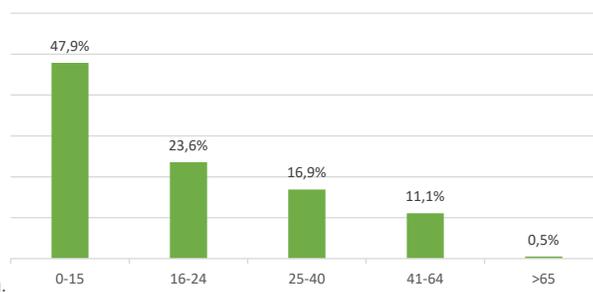


Source: INDEC.

A deeper analysis on socio-economic conditions can be made using a broader concept, chronic poverty, which seeks to identify the drivers that make poverty a persistent condition, beyond economic growth and social policy interventions. One central feature of chronic poverty is its intergenerational reproduction. In a working paper prepared by Gasparini, Tornarolli and Gluzmann,⁶ they analysed the profile of the 10% of the population that can be considered as “chronically poor people”.

Children are especially affected by chronic poverty: they represent nearly a half of the total. By contrast, the elderly accounts for just 0.5% of chronic poverty, mainly due to non-contributory pensions.

Figure 14. Chronic poverty by age % of total



Source: Gasparini, Tornarolli and Gluzmann.

⁶ Gasparini L., L. Tornarolli and P. Gluzmann (2019), “El Desafío de la Pobreza en Argentina”, CEDLAS/PNUD/CIPPEC, Buenos Aires.

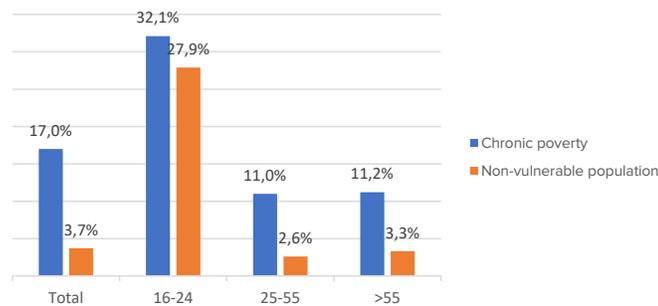
Chronically poor people live in poor housing conditions: the number of people living in a house is 6.1 on average, with 2.5 children below 12 years old. Houses are of poor quality, overcrowded, and their sanitary conditions are much worse than that of non-vulnerable households, especially concerning sewage and hygiene. Though chronic poverty is usually identified with those who live in urban “villas miserias” (shanty towns), an important percentage of chronically poor people live outside them (in poor neighbourhoods), a feature that has implications concerning public policies (which are usually focused on “villas” population).

Table 1.

	Chronic poverty	Non-vulnerable population
Nr of household members	6,1	1,9
Nr children < 12 years	2,5	0,3
Nr people per room	1,5	0,4
% poor quality houses	6,2%	0,6%
% of houses with access to safe water	98,5%	100%
% houses with sewer system	28,9%	92,7%
% of houses with hygienic bathroom	63,4%	99,8%

Source: Gasparini, Tornarolli and Gluzmann.

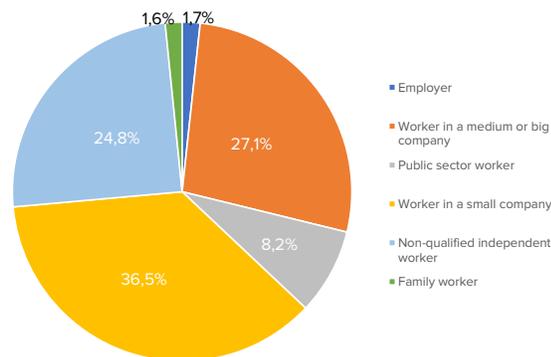
Figure 15. Chronic poverty Unemployment by age



Source: Gasparini, Tornarolli and Gluzmann.

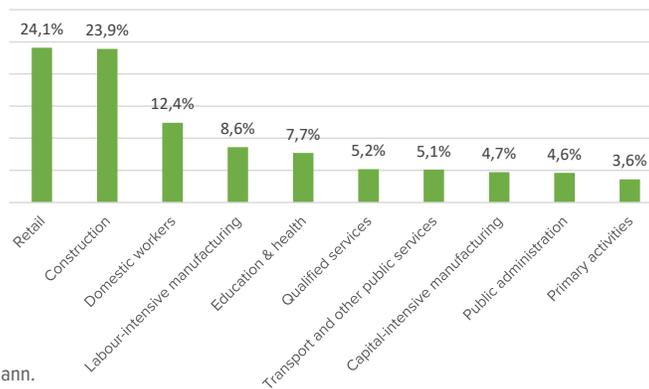
Workers suffering from chronic poverty are mostly employees in small firms and, to a lower extent, employees in larger firms and self-employees. They are mostly employed in the retail sector (many of them are street vendors), in the construction industry and in domestic services.

Figure 16. Chronic poverty by labour conditions



Source: Gasparini, Tornarolli and Gluzmann.

Figure 17. Chronic poverty: workers by sector



Source: Gasparini, Tornarolli and Gluzmann.

4. Potential for social unrest

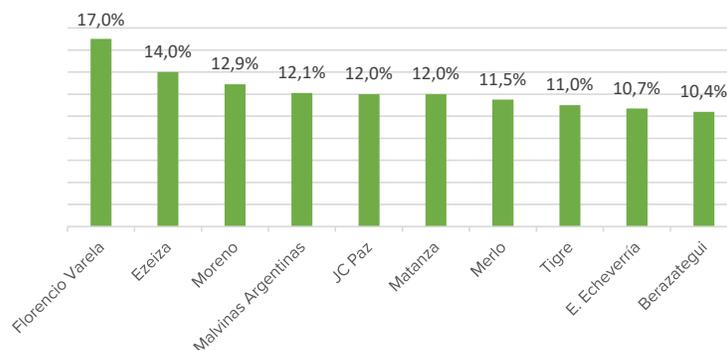
Despite the unfavourable economic scenario (characterized by a long recession and high inflation), in 2019 Argentina experienced a surprising orderly political transition between a non-Peronist government (Mauricio Macri) and a Peronist one (Alberto Fernandez). This was largely the result of broad social welfare programs that help to protect the most vulnerable households, such as the AUH (universal child allowance following a conditional cash transfer scheme), which was not in place in 1989 nor in 2001.

However, the current scenario poses important challenges, especially in the Greater Buenos Aires area (GBA, which includes a group of 33 districts surrounding Buenos Aires city with a population of about 10 m people), where unemployment, poverty and informality hit harder, and living conditions are poor, with overcrowded houses, poor health, and restricted access to safe water. Greater Buenos Aires accounts for half of total poverty (with nearly 5 m people under the poverty line in the second half of 2019) and 61.8% of extreme poverty (with 1.4 m extreme poor).

An important part of the population are informal workers with low incomes and no cash cushion, so if the quarantine extends for a long period there is a growing risk of riots and lootings in the poorer neighbourhoods of Greater Buenos Aires. At the same time, the Buenos Aires metropolitan area is now the outbreak's epicentre (Buenos Aires city and province account for more than half of the total confirmed cases by the second week of April), so the pandemic creates a severe challenge: if quarantine is lifted, the risk of an uncontrolled virus spread boosts. However, if isolation measures are extended, there is a growing risk of riots and looting.

Living conditions in Greater Buenos Aires are inadequate for most of its population. According to INDEC's figures for the second half of 2019, 40.5% of the GBA population was poor (equivalent to nearly 5m people), while 11.3% was extremely poor (1.4 m people). Unemployment was 10.8% in the last quarter of 2019, while under-employment was 13%, showing that nearly a quarter of the labour force had labour troubles. Self-employees represented 28% of total employment, while informal employees accounted for 38.4% of the total. According to a report prepared by the Dirección Nacional de Relaciones con las Provincias (DINREP) of the Ministry of Economy using data from the 2010 Census,⁷ 9.2% of GBA households had unsatisfied basic needs: that figure is surely higher now, given that poverty rates have increased since then. There were many districts where it was well above that figure, hiking to 17% in Florencio Varela, in Southern GBA. The prevalent unsatisfied need was overcrowded houses, a key risk factor for virus spread.

⁷ DINREP, "Necesidades Básicas Insatisfechas: Información Censal del Año 2010", January 2014, Ministerio de Economía.

Figure 18. Unsatisfied basic needs, 2010 GBA districts

Source: Ministerio de Economía

From a political viewpoint, the fact that the current government represents the Peronist party is an advantage for political governability, as most trade unions and social organizations identify with that party, while the poorest households are Peronism's traditional electorate. Most destabilizing episodes of social unrest happened during non-Peronist government (such as 1989 and 2001), except for 2002, when the deaths of two political activists that belonged to a social organization during a social protest triggered the decision of president Eduardo Duhalde to bring forward presidential ballots. So, although a Peronist government could be in a better position to prevent destabilizing social unrest, it will depend to a great extent on the magnitude of the economic crisis and its ability to handle it.

5. Policy options

The outbreak found Argentina in difficult macroeconomic conditions. The economy has been stagnated for more than a decade, with double-digit inflation rates. However, conditions have worsened since 2018, due to a combination of political uncertainty and policy mistakes. In 2018 real GDP decreased by 2.5% and in 2019 it contracted by 2.2%. Inflation has climbed from 25% in 2017 to 47.6% in 2018 and 53.8% in 2019. Real wages contracted in 2018 and 2019.

In 2018, with no access to private lending, the Macri administration had signed a stand-by agreement for about US\$57bn with the IMF, seeking to remove investors' fears about sovereign debt sustainability and so reverse capital outflows. However, the package failed to boost investors' confidence, and capital outflows continued to put pressure on international reserves, which fell from a peak of US\$68.4bn in March 2019 to US\$43.1bn in November 2019. In the third quarter of 2019, public debt totalled US\$311bn, equivalent to 91.6% of GDP. The end of renegotiations and the debt restructuring were expected to help the government to regain access to private lending. However, the result of debt renegotiations is unclear, and a new debt default would significantly limit the government's policy options. In 2019 the primary deficit was PS208.8bn (-0.96% of GDP) and the financial deficit was Ps933bn (-4.28% of GDP), and the pandemic, with the combination of lower tax revenues and boosting expenditure is expected to worsen these figures. Data from March showed a dramatic rise of the government's primary deficit, which totalled Ps124.7bn, up from Ps13bn in the same month of 2019. Given this scenario, policy options are limited.

5.1. Current social programmes

The pillars of the government's social programs are the universal child allowance (AUH), the child allowance for formal workers (Asignaciones Familiares), the unemployment insurance benefit, and, since January 2020, the food card (Tarjeta Alimentar).

AUH

The AUH was implemented in 2009, seeking to extend the benefit received by formal workers to informal ones, unemployed workers and “monotributistas sociales”. Households receive a benefit per child below 18 years old (up to 5 children). The benefit ranges between Ps3,000-Ps4,000 (approximately USD 50) per child. 20% of the benefit is conditioned to children’s school attendance and health controls. Around 2.4m households and 4.0m children receive this benefit. Coverage is already high.

Asignaciones familiares

This benefit is received by formal workers, self-employees, and those who receive the unemployment insurance. The amount is computed according to each worker’s income. This program benefits around 4.7m children.

Unemployment insurance benefit

There are around 120,000 unemployed workers that receive this benefit. This benefit extends for a maximum of 12 months (those workers older than 45 years can extend it for 6 months) but decreases during this period. The amount was raised to Ps6,000-Ps10,000 in April 2020. In order to be eligible for this benefit, the worker had to be laid off from a formal job.

Food card

This benefit is received by AUH beneficiaries with children below 6 years old and pregnant women that receive the universal pregnancy allowance (AUE). The benefit ranges between Ps4,000 (approximately USD 50) and Ps6,000 and is expected to reach 1.5 m households.

5.2. Macroeconomic environment and recent measures

With a high fiscal deficit, no access to private lending, and with a historically low Argentine Peso demand, the government has few tools to prevent a major economic depression. In line with the policies implemented in other countries, the government has announced some measures that seek to smooth the impact of social distancing measures in households’ incomes and companies’ liquidity, however the delay in their implementation and the severity of the situation of many households and companies suggest that they could not be enough given that social distancing measures will be in place for a long time.

The government announced different measures to relieve companies of non-essential industries that are hit harder by the pandemic.

- » **Tax payments:** the government decided to postpone or significantly reduce the payment of payroll taxes for companies in non-essential activities for a two-month period. The specifics of these measures have not been established yet, creating a vacuum for many firms that do not yet know whether their activities are essential or not.
- » **Wage payments:** the government will subsidize wage payments in companies affected by the crisis. In March it had announced that it would pay part of workers’ wages, with coverage varying according to the companies’ size, but in April it decided to make a more uniform subsidy, paying half of private workers’ wages in companies with up to 800 workers, with a cap of two minimum salaries. 1.6 m workers of 158,731 companies would receive the benefit. Again, the specifics of these measures have not yet been established.
- » **Bank loans:** the government announced subsidized loan programs to finance companies’ working capital, and also independent workers, seeking to prevent a break-up in the supply chain, which is already very tight. However, small and medium businesses have faced trouble in complying with banks’ credit requirements.

In order to prevent a major worsening of social conditions, the government announced the following measures:

- » A rise in the unemployment insurance benefit.
- » A bonus for beneficiaries of AUH (universal child allowance) and for retirees that earn the minimum pension.
- » An emergency subsidy (Ingreso Familiar de Emergencia) of Ps10,000 in April for those who are unemployed, for informal workers and for independent workers with the lowest incomes (the lower categories of “monotributo”). Around 12 m people applied to receive this benefit. In February 2020 the value of the basic goods & services basket for a household of a couple and two children was Ps40,800: with earnings lower than that amount the household is below the poverty line. If both adults can receive the IFE, it would cover half that basket.
- » A bonus for beneficiaries of the Food Card.
- » The strengthening of soup kitchens.
- » Price ceilings for some groceries, cleaning products, medicines and medical inputs.
- » A zero-interest subsidy to upper categories of “monotributistas” and independent workers to be deposited in their credit cards up to Ps 100,000. The details of this measure have not yet been disclosed.

In mid-March, at the start of the COVID-19 outbreak, the government had announced the relaunch of “PROCREAR”, a subsidized credit line for housing construction, and new funds (PS100bn) for new infrastructure works in roads, schools and tourism. However, it soon realized that this was not the time for stimulus policies, but for measures to relieve the situation of those most affected by the pandemic (both households and companies). Moreover, the government cannot encourage infrastructure programs given the need for social distancing measures.

So far, policy interventions focused on restoring households’ incomes and supporting firms, especially small and medium businesses, in order to avoid widespread bankruptcy have been limited.

As mentioned above, the government has responded with some income maintenance support measures for poor households and for people receiving the minimum pensions. Such measures increase the resources of individuals that will continue receiving monthly income regardless of the economic crises.

Measures aiming at sustaining the income of workers outside the ones covered by AUH and IFE have not been implemented at the same pace. The loss of income for both formal and informal workers in non-essential activities is very important and no measures have been taken for them beyond the announcement of the emergency subsidy -whose initial claims have quadrupled the available number of subsidies and has not been implemented so far. The situation is expected to worsen if the lockdown continues and more workers are laid off.⁸

The relief package is expected to cost 3% of GDP (Ps 850bn), according to government’s estimates. The government has not yet explained how it will finance this package. Some alternatives that have appeared in the scene are:

- » A group of legislators from the official party are preparing a bill to implement a “wealth tax” levied on those with a net worth higher than US\$3m. The tax rate would range between 2-3.5%, and legislators expect to raise US\$3.0bn (Ps190bn). The funds would finance the relief package.
- » The government has made a debt restructuring proposal that includes a grace period of three years. If this proposal were accepted, in 2020 it would save US\$4.5bn (equivalent to Ps 280bn) of debt-service on swa-

⁸ While the government has issued an Executive Decree that forbids the firms from laying off people during the crisis, firms in non-essential activities are de facto stopping wage payments- or at least reducing them- for their employees.

pped bonds. A deal with creditors would allow the government to regain access to private lending once turmoil in global markets recedes.

- » The government could ask for a new allocation of IMF's Special Drawing Rights (which was expected to climb to US\$3.5bn), a tool that was encouraged by IMF's head Kristalina Georgieva, but that, by the end of April, was still on hold.

There are other financial proposals. Legislators from PRO, in the political opposition, presented an alternative bill to the “wealth tax”, that seeks that those with a net worth higher than Ps 200m (about US\$3m) make a “patriotic investment” equivalent to 2.5% of their net worth. Unlike the bill encouraged by official legislators, taxpayers would be able to choose among different investment tools to channel these funds (construction projects, purchase of capital goods, securities' underwriting, etc).

5.3. Policy options and problems

Policy options: companies

Though there is not much certainty about the COVID-19 pandemic, one thing is clear: in the absence of an effective vaccine, the shutdown can be lifted only gradually if a new outbreak is to be avoided. This has different implications:

- » The lifting of the lockdown will have to be parallel to the implementation of new health protocols, which will have a cost in terms of the new infrastructure needed to comply with social distancing and will also have a cost in terms of a lower capacity utilization.
- » There are some industries that will suffer a more prolonged shutdown, for which the return to the “old normal” could happen well beyond 2020. These industries will demand more prolonged package reliefs, as well as more funds to readapt their infrastructure. This group includes: the tourism industry, the entertainment industry (including from cinemas and theatres to massive sporting events), long-distance land and air passenger transport (including also infrastructure such as airports), and private education.

The government's goal should be to prevent a massive bankruptcy of companies, especially small and medium businesses, which would mean a permanent loss of capabilities in many industries.

We think that in the short-term (while the shutdown is stricter), relief measures should focus on wage payment subsidies, subsidized loans and tax deferrals (or even tax relief) for companies in non-essential activities (especially small and medium businesses). In the medium and long-term, the focus should be in those industries which will suffer the more permanent shock, for which there should be subsidized loans to finance the adaptation of infrastructure to the “new normal”.

Policy options: households

Policies have focused on cash transfers to strengthen the incomes of the most vulnerable households and to maintain earnings for workers in non-essential activities. But as the shutdown will be lifted only gradually, these benefits will have to be kept for a long time.

There is some consensus that the government's efforts should be focused in the Buenos Aires metropolitan area (AMBA), given its high share of the total population, high share of total poverty and its high population density. This area is also the outbreak's epicentre. Many of those in extreme poverty live in large shanty towns, where the risk of contagion is much higher, which could lead to a peak that exceeds the capacity of the health

system. Efforts should also be focused in other large cities such as Rosario (in Santa Fe province) and Córdoba (in Córdoba province), which share many features with AMBA.

We think that, apart from monetary interventions to strengthen incomes, the focus should be on improving access of the most vulnerable households to quick primary care where potential COVID-19 patients are soon identified, isolated and receive the adequate treatment. Among the poorest households, some diseases that are not potentially dangerous become deadly because they do not receive medical treatment soon enough, so for COVID-19 patients this risk is even higher.

Policy options: infrastructure

Considering that social distancing will be in place until the first half of 2021 (at best), two key areas to improve are public urban transport and networking technologies.

- » Urban transport: urban transport is one of the main drivers of contagion in big cities, as they are usually overcrowded at rush hours. There are some measures that could reduce this problem such as staggered work hours and the use of long-distance buses -which are not circulating due to the restrictions to travel within Argentina- to complement local bus lines. Some measures to reduce the cost of car use would also help.
- » Networking technologies: improvements in internet connectivity and easier access to personal computers would help to improve tele-working productivity, and would be key for tele-education, especially among the most vulnerable households, for which some subsidies will be needed.

Once the pandemic is over, the government should focus on measures to fuel demand and improve social infrastructure.

There are some areas in which infrastructure works will help to jointly improve public health and offset the reduction of income in low-income households:

- » Programs to improve access to clean water and sewerage. According to figures from INDEC for the first half of 2019, 13.3% of the population had no access to public water systems: 10.1% had access to water from well drillings, and for 3% of population the water source was outside their homes. 7.5% of the population (equivalent to 1.3m people) lacked a flush toilet.
- » Programs to improve housing conditions. 4.7% of the population (1.3m people) suffered from critical overcrowding, living in houses with more than 3 people per room. 12.8% of population (3.6m people) lived in floodable areas, while 7.6% (2.1m people) lived near landfills. 8.9% of the population (2.5m people) lived in houses made of poor-quality materials.

Financing options

One of the main problems that companies are facing is how to pay wages of workers in non-essential activities, given that these sectors are not generating revenues. According to estimates from Analytica, a private consulting firm, there are around 6.9m workers in non-essential activities, while there are other 5.4 informal workers and self-employees whose jobs are also at risk.

Formal private sector workers in non-essential activities⁹ amounted to 3.2 m in February 2020. Many industries are already negotiating wage cuts with trade unions.

⁹ The activities considered as non-essential were: construction, hotels & restaurants, real estate and professional services, and social and community services. We computed a share of workers from manufacturing industry, commerce and repairing services.

The government faces decreasing tax revenues, while it must finance a relief package for workers in non-essential activities and for the most vulnerable households. We think that a measure that would help to both alleviate government and companies' finances is a 20% cut of wages in non-essential activities,¹⁰ including:

- » Private workers in non-essential industries.
- » Public employees of non-essential activities.
- » High-ranked government officials, legislators and privileged pensioners.

The measure should extend while those activities remain as non-essential.

Both government and political opposition proposed an extraordinary tax on the net worth of the wealthiest taxpayers. However, in such a deep economic crisis instead of levying a tax on a wealth stock, it could be more reasonable to levy an extraordinary tax on those companies that are facing an unexpected boost of demand, particularly big companies in industries such as pharmaceuticals, cleaning products, e-commerce, and big supermarket chains. Another alternative could be a sort of “patriotic bond” such as that underwritten by big companies in 2001, to help to finance the government's needs.

Concerning the financing of social infrastructure (housing and water & sewage), as well as the adaptation of infrastructure to social distancing standards, the government could borrow from development banks or international organizations.

6. Conclusion

The early adoption of social distancing measures has helped Argentina to slow the virus spread, avoiding (so far) uncontrolled scenarios such as those observed in the US, Italy or Spain. However, the already difficult economic and social scenario that the country faced before the COVID-19 outbreak makes the trade-off between health and economic concerns more difficult. Policy interventions must focus on relief measures for households and companies (especially small businesses) during the pandemic's outbreak (when the shutdown hit both supply and demand), and stimulus measures once social distancing measures are lifted. While this is the consensus for most countries, the outlook is particularly challenging for Argentina due to its fiscal imbalances, its high debt burden and its already deteriorated social and economic network. With no cash cushion, the government has few alternatives to finance the relief measures (and eventually the stimulus package): money printing (with the risk of an inflationary spiral) or multilateral lending. In fact, the relief measures set up so far are lower in terms of total GDP than those of other Latin American countries.

The challenges are enormous, since, as mentioned, the policy options are limited, and the next few weeks are crucial in terms of which scenario might prevail. The country has offered an initial proposal for debt restructuring and the results of such negotiations are uncertain. The risk of a default on foreign debt will probably not have immediate consequences due to the crisis the country is in. However, it will hinder the possibilities of a better and quicker recovery, since it will harm private debt markets. On the monetary front, Argentina's inflation was above 50% during 2019 and monetary printing poses the risk of accelerating inflation.

One of the government's main challenges ahead is to avoid a social and health crisis, especially in Greater Buenos Aires, which accounts for a half of the country's total poor population and is also the epicentre of COVID-19 outbreak. There are some social programmes that are easily scalable, such as AUH, the unemployment insurance benefit, and the food card. However, the demand for the newly Ingreso Familiar de Emergencia exceeded expectations and has shown that the number of unprotected people is much higher than initially considered. All the social benefits in place to fight the crisis are not indexed to inflation and their purchasing

¹⁰ The percentage could be lower for lower wages, and higher for higher wages.

power will be eroded quickly if inflation accelerates. This means that new social aid will need to be discussed, given that the economy's reopening will take a long time. The prevention of a social and health crisis will demand further surveillance measures especially in the poorest neighbourhoods, a delicate task given the country's political past.

The other challenge is to prevent a widespread bankruptcy of small businesses in non-essential sectors. The gradual reopening of the economy means that a great number of sectors will remain closed or will be working at a very low capacity, so a new package of measures that include subsidies to pay salaries, loans to pay debt to suppliers, and tax relief will be needed. An accurate evaluation of the effectiveness of this package will also be needed.

The experience of the countries that have succeeded in controlling the outbreak and have started to relax the lockdown shows that this process must be gradual and could extend for a long time. For Argentina, the fact that there are still four to five months of cold weather ahead makes things worse. The government has extended the quarantine until the expected May/June peak (or even beyond it). However, increasing pressures from business representatives and political actors (not just from the political opposition but also local leaders such as governors and mayors), and fears of a social crisis will hinder this possibility. It is crucial that the quarantine lift is gradual. This will demand a challenging coordination between economic policy intervention (with the implementation of new relief measures for the most affected economic and social actors), the maintenance (and control) of some social distancing measures, the strengthening of the public health system, and the challenge of widespread testing to contain the virus spread and prevent a new peak. While this coordination is truly difficult for every government, it is even more demanding in Argentina given its fragile political equilibrium, its long-standing governance problems and the limited managing capabilities of its political leaders.

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Social and Economic Impact of the COVID-19 and Policy Options in Jamaica

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Abstract

As the rest of the world, Jamaica is confronting the problems derived from the COVID-19 pandemic. Economically and socially, Jamaica will face a very difficult year. The sudden stop in tourism and the fall in alumina prices, the two main exports, are generating an increase in unemployment and a fall in the projected GDP. Unlike previous crises, Jamaica is in a robust fiscal and macroeconomic position to develop a strong emergency response. The Government has established two sets of stimulus policies, but these responses are showing limitations that should be addressed fast. On the one hand, the fiscal stimulus is based mainly on a 1.5 percent consumption tax reduction and it's not targeted to those most affected. On the other hand, the targeted cash grants have already exhausted the budget allocation and the wide range of new emergency programs will generate administrative inefficiencies. The Government should redirect the fiscal effort to sustain businesses and jobs and increase cash transfers through existing social programs for unemployed formal and informal workers.

1. Introduction

The world is facing a global pandemic of unprecedented scale in recent history. The COVID-19 is a health threat that every country is trying to cope with using the resources and mechanisms they have at hand. Quarantines and curfews are currently the best actions against the COVID-19 but at the cost of a potentially dramatic economic recession. Developing countries will face a rise in unemployment and poverty, which should be addressed quickly and decisively. In this context, the UNDP COVID-19 Policy Documents Series is an attempt to promote a collective reflection on the response to the health crisis and its economic and social effects on our societies.

This document reviews the social, fiscal, and economic context of Jamaica, identifying strengths and weaknesses, and presenting ideas to improve the policy toolkit needed to deal with this international crisis. In addition to community social distancing policies and working hours restrictions, the Government has established two sets of stimulus policies, the Fiscal Stimulus Response program and the COVID Allocation of Resources for Employees program (CARE). These programs attempt to maintain consumption, protect businesses, sustain employment, and protect unemployed and informal workers.

Unlike previous crises, Jamaica is in a better position to develop an emergency response to the crisis and reduce its impact on poverty and unemployment. Jamaica shows very promising fiscal numbers, which reflect the financial reforms and macroeconomic stability achieved in recent years. However, poverty is still prominent, especially in rural areas, growth is slowing down and inflation increased during the last quarter of 2019. The fiscal and economic stimulus response from the government was a good attempt to buffer the economic impact of COVID-19 on the unemployed and informal population; however, the continued restrictions to suppress the virus has placed a strain on the government's ability to respond adequately to the needs of those impacted. The Government needs to evaluate an increase in social spending through the expansion of the various social programs that could target those households most affected by the COVID-19 crisis.

2. The decrease in the economic activity

The Jamaican economy is heavily dependent on services, which account for 72.6 percent of GDP. Tourism is the main industry, representing 7.8 percent of GDP, followed by exports of bauxite and alumina that account for 3.6 percent of GDP.¹ The economy stalled in the fourth quarter of 2019 contracting 0.5 percent, the weakest quarter in five years, ending 2019 with a modest 0.9 percent growth. The deceleration in GDP growth reflected mainly a contraction in Mining & Quarrying.²

The slowdown of the economy at the end of 2019 is worrisome in the novel international context generated by the COVID-19. Each of the sectors that have had a growth reduction will be further affected by the curfew and working limitations implemented by the government as well as by the global economic recession. Activities such as tourism, restaurants and bars, retail, and construction will face a significant paralysis. The consequences will be seen in the increase of unemployment and poverty levels and a decrease in government tax revenues which, could be used to counteract the economic stagnation.

3. The fall in the prices of primary products

Jamaica had a negative trade balance of 4.7 billion dollars in 2019, as imports exceed exports by 3 to 1. Imports are composed primarily by Oil (26.2 percent) -which accounts for 40 percent of oil consumption in the country- followed by machinery/equipment (23 percent), food (14.7 percent), chemicals (12.3 percent), and manufactured

¹ Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

² Bank of Jamaica. Quarterly Monetary Policy Report. February 2020 Vol. 30 Number 3.

goods (12.1 percent).³ Exports are predominately bauxite and alumina, which represent 63 percent of the total exports. Agricultural commodities and food, such as bananas, citrus, coffee, yams, and ackee, represent about 11 percent of the total exports, while manufactured goods only represent 4 percent of the total.⁴

Table 1. Jamaican Exports, in total value and percentage.

Commodities	J\$ (millions)	Percent
Total Domestic Exports	235,449	100%
Total Traditional Exports	158,241	67%
Agriculture	2,406	1%
Mining and Quarrying	147,568	63%
Manufactures	8,267	4%
Total Non-Traditional Exports	77,208	33%
Food	22,905	10%
Beverages & Tobacco (excl. Rum)	8,511	4%
Raw Materials	3,081	1%
Other	42,710	18%

Source: STATIN

It is estimated that the value of exports from the Caribbean will fall by at least 9.3 percent in 2020. Most of the reduction in the value of exports corresponds to the drop in prices, estimated at 7.2 percent, while the volume exported is expected to register a contraction of 2.1 percent.⁵ Jamaican export destinations are led by the United States, 30 percent of the total, followed by Germany (11 percent), Canada (9.4 percent), Netherlands (6.1 percent), and Russia (4.2 percent). China only represents 3.1 percent of total exports.⁶

Bauxite and alumina, the main source for the manufacture of aluminum are, by large, the main commodity exported. Jamaica's alumina buyers are varied: Germany represents 18 percent, Canada 16 percent, Netherlands 13 percent, USA 10 percent, and Russia 9.4 percent, and the remainder distributed between 14 different countries.⁷ Two factors have impacted the industry in recent times. First, the two-year shutdown of the Alpart alumina refinery for major equipment revamp. This event could explain, in part, the slowdown in Mining for the fourth quarter of 2019. Secondly, the significant fall in alumina prices. Alumina prices decreased some 730 USD/Tonne or 32 percent since the beginning of 2020 as a consequence of a decrease in demand and a weak performance of aluminum future prices on the Shanghai Futures Exchange market (Figure 1).

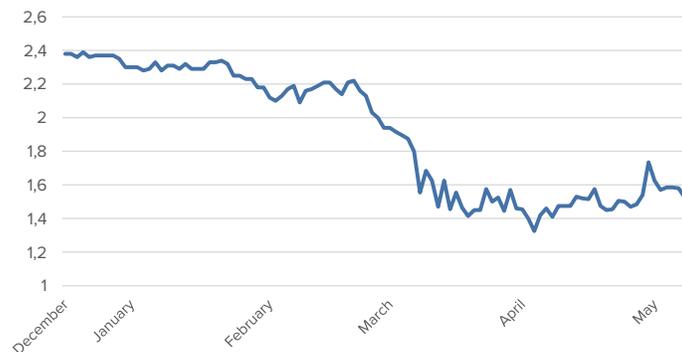
³ The Observatory of Economic Complexity, based on data from the United Nations Statistical Division (COMTRADE).

⁴ Statistical Institute of Jamaica statinja.gov.jm.

⁵ CEPAL. América Latina y el Caribe ante la pandemia del COVID-19. Efectos económicos y sociales. April 3rd 2020. N° 1.

⁶ 2017 Data. Source: The Observatory of Economic Complexity, based on data from the United Nations Statistical Division (COMTRADE).

⁷ The Observatory of Economic Complexity, based on data from the United Nations Statistical Division (COMTRADE).

Figure 1. Alumina Market Price (Thousand U.S. dollars per metric ton)

Source: Alumina Lmtd.

Another commodity that has shown a significant fall in price is oil. In the case of Jamaica, an oil importer, this is beneficial for its trade balance. Jamaica imports mostly refined petroleum, which represents 67 percent of Mineral fuel imports, followed by Crude Petroleum (19 percent) and Gas (14 percent).⁸ Given the fall in prices of these commodities in 2020, it's possible to estimate an 11 percent reduction in the value of the oil imports based on 2019 mineral fuel imports. This value can add up to 111 million US dollars, which represents 2 percent of the total Jamaican imports.⁹

If we estimate the net effect of the decrease in the price of Alumina and OIL, the result is still negative for Jamaica's trade balance by about 237 million US dollars, increasing the total negative balance by about 5 percent, to an estimated total deficit of 5 billion US dollars. Nevertheless, the fall in the international oil price could be an opportunity for the Jamaican government. An emergency increase on oil and gas taxes could be a transitory source of government revenue that could help pay for the costs of the measures to mitigate the social impact of the crisis. Further calculations for this alternative are presented in the section Policy Options of this document.

4. The Impact on Remittances

Jamaica's population is 2.7 million people, and the estimates of the Jamaican diaspora range between 3 to 5 million, indicating that there are at least as many individuals of Jamaican descent living outside the country as within it. A 2014 estimate by the Jamaica Diaspora Institute calculated that there are 1,700,000 diaspora residents in the US, 300,000 in Canada, and 800,000 in the UK.¹⁰ The World Bank is more cautious and projects 1 million Jamaican migrants, which still represents 40 percent of the population.¹¹

The Jamaican diaspora is a very important source of earnings for the population. Remittances have been steadily increasing over the years and represented 16 percent of GDP in 2018. Net remittance inflows in 2019 increased by 2.3 percent and reached a total of 2152.3 million US dollars. The largest source market of remittances is the US, while it represents around 30 percent of the diaspora, the economic inflow accounts for 63.2 percent of the total remittances. The remaining share comes from the UK (13.5 percent), followed by Canada (9.3 percent) and Cayman Islands (8.1 percent).¹²

Remittances are widely spread in Jamaican society. The Jamaica Survey of Living Conditions shows that 51 percent of the population (49.5 percent of households) receive remittances. These numbers are split in

⁸ Trading Economics (tradingeconomics.com/jamaica/gasoline-prices), Macro Trends (www.macrotrends.net/2516/wti-crude-oil-prices-10-year-daily-chart?q=refined+petroleum), Macro Trends (www.macrotrends.net/2478/natural-gas-prices-historical-chart). Accessed on April 17th 2020.

⁹ Statistical Institute of Jamaica statinja.gov.jm.

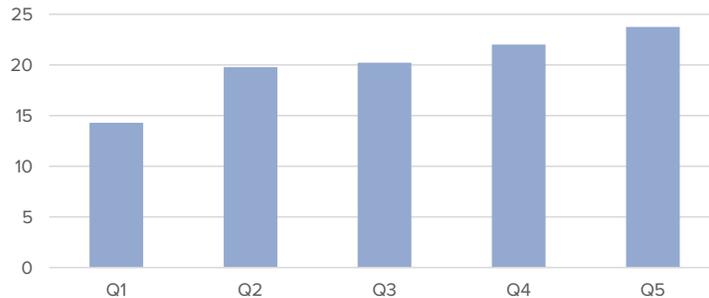
¹⁰ University of West Indies and Caribbean Policy Research Institute. Economic Value of The Jamaican Diaspora. R1802 MAY 2017.

¹¹ World Bank. Investing Back Home: The Potential Economic Role of the Caribbean Diaspora, World Bank Group, 2016.

¹² Bank of Jamaica. Remittances Bulletin. December 2019.

approximately equal proportion between urban and rural areas. If we analyze remittances by poverty quintile, we observe that the poorest population receive proportionally fewer remittances than the richest quintiles. Figure 2 shows the share of remittances by poverty quintile, with Q1 and Q5 receiving 14.3 percent and 23.7 percent of the total remittances, respectively.¹³

Figure 2. Percent Share of Remittances by poverty quintile.



Source: JSLC 2017

Remittance flows are broadly affected by three macroeconomic factors: the diaspora size in destination countries, the income of these migrants in the destination countries, and the income of the population within the country of origin.¹⁴ Statistical analysis shows that flows to Jamaica are partially influenced by movements in US real GDP as well as employment in the Health Care & Social Assistance sector.¹⁵ It's hard to predict how remittances will behave in the near future. While income in Jamaica's population will decrease pushing inflows up, so will the expected income of the Jamaican diaspora in countries such as the US where unemployment is rising significantly.

The performance of the remittances during the 2008–2009 economic crisis could be a useful comparison to project behavior. During that period, remittances dropped 12 percent from 2008 to 2009 due to the international crisis¹⁶ but began a recovery in 2010 (+6 percent) that continued up until the end of 2019 with a total increase of 34 percent.¹⁷ There is no official data on remittances for March and April 2020, but the expectations are of a big drop in inflows.

The remittance structure is composed of 485 listed Remittance Locations in the whole country. These locations are private companies such as Western Union and Moneygram.¹⁸ This structure is currently being used for the payment of the Compassionate Grant program. However, the government is evaluating alternatives due to the prospect that people queuing up to receive payments poses certain logistic and health challenges.¹⁹

5. The Impact on Tourism

Jamaica's tourism industry has been growing steadily in the last decade, going from 2.7 million visitors in 2009 to 4.2 million in 2019. Out of that total, 37 percent are cruise passengers and 63 percent are stopover visitors. Around 95 percent of the total revenues by tourism are foreign visitors, as domestic tourism is marginal.²⁰

¹³ Jamaican Survey of Living Conditions 2017.

¹⁴ University of West Indies and Caribbean Policy Research Institute. Economic Value of The Jamaican Diaspora. R1802 MAY 2017.

¹⁵ Roach, K. (2014). Estimating the Cyclicity of Remittance Flows to Jamaica from the USA. Bank of Jamaica Working Paper

¹⁶ Bank of Jamaica. Remittances Update. April 2010.

¹⁷ Bank of Jamaica. Remittances Update. December 2019.

¹⁸ Bank of Jamaica. boj.org.jm/financial_sys/licencedremittance.php?option=2&parish= Accessed April 21, 2020.

¹⁹ Ministry of Finance. mof.gov.jm.

²⁰ Statistical Institute of Jamaica.

The total value added from tourism is close to 7.8 percent of GDP. This could be a modest estimate, as the informal market of services is deeply integrated with tourism. Calculations on the composition of services that represent tourism in Jamaica show the prominence of accommodations, followed by food and beverages. The industry also branches into transportation, travel agencies, and other recreational services (Table 2).²¹

Table 2. Value Added by Tourism, 2018.

Industries	J\$ (millions)	Percent of GDP	Percent of Exports
Accommodation services for visitors	55,678	3.4%	22%
Food and beverage services	21,493	1.3%	9%
Passenger transport services	9,055	0.5%	4%
Transport equipment rental services	3,593	0.2%	1%
Travel agencies and other reservation services	1,179	0.1%	0%
Tourism related recreational services	13,927	0.8%	6%
Recreational sports and cultural services	23,585	1.4%	9%
Total Tourism	128,509	7.8%	52%

Source: STATIN

Table 2 also shows that Tourism has a more important role in exports than in GDP. Hotels and accommodation represent around 22 percent of total exports, followed by food and beverages (9 percent). In turn, the expenditure on accommodation and restaurants by residents in Jamaica that travel abroad, i.e. “Hotels imports” and “Restaurants imports”, represented 3.8 percent and 1.1 percent of total imports in 2015, respectively.²² While significant (4.9 percent), the potential reduction in imports is insignificant compared to the potential losses in exports due to the tourism crisis.

With flights and cruises taking a halt due to the pandemic, the tourism industry will suffer a heavy hit in 2020. It's difficult to predict when this industry will recover, given that it's a luxury service in a context of a global recession, and that travel bans will probably remain enforced until countries evaluate that the COVID-19 spread is under control. The Cruise industry, in particular, is facing a difficult challenge, as it has been the focus of several coronavirus outburst early this year. The fact that almost 40 percent of the tourism in Jamaica arrives in cruise ships, reflects the importance that this situation has for the local economy.

The impact on Tourism is already very serious. The Minister of Tourism has informed that approximately 120,000 people, or 75 percent of the workers employed directly in the Jamaican tourism industry, have been laid off already. Of the 40,000 remaining formal workers directly employed by the industry, mostly hotel staff, many are working either two or three days a week, for a fraction of their normal pay.²³ These numbers might not be representing the total number of workers laid off, as informality is high in this industry. Unregistered workers represent 47 percent of the Hotels and Restaurants industry and 60 percent in Transportation.²⁴

6. Financial and Macroeconomic Conditions

In terms of financial variables, Jamaica has shown significant improvements over the last six years. A strict Stand-By Agreement with the IMF required Jamaica to produce an annual primary surplus of 7 percent to

²¹ Statistical Institute of Jamaica.

²² Martín Cicowiez and Romina Ordoñez (2018) The Economic Impacts of Private Tourism-Related Investments in Jamaica. Inter-American Investment Corporation (IIC).

²³ Jamaica Observer. Bartlett appeals for regional unity in responding to COVID-19. Sunday April 19th 2020. www.jamaicaobserver.com/news/bartlett-appeals-for-regional-unity-in-responding-to-covid-19_192353. Accessed on April 21, 2020.

²⁴ Statistical Institute of Jamaica.

reduce its debt-to-GDP ratio. Public debt fell under 100 percent of GDP in 2018/19 and it was expected to decline below 60 percent by 2025/26, in line with the provisions of the Fiscal Responsibility Law.²⁵ Unemployment hit at a historic low in 2019 (7.8 percent) and the labor force expanded, credit recovery was gaining force, foreign exchange reserves are comfortable, and inflation was subdued. Gross reserves are close to the IMF's Assessment of Reserve Adequacy (ARA) metrics, which puts them in a good position to buffer the external shocks expected for the short and medium terms. However, for most of the past 6 years, growth has been low, and the last quarter of 2019 showed the lowest rate in years.²⁶

Jamaica had a gross external debt of 14 billion US dollars in September 2019. Short-term debt is 2 billion US dollars (14 percent of the total debt) none of which is General Government or Monetary Authorities related.²⁷ Out of the total long-term debt stock, 8 percent corresponds to IMF credit and 6 percent to World Bank, while other multilateral creditors represent 15 percent and bilateral creditors 5 percent. The rest of the long term external debt is 43 percent private creditors of public debt and 24 percent private nonguaranteed debt.²⁸ These numbers show that 33 percent of the total long term debt could be renegotiated with official creditors such as the World Bank and IMF to ease the pressure on the government's financial sustainability.

According to the latest IMF review from November 2019, the balance of payments risks are mitigated by a moderate current account deficit and adequate reserves. The current account deficit is estimated to have declined last year to 2.2 percent of GDP, due to resurgent mining exports and tourism receipts.²⁹ This improvement will be jeopardized due to the fall in commodity prices and the sudden stop in tourism. Depending on the type and size of the stimulus the Jamaican government ends up implementing, the current account deficit will rise over the medium term.

The Bank of Jamaica has kept the benchmark interest rate steady at 0.50 percent up until May 18th, 2020 when a new decision is scheduled. The interest rate is expected to lower down to 0.25 if not further. In the face of the COVID-19 outbreak, the Bank of Jamaica announced a series of measures: a temporary increase in the limit on the foreign currency net open positions of authorized dealers by 5 percentage points, and the removal of the limit on the amounts that deposit-taking institutions can borrow overnight without being charged a penalty rate. The Bank also commenced a bond-buying program to purchase Government securities on the secondary market from financial institutions.³⁰

Following the improvements in the fiscal and macroeconomic scenarios, the Jamaican Stock Exchange (JSE) Market Index showed a 500 percent increase in the last five-year period, becoming a strong market for investment. The JSE Market Index is a major stock market index which tracks the performance of all ordinary companies listed on the Jamaica Stock Exchange. But due to the COVID-19 outbreak, the JSE decreased 126898 points or 24.97 percent since the beginning of 2020 until late April, returning to levels of early 2019.³¹ It remains to be seen if the market's turbulence will stabilize or whether we are witnessing a "flight to quality" capital outflow.

²⁵ The World Bank. Jamaican Overview. Accessed on April 8th 2020 www.worldbank.org/en/country/jamaica/overview.

²⁶ IMF Sixth Review Under The Stand-By Arrangement—Press Release; Staff Report; And Statement By The Executive Director For Jamaica. November 2019.

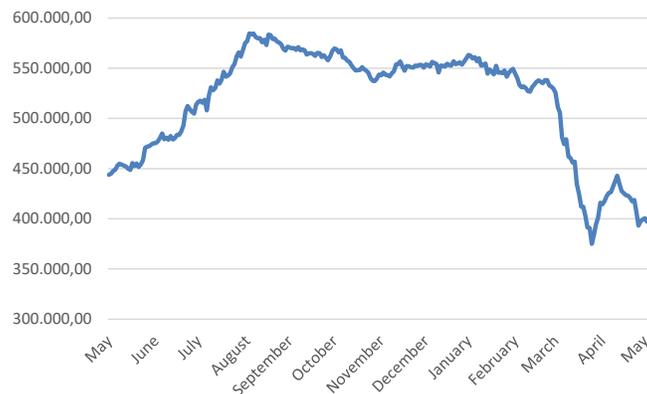
²⁷ Bank of Jamaica. www.boj.org.jm.

²⁸ International Debt Statistics, 2020, The World Bank datatopics.worldbank.org/debt/ids/countryanalytical/JAM#

²⁹ IMF, Sixth Review Under The Stand-By Arrangement—Press Release; Staff Report; And Statement By The Executive Director For Jamaica. November 2019.

³⁰ Trading Economics. Jamaican Forecast. tradingeconomics.com Accessed on April 7th.

³¹ Trading Economics. Jamaican Forecast. tradingeconomics.com Accessed on April 7th.

Figure 3. Jamaica Stock Exchange (JSE) Market Index

Source: Jamaica Stock Exchange

7. Measures in place

The first actions taken by the Jamaican government amid the COVID-19 outbreak on January 31st were the ban imposed on travel to and from China and the 14-day quarantine for all travelers entering from this country. In late February, travel restrictions expanded to include Italy, South Korea/Republic of Korea, Singapore and Iran, and later the UK. By mid-March, all travelers from countries with local transmission and any Jamaicans who had contact with those persons were required to self-quarantine for up to 14 days. Finally, on March 21st Jamaica closed all air and seaports to incoming passengers while exiting passengers were permitted to leave based on travel availability.³²

Classes were canceled on March 13th, including early childhood institutions, primary and prep schools, secondary schools, community and teacher's colleges, and community-based training programs. The cabinet approved the procurement of 65,000 tablets for provision to 40,000 students and 40,000 teachers as well as the provision of offline servers for schools to facilitate offline learning.³³

Public places and mass gatherings have been limited to 10 persons and maintaining social distance and the use of masks is required. Public transport service is limited to seated passengers only and taxis are required to transport only one passenger. From April 22nd to May 6th all citizens should remain at home from 6 pm to 6 am, except for essential services workers. In addition, a community quarantine was declared for 3 communities: Bulls Bay, St Andrew, and St. Catherine.³⁴

Public and private sector workers – except for essential services – have their duties limited and working from home is encouraged. Non-essential business hours were limited to an 8 am – 4 pm schedule. Supermarkets, pharmacies, and corner shops are allowed to close at 5:00 pm and markets are allowed to operate from 6 am to 4 pm except on Sundays when they close. On March 25th, under the Trade Sales of Goods During Period of Declaration Order 2020, the government instituted penalties for those businesses that increase prices, with fines of up to J\$2 million.³⁵

The Government has focused assistance efforts through two main policies: The Fiscal Stimulus Response program and the COVID Allocation of Resources for Employees program (CARE). The first one is a strategy

³² CEPAL, Observatorio COVID-2019 América Latina y el Caribe: acciones por país. www.cepal.org/en/topics/covid-19.

³³ Ibid.

³⁴ House of Parliament. japarliament.gov.jm/index.php/publications/resolution Accessed on April 6th, 2020. Jamaica Observer. New curfew hours islandwide, mask wearing now mandatory. April 20th, 2020. www.jamaicaobserver.com/latestnews/_New_curfew_hours?profile=1228. Accessed April 22, 2020.

³⁵ House of Parliament. japarliament.gov.jm/index.php/publications/resolution Accessed on April 6th, 2020.

to maintain consumption and protect enterprises from the economic crises, while the second is an alleviation program to sustain employment and protect unemployed and informal workers. In total, both programs aim to allocate a J\$25 billion (US\$183 million), representing around 1.2 percent of 2019 GDP, making it the largest fiscal stimulus in Jamaica's history. But given that most of it is tax exemption, the direct spending is calculated to be close to J\$10 billion (US\$73 million).

The Fiscal Stimulus Response to COVID is composed of a reduction in general consumption tax (GCT) from 16.5 percent to 15 percent that projects a return of J\$14 billion back to consumers and a J\$1 billion Micro, Small and Medium Enterprises (MSME) tax credit for cash-flow support to MSME³⁶ and a reduction in regulatory fees for coconut, coffee, cocoa, and spice farmers to incentivize production. Also, the Banking sector has volunteered to forgo the reduction of the asset tax for one year, which could represent an extra J\$3 billion.³⁷ The total fiscal stimulus could then be estimated between J\$15 and J\$18 billion.

The Fiscal Stimulus shows some limitations. The first issue that comes up is the problem of targeting. A 1.5 percent reduction in GCT will not increase consumption among those that lose their main income due to unemployment. Moreover, the lack of targeting makes this policy regressive, as higher-income households get a larger share of the taxes foregone. The focus of the help should be but on households that lost their main income through direct transfers, this will make spending more efficient and produce a larger aggregated impact on consumption.

A second problem is that the tax credit stimulus for MSME is marginal compared with the GCT reduction. MSME tax cuts, if increased, could help businesses maintain employment (it could be a requisite for the benefit), target vulnerable jobs, and favor consumption. Sustaining MSME is a direct way to sustain jobs and incomes. The Government should review the composition of the fiscal stimulus to focus the effort on businesses' sustainability rather than GCT cuts.

The second large effort, the CARE program, is composed of nine sub-programs, the most important of which are the Business Employee Support and Transfer of Cash (BEST Cash), the Supporting Employees with Transfer of Cash (SET Cash), the Compassionate Grant and the COVID PATH³⁸ Grant. Table 3 summarizes the universe covered and the benefits provided by all the sub-programs. The BEST Cash seeks to sustain employment subsidizing salaries for registered workers in registered businesses that are operating in the hotel, tours, attraction companies, and segments of the tourism industry. The SET CASH focuses on newly unemployed registered workers and transfers cash to individuals where it can be verified that they lost their employment since March 10th (the date of the first COVID-19 case in Jamaica). Both SET and BEST pay a benefit of J\$ 9,000 per fortnight (about 64 percent of the minimum wage) for up to three months. Unlike BEST and SET, the Compassionate Grant provides support for all people, as long as they are not registered workers and do not receive other COVID related benefits. The benefit is a one-time payment of J\$ 10,000, which represents about 35 percent of a month's minimum wage. Finally, the PATH Grant sets up a temporary 50 percent increase in benefits for the current beneficiaries of the social program PATH between April and June. Further on, this program is described in the Social Policies Interventions section.

The CARE program has a cap of J\$10 billion (US\$73 million) that has rapidly become insufficient. The government has recently informed that 480,000 individuals have applied for the benefits, 84 percent of which applied for

³⁶ This measure provides micro- small & medium-sized enterprises (MSMEs), with annual revenues less than or equal to \$550 million, a non-refundable tax credit of \$375,000. This credit can be used in addition to the employment tax credit (ETC) which provides a credit against the payroll tax equivalent to the lesser of: (i) 30 percent of the income tax liability or (ii) employee and employer statutory contributions (excluding PAYE). The maximum credit will be \$5,000 per employee. Jamaica Observer. Surviving tax season in Jamaica amid the COVID-19 pandemic. March 22, 2020.

www.jamaicaobserver.com/sunday-finance/surviving-tax-season-in-jamaica-amid-the-covid-19-pandemic_190169. Accessed April 22, 2020

³⁷ Ministry of Finance and Public Service. mof.gov.jm/mof-media/media-centre/press/2633-fiscal-stimulus-response-to-the-covid-19.html Accessed on April 6th, 2020.

³⁸ PATH stands for Programme of Advancement Through Health and Education.

the Compassionate Grant and 16 percent for the SET Cash.³⁹ Given the benefits of these two programs, the spending can be projected to be around J\$8.2 billion. In addition, CARE has informed that the COVID PATH Grant represents J\$1.1 billion, and the budget already allocated for the Tourism Grants, Farmers, Homeless, and Constituency Development add up to \$1.7 billion. Based on these back of the envelope calculations, the CARE program already exceeds its budget by J\$1 billion, and that is without considering the resources for BEST Cash (potentially J\$ 2.1 billion), and the General Grants for small businesses. The Government has already flagged this situation, admitting that the CARE program is at the limit of the budget provided.⁴⁰ This is one of the most urgent problems that the Government should address in the next weeks.

Table 3. COVID-19 Economic Response Measures Implemented by the Government of Jamaica.

Measures	Target enterprise/population	Benefit Estimations
Tax Measures		J\$ 15,000 Mn
Reduction in General Consumption Tax	All products taxed with GCT	Reduction from 16.5 percent to 15 percent (estimated in \$14,000 Mn)
Tax credit for cash-flow support	Micro, Small and Medium Enterprises	Estimated in \$1 billion
A reduction in regulatory fees to incentivize production.	Coconut, coffee, cocoa and spice farmers	No data available
Economic Stimulus Measures		J\$ 10,000 mn
A. COVID Allocation of Resources for Employees (CARE)		
1. Set Cash	Registered workers laid off after March 10th, 2020, with less than J\$1.5 mn yearly salary	Cash transfer of J\$ 9000 per fortnight until June
2. Best Cash	Registered workers in Tourism, with less than J\$1.5 mn yearly salary	Cash transfer of J\$ 9000 per fortnight until June
3. COVID-19 General Grants	a) Registered barbers, hairdressers, beauty therapists, cosmetologists, market vendors, taxi and bus operators; b) Registered bar and night club operators; c) Registered craft vendors, JUTA, MAXI, and JCAL operators.	a) onetime amount of J\$25,000 b) onetime amount of J\$40,000 c) onetime amount of J\$40,000
4. COVID-19 Compassionate Grants	Anyone in need not formally employed	A one-time grant of \$10,000
5. COVID-19 Path Grants	Persons enrolled in PATH	One additional PATH payment between April and June (50 percent increase).
6. COVID-19 Small Business Grants	Registered small businesses with sales of J\$50 million or less with registered employees	One-time grant of J\$100,000
7. COVID-19 Tourism Grants	Registered businesses operating in the tourism sector (hotels, attractions, and tours)	A one-off grant from a pool of J\$1.2 billion allocated
8. COVID-19 Student Loan Relief	All loans from the Student Loan Bureau (SLB).	Deferral of loan and interest payments until July 2020
9. Other COVID-19 Support Programmes	a) Assistance to small farmers b) Homeless assistance c) Constituency Development Fund	a) J\$200 mn allocated b) J\$150 mn allocated c) J\$189 mn allocated
B. National House Trust		
	a) Mortgagors who are laid off b) Mortgagors that contribute to NHF	a) moratorium on all loan payments of three months b) reduction in interest rates on new loans by 1 percent c) reduction in all existing loans by 0.5 percent

Source: Ministry of Finance

³⁹ Ministry of Finance mof.gov.jm/mof-media/media-centre/press/2637-go-j-s-care-programme-set-to-help-workers-amid-covid-19-layoffs.html Accessed on April 22, 2020.

⁴⁰ Ibid.

One conclusion that emerges from Table 3 is that the CARE program has too many subprograms that will make its administration and implementation difficult. An urgent crisis is not a good moment to develop new administrative circuits, especially when many government workers are affected by the curfew. In this context, the help would be better targeted and channelized through existing programs. The COVID-19 crisis hits businesses and employment (formal and informal); thus, programs should focus mainly on businesses' survival, the sustainability of jobs, and the protection of informal and unemployed workers. We already mentioned the need to increase tax help for MSMEs, which could help business survival and job sustainability. For unemployment benefits, resources could be administered and transferred using the National Insurance Scheme (NIS) structure, which has the record of all contributing workers. Regarding informal workers, increasing spending through COVID-19 Path Grants would be a fast and efficient way to reach those households most affected by the crisis.

8. Reduction in consumption and investment

In early 2020 the expectations among the businesses were low and firms were not convinced about current business conditions. The Present Business Conditions Index developed by the Jamaica Chamber of Commerce declined from 167.9 to 149.1 points, driven mainly by uncertainty around the climate for investment and expansion as well as the companies' profitability being worse than expected.⁴¹ This expectation could only worsen with the recent actions taken against the pandemic.

In this context, banks, credit unions, and other financial institutions have begun announcing COVID-19 relief packages. Most of these packages offer solutions on three main areas: extension of credit terms; working capital support; and the waiving of fees.⁴² As mentioned earlier, the interest rate remains unchanged at 0.5 percent, but the Bank of Jamaica has tried to ensure uninterrupted system-wide liquidity through the removal of limits on the amounts that deposit-taking institutions can borrow overnight without being charged a penalty rate and a broadening of the range of acceptable repo collateral. The government is also encouraging the banks to reschedule loans and mortgages, in line with the mortgage rate cuts announced by the National Housing Trust.⁴³

It's hard to calculate the reduction in consumption and investment at this point, given that most curfew policies are less than a month old. Nevertheless, there are already signs of economic slowdowns. Google's COVID-19 Community Mobility Report⁴⁴ of Jamaica shows that mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters decreased 57 percent by the first week of April. Mobility trends for places like public transport hubs such as bus decreased 53 percent while trends for places of work decreased by 42 percent.

9. Assessing the Economic Impact

The country entered the curfew in good financial health but with less than ideal numbers on growth and inflation. As previously mentioned, Jamaica has presented low growth rates in recent years, and expectations for 2020 were low, close to 1 percent.⁴⁵ Currently, we cannot project with confidence the magnitude of the economic impact. Firstly, it's unclear how long will the COVID-19 remain threatening global health at the current pace. Its impact on the global economy will vary significantly depending on this time frame. Secondly, the Government of Jamaica is still in the midst of presenting a full response to the crisis through fiscal and monetary policies. These actions will seek to limit the scope of the crisis by stimulating the aggregate demand and thus

⁴¹ Business confidence dips, consumers stable, Jamaica Gleaner, January 22, 2020. Accessed on April 5th, 2020 jamaica-gleaner.com/print/772527

⁴² The Private Sector Organization of Jamaica (PSOJ). Financial Institutions Covid-19 Relief Packages psoj.org/covid-19 Accessed on April 5th, 2020.

⁴³ IMF. Policy Responses to COVID-19. Accessed on April 4th, 2020 www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#J.

⁴⁴ This report shows how visits and length of stay at different places change compared to a baseline (the median value, for the corresponding day of the week, during the 5-week period Jan 3-Feb 6, 2020). www.google.com/covid19/mobility. Accessed April 22, 2020.

⁴⁵ Trading Economics Accessed on April 6th, 2020 tradingeconomics.com/jamaica/gdp-growth-annual.

counteracting the loss in domestic product. Nonetheless, we can do a back of the envelope estimation based on Jamaica's economic trend at the end of 2019, the global estimations on the COVID-19 impact, and the countries' previous behavior in global crises.

The global economy is likely to experience a historic decline in output in the second quarter of 2020 generating a global recession. J.P. Morgan expects a double-digit contraction in global growth in the first half of the year, with GDP contractions through the second quarter or until the outbreak fades.⁴⁶ Regionally, the Caribbean Development Bank released its estimations that worldwide, the global growth will be at least 2 percentage points lower than previous estimates, while for the Caribbean region as a whole, the impact could be even more profound.⁴⁷ In accordance with these projections, ECLAC forecasted a drop in GDP of at least 1.8 percent and as high as 4 percent or more for the Caribbean region.⁴⁸ More recent calculations by the IMF projected a more dramatic scenario for Jamaica, and estimate a 5.6 percent fall in GDP.⁴⁹

When we look at the Jamaican case, we can see a direct impact of the international crisis in two areas. On the one hand, it is estimated that if a travel ban prompted by the virus were to last for one, two, or three months, tourism activity in the Caribbean would contract by 8 percent, 17 percent, or 25 percent, respectively.⁵⁰ For the case of Jamaica, this would entail a GDP drop of 0.51 percent, 1 percent, or 1.6 percent, only considering the decline in tourism. On the other hand, current expectations project a drop of 9.3 percent of exports in the Caribbean (7.2 percent due to prices and 2 percent due to volume).⁵¹ Based on this projection, we could expect a drop of approximately 1.36 percent in Jamaica's GDP. Thus, adding losses from tourism and exports alone, we have approximately a 2.96 percent reduction in the GDP.

Other activities, such as wholesale and retail, manufacturing, and construction will be directly affected by domestic restrictions. To estimate the potential impact, it is useful to compare this crisis to the 2008–2009 one. Both are external crises that impact the country through, firstly, a fall in commodity prices, lower exports, a decrease in tourism and potentially also remittances, and secondly, through financial markets, capital outflows and currency depreciation.⁵² During the last global recession, wholesale and retail fell 3.7 percent, while manufacturing and construction dropped 4.8 percent and 8.7 percent respectively. If we apply this behavior to the current added value composition, we could expect a 1.87 percent drop in the GDP driven by these three sectors.

Adding the calculations on tourism and exports to the projected impact of retail, construction, and manufacturing, we arrive at an overall decrease of 4.83 percent of the GDP. This number seems consistent and ranges between the estimations of ECLAC and the IMF. But yet again, we have only seen the start of both the pandemic in Jamaica as well as the reaction of the Government.

In terms of inflation, the last quarterly monetary report by the Bank of Jamaica states that annual inflation accelerated to 6.2 percent in December 2019 and has remained at 5.96 percent point to point in February 2020. This outturn puts inflation around the upper limit of the Bank's target of 6 percent annual inflation. The Bank of Jamaica projected an average 4.7 percent inflation over the next eight quarters (March 2020 to December 2021) based on higher imported inflation and accommodative monetary conditions, partly offset by a restrictive fiscal stance.⁵³ The impact of the Coronavirus, while flagged by the Bank, was not taken into

⁴⁶ JP Morgan. Fallout from COVID-19: Global Recession, Zero Interest Rates and Emergency Policy Actions. Accessed on April 4th, 2020 www.jpmorgan.com/global/research/fallout-from-covid19.

⁴⁷ The Caribbean Community (CARICOM) caricom.org/caribbean-needs-financial-backing.

⁴⁸ CEPAL. América Latina y el Caribe ante la pandemia del COVID-19. Efectos económicos y sociales. Accessed on April 3rd, 2020. No 1.

⁴⁹ International Monetary Fund (2020). World Economic Outlook.

⁵⁰ CEPAL. COVID-19 Will Have Grave Effects on the Global Economy and Will Impact the Countries of Latin America and the Caribbean. Accessed on April 7th, 2020. www.cepal.org/en/pressreleases/covid-19-will-have-grave-effects-global-economy-and-will-impact-countries-latin.

⁵¹ CEPAL. América Latina y el Caribe ante la pandemia del COVID-19. Efectos económicos y sociales. Accessed on April 3rd, 2020. No 1.

⁵² Levy, Santiago (2020) Suggestions for the Emergency. UNDP LAC C19 PDS No. 2.

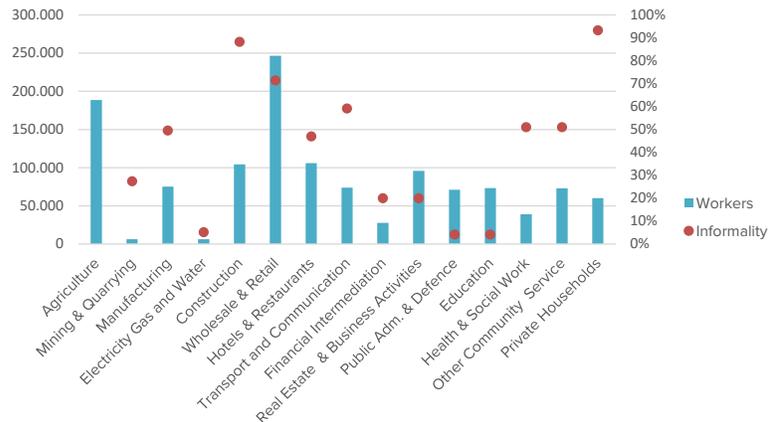
⁵³ Quarterly Monetary Policy Report. Bank of Jamaica. February 2020 Vol. 30 Number 3.

account for these projections. The IMF remains positive and projected moderate inflation of 4.9 for 2020 amid the COVID-19 crisis.⁵⁴ However, looking back to the 2008-2009 crises, we find that inflation was 22 percent in 2008 and 9.58 percent in 2009.⁵⁵ Given the similarities with the previous crises, but acknowledging that Jamaica is standing in a very different fiscal position, we should expect inflation to be around the upper 6 percent limit, but not to soar, like in the past.

10. Effect on Employment

According to 2013 data from the Statistical Institute of Jamaica, only 173,000 employees worked in large establishments of 10 people and more. This entails that 85 percent of the workforce is employed by Micro, Small and Medium Enterprises or are independent workers.⁵⁶ Out of the total 1,248,400 workers at the end of 2019, Wholesale and Retail represented the largest sector with 20 percent of employment, followed by Agriculture (15 percent), Hotels and Restaurants (8 percent), Construction (8 percent) and Manufacturing (6 percent). It's worth noting that while aluminum raw materials are important in terms of GDP and exports, they are not labor-intensive. Bauxite and Alumina only represent 1 percent of all employees.

Figure 4. Projected Number of Employees and Percentage of Informality by Sectors, October 2019



Source: STATIN

In a context of uncertainty, and forced by the curfew measures implemented, many businesses are considering temporary cost-saving measures.⁵⁷ Firstly, businesses can resort to part-time working arrangements that imply the reduction of employee working hours and their correspondent compensation. This measure requires an agreement between the employer and the employee and should be revised periodically as the circumstances of the pandemic evolve.

Secondly, businesses can do short-term layoffs. Jamaican labor code allows businesses to shut down temporarily and suspend employees without pay. Under the Employment (Termination and Redundancy Payments) Act, an employee can be laid off without pay for up to 120 days. This cost-cutting strategy, albeit temporary, may allow businesses to avoid foreclosure, but affects employees significantly. After 120 days, if the employee is not reinstated, he/she may request to be made redundant and receive the corresponding compensation.⁵⁸

Finally, employers may shut down indefinitely and lay off employees paying redundancy compensation. An employee (except a seasonal employee) is entitled to two weeks' pay for the first ten years of employment and

⁵⁴ International Monetary Fund (2020). World Economic Outlook.

⁵⁵ Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

⁵⁶ Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

⁵⁷ Justine Collins, Employment contracts and the coronavirus: Telework, layoffs and hazard pay. Jamaica Gleaner. April 3rd 2020. jamaica-gleaner.com/print/778612 Accessed on April 3rd 2020.

⁵⁸ Ibid.

three weeks' pay for each succeeding year. This is applicable, naturally, to registered employees. But given the high level of informal workers in Jamaica (60 percent of the workforce⁵⁹), many may go home empty-pocketed.

As mentioned earlier, for employees who may be made redundant or laid off, the Government has established the BEST Cash and SET Cash programs. These policies provide temporary cash transfers of J\$ 9,000 per fortnight to laid-off formal workers earning less than J\$1.5 million per year (4 times the minimum wage) and a subsidy of the same amount for each registered employee that an enterprise retains.⁶⁰ Current numbers show that approximately 77,000 formal workers applied for the unemployment benefit, and it's unclear how many jobs will be subsidized given that the CARE program has reached its budget limit of J\$10 billion (see section Measures in Place).⁶¹

In this context, informal workers in endangered industries are the most vulnerable. The number of formal workers calculated by official statistics is 39 percent of the workforce (currently close to 480,000 workers), the rest of the workforce is divided among informal workers (41 percent), Agricultural (17 percent), and domestic workers (3 percent). Sector-wise, the highest rates of informality are among Construction (88 percent), Wholesale and Retail (72 percent), Transport and Storage (60 percent), and Domestic Work (93 percent) (See Figure 4 above).⁶²

Estimations calculate that 40.3 percent of GDP is generated by Jamaica's informal sector, including micro, small, medium, and even large firms. Most of these enterprises and workers do not have a bank account, and either maintain total financial self-sufficiency or run their affairs through informal financial institutions. There has been an increase in the number of informal firms operating in the banking sector, loaning to individuals and small businesses at interest rates that are higher than that of commercial banks.⁶³

If we focus on Tourism, which will be the industry most affected as a result of COVID-19, we find that Hotels and Restaurants have an informality rate of 47 percent. However, Tourism is larger than just accommodations and food, so the impact will hit on the informal workers of the other industries as well. As mentioned, the work situation in tourism is dramatic; the Minister of Tourism has informed that 120,000 (75 percent) of the workers employed directly in the Jamaican tourism industry have been laid off.⁶⁴

The CARE program has received up until April 17th a total of 403,000 applications for the Compassionate Grant that covers informal unemployed workers. This number most probably includes new and previous unemployed workers, so it's unclear how many were directly affected by the COVID-19. As mentioned, the government has capped the total benefits and it's uncertain when they will reopen for new applications. The benefit is a one-time payment of J\$10,000, which represents 35 percent of a month's minimum wage, which is low given the expected duration of the crisis. There are, nonetheless, other social programs that target indirectly this population, such as the COVID-19 PATH Grants that increased transfers for the April and June payments of PATH benefits. This issue is further developed in the section Social Policy Interventions.

The last report on unemployment published by the Government showed a historic low of 7.2 percent. Among the unemployed population, many had their last job in Wholesale and Retail (16 percent), Construction (14 percent), and Hotels and Restaurants (11 percent).⁶⁵ This is not surprising given the high rate of worker's rotation

⁵⁹ Statistical Institute of Jamaica (STATIN), Labour Force Survey 2016. statinja.gov.jm.

⁶⁰ Justine Collins, Employment contracts and the coronavirus: Telework, layoffs and hazard pay. Jamaica Gleaner. April 3rd 2020 Accessed on April 3rd 2020. jamaica-gleaner.com/print/778612.

⁶¹ Ministry of Finance mof.gov.jm/mof-media/media-centre/press/2637-go-j-s-care-programme-set-to-help-workers-amid-covid-19-layoffs.html Accessed on April 22, 2020.

⁶² Projected numbers based on Labour Force Survey 2016. Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

⁶³ OECD (2018) Latin American and Caribbean Competition Forum – Session I: Informal Economy in Latin America and the Caribbean: Implications for Competition Policy – Contribution from Jamaica. 18-19 September 2018, Buenos Aires, Argentina. DAF/COMP/LACF(2018)20.

⁶⁴ Jamaica Observer. Bartlett appeals for regional unity in responding to COVID-19. Sunday April 19th 2020. www.jamaicaobserver.com/news/bartlett-appeals-for-regional-unity-in-responding-to-covid-19_192353 Accessed on April 21, 2020

⁶⁵ Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

in these industries. As with GDP, we can look at past trends to project the potential unemployment generated by the COVID-19 crisis. During 2008 and 2009 the global crisis affected the Jamaican labor market and unemployment rose to 11 percent. Currently, each point increase in unemployment means that 13,400 workers lose their jobs. Therefore, a 4-point increase in (temporary) unemployment could mean that 53,600 people would be laid off and will need a new source of income. However, Tourism alone is showing around 120,000 layoffs according to the government, which would represent more than a doubling in unemployment, around 16.1 percent. These numbers are dramatic and should push the government to increase the scope and amount of cash transfers for informal and unemployed workers.

11. Citizen Safety and Security

Citizen security and public safety are some of the main challenges faced by the Jamaican government. Different analyses point to the negative effects of gang violence on growth and development, especially due to the reduction in tourist arrivals.⁶⁶ In the World Economic Forum Global Competitiveness Report 2017-2018, 15 percent of Jamaican business persons identified crime and theft as the most problematic factor for doing business, while 12.6 percent pointed to tax rates, and 9.7 percent mentioned corruption as the greatest problem.⁶⁷

Jamaica's violence problem started in the mid-1970s, and since then the per capita murder rate has steadily increased by an average of 4.4 percent per year. In 2019 Jamaica had the second highest murder rate in Latin America and the Caribbean region with 60 per 100,000 people.⁶⁸ Jamaican gangs use diaspora connections to carry out criminal activities, particularly transnational drug trafficking networks. The number of gangs has increased from 191 in 2010 to 381 in 2018, with Kingston and St. Andrew experiencing most of the increases. In the same period, gang-related violence was responsible for 56 percent of murders in Jamaica, with a high of 78 percent in 2013.⁶⁹

Jamaica's gangs must be considered in the existing context of poverty, social exclusion, and weak rule of law. Therefore, an increase in unemployment and poverty might exacerbate the crime problem of gang violence, deriving in more deaths and a worst context for economic and social recovery.

12. Policy Options

In line with the series of recommendations presented in the UNDP COVID-19 Policy Documents Series, the Government must increase emergency spending without running a serious fiscal risk. This budgeting could include loans from multilateral lending institutions and actions from the monetary authority. The Government should also expand loan programs to firms and households in the formal sector and transfers to households in the informal sector.⁷⁰

This document has already reviewed in detail the J\$25 billion stimulus program launched by the Government to counteract the economic shock of the pandemic. As said, a large part of this stimulus is based on a 1.5 percentage point reduction in the GCT (J\$14 billion) and a tax credit for MSMEs (J\$1 billion). While tax cuts can take the pressure off prices and moderate inflation, they might not necessarily boost consumption. A decrease in GCT is a regressive policy, as higher-income households will benefit more. Thus, a shift in the resources

⁶⁶ Joanna Callen and Diana Thorburn, *Transforming Citizen Security a Yaad*. Executive Summaries. CAPRI March, 2020.

⁶⁷ Klaus Schwab (2017). *The Global Competitiveness Report 2017-2018*. World Economic Forum.

⁶⁸ Callen and Thorburn 2020, *op.cit.*

⁶⁹ Joanna Callen, *Guns Out: The Splintering of Jamaica's Violent Gangs*, CAPRI March, 2020.

⁷⁰ Constantino Hevia and Andy Neumeyer, *A Conceptual Framework for Analyzing the Economic Impact of COVID-19 and its Policy Implications*. UNDP LAC C19 PDS No. 1. March 2020.

from the GCT to the MSMEs might generate a healthier and more progressive impact on the economy. The sustainability of MSMEs is directly linked with the sustainability of employment, formal and informal. By reducing unemployment the policy will reduce the fall in consumption and alleviate the economic burden of those most affected.

The stimulus package seems in line with the objective of not risking the fiscal deficit as well as not undoing the fiscal successes achieved in recent years. But given recent years improvements, there is space to increase emergency help. Two alternative policies can increase the fiscal stimulus. Firstly, the government could look into the use of monetary policies to stimulate investment and aggregated demand. A reduction of the interest rate from 0.5 to 0.25 or even 0 would be a step forward and would allow businesses to acquire loans to pay for salaries. In addition, given that foreign exchange reserves are high, an increase in the money supply could also be a strong instrument to increase spending and targeted cash grants, but with caution, as it will have a direct impact on inflation.

Secondly, given the current low oil prices, the government could introduce a temporary oil tax to help increase the stimulus expending. The Government, together with the Bank of Jamaica, is reviewing the oil situation to evaluate the next steps in a way that maximizes returns on taxpayer dollars.⁷¹ Jamaica consumes 53,000 barrels of oil per day⁷², and gasoline prices in Jamaica have fallen 3 percent since December.⁷³ This generates the potential for extraordinary tax revenue of 92 million US dollars in a year (130 percent of the current CARE program budget). But a tax on oil is not without its risk. The literature on carbon taxes is cautious about the benefit of such strategies, and some authors argue that oil taxes can be regressive, as lower-income households spend a larger proportion of their incomes on energy and goods whose production uses energy, and as a result, they would pay a disproportionate share of any tax on gasoline.⁷⁴ But if the revenues are targeted correctly, the overall impact of a tax increase should be positive.

Given the fiscal responsibility Jamaica has shown, multilateral institutions should be confident that the country will behave responsibly and honor its dues. International organizations can provide budgetary support through a mix of grants and low-cost loans to boost the CARE program and reduce fiscal risks. Jamaica has already applied to return to the IMF to gain relief support under the Rapid Financing Instrument (RFI). This type of instrument, designed for emergencies, will allow the country to access funding without the usual conditionalities such as those under stand-by agreements and extended fund facilities.⁷⁵

The CARE program has already exhausted its budget allocation, and this benefit will be insufficient in the short term. Jamaican government should evaluate significant increases in cash transfers. This policy is in line with the type of emergency spending UNDP recommends, but its success will be dependent on the budget allocated to the program and the efficiency of the distribution. On the efficiency side, it was previously mentioned that administrative problems could derivate from the multiplicity of new subprograms. Amid the implementation of fiscal and economic stimulus, the government affirmed that “the systems to deliver a targeted intervention of this scale, in the required timeframe, do not exist and have to be built from scratch”.⁷⁶ Previous crisis experiences worldwide show that countries that tried to implement programs from scratch were unable to do so promptly.⁷⁷ The Government should thus focus help through a reduced number of existing programs; taxes and loans to

⁷¹ Ministry of Finance. mof.gov.jm/mof-media/media-centre/press/2643-statement-from-the-minister-of-finance-and-the-public-service-on-potential-oil-price-hedging.html. Accessed April 22, 2020.

⁷² U.S. Energy Information Administration (EIA) www.eia.gov/international/overview/country/JAM Accessed April 17th 2020.

⁷³ Trading Economics, tradingeconomics.com/jamaica/gasoline-prices Accessed April 17th 2020.

⁷⁴ Levinson, A. (2019). Energy efficiency standards are more regressive than energy taxes: Theory and evidence. *Journal of the Association of Environmental and Resource Economists*, 6(S1), S7-S36.

⁷⁵ Jamaica Observer. Exceptional times require exceptional action. April 19th 2020. www.jamaicaobserver.com/sunday-finance/this-crisis-knows-no-boundary-imf-rep-says-exceptional-times-require-exceptional-actions_192255. Accessed April 21, 2020.

⁷⁶ Ministry of Finance. We Care Brochure, page 3. jis.gov.jm/media/2020/04/CARE-Brochure-Ministry-of-Finance-2020.pdf Accessed April 20th, 2020.

⁷⁷ International Labour Organisation and World Bank. (2012). *Inventory of Policy Responses to the Financial and Economic Crisis*. Washington, DC.

sustain businesses and jobs, and direct transfers through NIS and PATH (both in the Ministry of Labour and Social Security) for unemployed formal and informal workers. In this way, the benefits will be better targeted and its implementation will use the administrative structure already in place.

13. Social Policy Interventions

Jamaica's social protection system is well established and has a variety of programs aimed at poverty reduction. The country's social protection strategy is based on a series of long-term development projects, such as the Vision 2030 Jamaica: National Development Plan⁷⁸, the Jamaica Social Protection Strategy⁷⁹, and the National Poverty Reduction Programme⁸⁰. Poverty has shown improvement in recent years, moving from a national average of 24.6 percent in 2013 to 19.3 percent in 2017. Rural areas present a higher incidence of poverty, currently around 20.1 percent (Figure 5).⁸¹

Figure 5. Prevalence of poverty in Jamaica, by regions.



Source: STATIN

The largest social assistance program is PATH, a conditional cash transfer program run by the Ministry of Labor and Social Security (MLSS) aimed at reducing poverty and promoting children's education. MLSS also provides additional support to poor and vulnerable households and individuals through smaller programs, such as the Rehabilitation Grants. Other major social assistance programs include the National Health Fund (NHF) and the Jamaica Drug for the Elderly Programme (JADEP) that provide subsidized medication. Several smaller cash and in-kind transfer programs complete Jamaica's offering of social assistance.

Since its launch in 2002, PATH has become Jamaica's leading social assistance program. Its objective is to reduce poverty and help break the intergenerational transmission of poverty. It targets poor and vulnerable families that are identified through the Beneficiary Management Information System (BMIS). The specific categories of beneficiaries are children from birth to completion of secondary school (0–17 years); pregnant and lactating women; People with disabilities; the poor elderly without a pension; and poor adults.

PATH's final objective is to reach poor households, and for that purpose, it targets primarily children. In 2018/19, PATH had close to 272,000 paid beneficiaries with a majority (65 percent) being children, which covered 26.9 percent of households in the country⁸². Figure 6 shows that 43.9 percent of children in the 1st quintile are PATH recipients, followed by 21.9 percent of the elderly and 6.3 percent of the working-age adults. These numbers show that PATH has a significant role in poverty alleviation and that its structure can target fast those households most affected by the crisis.

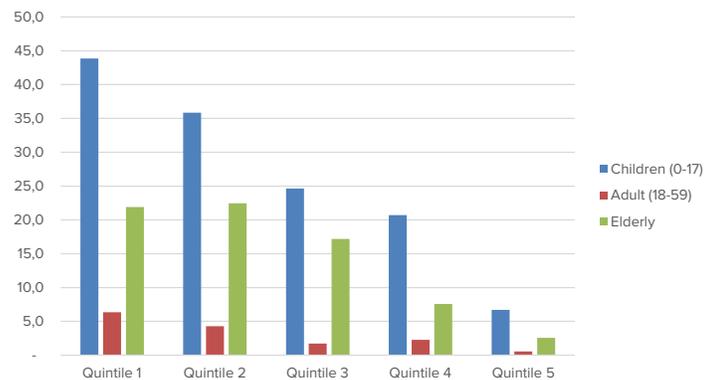
⁷⁸ Vision 2030 www.vision2030.gov.jm.

⁷⁹ Planning Institute of Jamaica (2014), Jamaica Social Protection Strategy.

⁸⁰ Planning Institute of Jamaica (2013). National Poverty Reduction Programme.

⁸¹ Statistical Institute of Jamaica (STATIN) statinja.gov.jm.

⁸² Jamaican Survey of Living Conditions 2017.

Figure 6. Percentage of Population Receiving a PATH benefit, by age group and quintile.

Source: Jamaican Survey of Living Condition 2017

As mentioned, PATH can be an instrument to target unemployed and informal workers. The 2017 Living Conditions Survey shows that 40 percent of households with a formal worker in the 1st and 2nd quintiles received a PATH benefit, and this number is higher for households with informal workers (44.8 percent in Q1 and 37 percent in Q2). Therefore, the use of PATH, even if it is through children-targeted benefits, can reach workers laid off from the labor force.

Given the size and trajectory of PATH, this program stands as the best way to provide temporary help targeted to the most vulnerable. Moreover, the Government has issued exceptional increases in PATH's transfers for April and June, as part of the CARE program. The COVID PATH Grants should be extended beyond current beneficiaries and projected over time, as the recession is expected to last longer than June.

14. Conclusion

Jamaica is in the early stages of the COVID-19 pandemic, with only 381 confirmed cases as of April 29th. The Government has been farsighted in implementing actions to protect the population and flatten the contagion curve as early as possible. Schools have been closed, social gathering restricted and the commercial activity reduced to essential services. Economically, the country has been directly affected by the fall in Tourism. With airports and seaports closed without a clear horizon, this sector will have a strong negative impact on the economy. The reduction in global demands for commodities and the fall in prices has affected bauxite and alumina, the main exports. The recession will soon affect construction, wholesale and retail, and services, deriving in higher unemployment and poverty.

Jamaica is better prepared to cope with this economic crisis than ever before, showing strong macroeconomic and fiscal numbers, and ending 2019 with record low unemployment. Growth and inflation, on the other side, showed adverse numbers in the last quarter of the year. The policies announced by the Government show precaution and an aversion to fiscal risk. Tax reductions on consumption, loans, and benefits for MSME, in addition to a variety of benefits for unemployed and informal workers, try to tackle the problems generated by the COVID-19. However, the budget allocation has already shown its limitation and the target methodology could be improved significantly. This document has, on the one hand, proposed further actions to fund the emergency effort, such as the reduction in interest rates, the request of grants and loans from multilateral institutions, an increase in the money supply, and a temporary tax on Oil. On the other hand, it has proposed a reduction in the number of programs and the distribution of the benefits through existing programs.

While fiscal responsibility is a good sign, with poverty levels close to 20 percent and labor informality around 60 percent, the government has to increase the emergency transfers and channel resources to poor households and informal workers more aggressively. The CARE program has run out of budget very quickly, and new

allocations should be evaluated as soon as possible. Besides, the multiple subprograms will limit the rapid and efficient implementation of help. The efforts should be targeted to sustain businesses and jobs, and transfer direct help to unemployed and informal workers. For that purpose, the Government could use the social spending structure already in place, like the NIS and PATH.

Jamaica has a wide range of social programs for poverty reduction that has developed and improved over the years. Using a program such as the COVID PATH Grants to temporarily increase transfers and increase beneficiaries could be the fastest and most efficient way to reach those households that are most vulnerable to the crises.

The following weeks will give a clearer picture of the health and economic crisis Jamaica is facing, as well as the effectiveness of the government's response. The UNDP, as the development agency of the United Nations, will continue to collaborate on policymaking design and support member states in their pursuit of solutions to the challenges ahead.

Social and Economic Impact of COVID-19 and Policy Options in Uruguay

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Abstract

The economic crisis caused by COVID-19 is an event without precedent in the modern economy and probably associated with the most disruptive effects since the Second World War, or even since the Great Depression. Evidence of this is the worldwide economic policy response, which also is without recent precedents. Within the orbit of the emerging economies, the situation is being aggravated by episodes of “flight to quality”, which brings additional pressure on the financial variables and access to financing in the international markets.

In the case of Uruguay, the economy will go into recession in 2020, there will be a significant real depreciation of the peso and higher inflation. All this will have negative effects on employment, incomes, poverty and inequality. Although the measures adopted up to now are going in the right direction in the light of what has been experienced internationally, and the restrictions faced by the country, they are still insufficient to offset the affected activities and mitigate the impact on the most vulnerable population. In this context, the purpose of this document is to analyse the channels of transmission of the shock and the impact that it might have on the Uruguayan economy, and the measures that have already been taken and additional measures that could be deployed to soften the impact on the most vulnerable sections of Uruguayan society.

1. Introduction¹

The economic crisis caused by COVID-19 is an event without precedent in the modern economy and probably associated with the most disruptive effects since the Second World War, or even since the Great Depression. COVID-19 is a shock without precedent to supply, amplified in terms of aggregate demand, and accompanied, furthermore, by a financial shock with a powerful impact on the emerging economies.

A reflection of the seriousness of the situation is the aggressive response of governments worldwide, which is also without precedent in recent times and is designed to avoid the temporary effects of social distancing measures becoming permanent, with the consequent impact on the wellbeing of societies. Despite this, the crisis will have significant consequences for production and employment, it will cause disruption of global supply chains and payments chains, and will affect the liquidity and solvency of many economic agents. In addition, given that the impacts are distributed asymmetrically to the detriment of the most vulnerable sections, poverty will increase and pre-existing inequalities will be exacerbated.

In the case of Uruguay, the economy will go into recession in 2020, there will be a significant real depreciation of the peso and higher inflation. All this will have negative effects on employment, incomes, poverty and inequality. Although the measures adopted up to now are going in the right direction in the light of what has been experienced internationally, and the restrictions faced by the country, they are still insufficient to offset the affected activities and mitigate the impact on the most vulnerable population. In this respect, and to fix the lines of action which must be deployed, four pillars can be considered: counter-cyclical containment policy measures to shorten the duration of the recession and smooth its impact, measures to restore long-term growth, measures to restore fiscal sustainability and measures to improve and complement the design of the social protection network. Obviously, this characterization is to lay out the principal pillars, given that there is an important interconnection between each of them, and there is not one way of sequencing them over time. In this regard, it is important to take on board that the exceptional nature of the circumstances could make it necessary to advance some parts of the medium-term reforms to increase the country's capacity to confront this shock.

Without prejudice to the foregoing, going forward, the core challenge will be to strengthen the capacity of the economy to return to growth in the future, or otherwise shore up its productivity. This is fundamental to avoid the profound disruption of the pandemic having permanent effects on potential GDP, undermining the capacity to face the immense challenge that lies ahead of us. Achieving this will require rolling out a major set of structural reforms, which must be based on a broad consensus and proper management of dissent, on the understanding that we are all faced with one of the greatest challenges in our recent history.

2. Channels of transmission of COVID-19

The coronavirus outbreak at international level presents a negative exogenous shock to the Uruguayan economy which means an abrupt change in the external scenario with negative effects on economic activity. In addition, the social distancing measures introduced to limit the progress of the virus in the national territory reinforce the contraction effects on activity, accentuating the negative impacts in the short term. The following analyses the channels of transmission, both external and internal, through which the COVID-19 shock impacts the Uruguayan economy.

i. External channels

The channels of transmission by which the effects of the global health crisis impact the Uruguayan economy are chiefly two: commercial (goods and services) and financial. In both cases, the impacts have already started

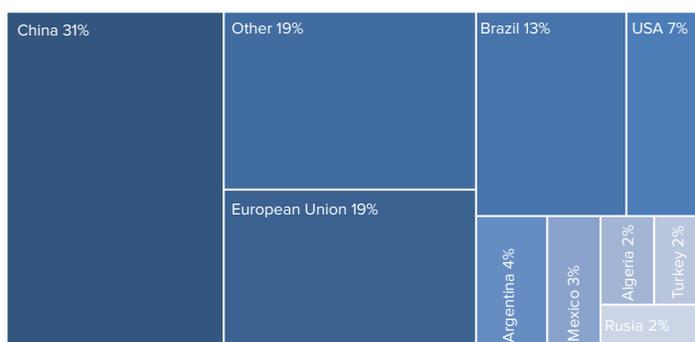
¹ This document is an extract of a broader document prepared for UNDP in April 2020.

to appear in the domestic economy, although the former could be aggravated on the tourism services side in the event of a prolongation of the pandemic in the next few months.

On the one hand, the commercial channel could be considered the primary channel through which Uruguay –and the emerging countries– have felt the impact of the pandemic. In terms of goods, the impact of the virus on the Chinese economy during the first quarter of the year, mainly explained by the social distancing measures adopted to limit its reach, reduced demand for imports by China, which in turn partly explained the fall in the price of commodities on international markets.

In the particular case of Uruguay, exports to China fell strongly –especially in February– during the first quarter of the year. This proved especially relevant due to the relative importance of China in the country's basket of export goods: during the last year, exports of goods to China accounted for 31% of total exports.² The conjunction of these factors partly explains why exports of Uruguayan goods fell by 1% in the first quarter of the year.³

Figure 1. Exports by destination (share of FOB value; 2019)



Note: Includes exports from free zones. Source: Own elaboration from Uruguay XXI (2020).

In addition, there is also a notable reduction in exports to two other trading partners, Brazil and Argentina.⁴ In this respect, the impact of the pandemic on these countries must be borne in mind and monitored, in particular taking into account that the products exported to these destinations tend to be more labour-intensive and, in turn, harder to redirect to other destinations. This is primarily the case of Argentina and its link with local manufacturing industry. The combination of these two factors means that a reduction in exports to these destinations could imply additional damage to the Uruguayan labour market. In the same vein, bearing in mind that exports to the US and the European Union represent 24% of total Uruguayan exports,⁵ the intensification of the pandemic in these countries represents a risk going forward which could impact on Uruguayan exports in the short term.

Despite this, looking ahead, there are some positive signals which could at least mitigate the fall in demand in these markets. In particular, the fall in exports to China was less in March than in February.⁶ This last is in line with recent reports which suggest that the activity of the Asian country has begun to recover in recent weeks. In any case, the recovery of normal levels of trade with this country will be dependent on the recovery of the Asian country continuing its pace going forward, and the supply of the country's export products is not affected by the lockdown effects.

² Including exports from free zones. Excluding these, exports to China represent 27% of the total.

³ Including exports from free zones. Excluding these, exports to China represent a fall of 6% in the quarter.

⁴ Excluding exports from free zones. This is because, at the time of writing this document, there was no access to export data by country for exports including free zones.

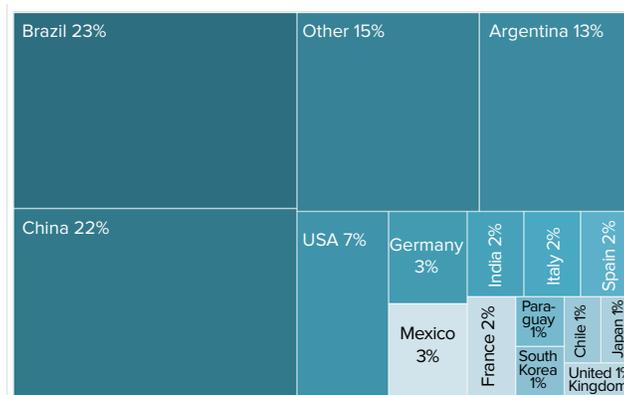
⁵ Including exports from free zones.

⁶ Based on Uruguay XXI.

While the contraction of world trade is bad news for the national economy in that the fall in exports represents a negative shock on aggregate demand, its impact will not be the same across different sectors of activity. This is the product of several factors, prominent among them the degree of exposure to foreign trade of each, and the varying degrees of exposure that each product sold may present due to its intrinsic nature or destination. A more detailed analysis of the impact at sectoral level will be presented in the next section.

With respect to imports –without considering crude and petroleum oils– these remained stable year-on-year during the first quarter of the year. With respect to imports from China, these declined by 10% in the same period. Just as for exports, the risk going forward is that the pandemic and its consequent impacts will intensify in countries which represent a major proportion of the basket of Uruguayan imports. This could have consequences, mainly for the commercial and industrial sectors, which use imported products as intermediate goods in their production chain.

Figure 2. Imports by destination (Share of CIF value; 2019)



Note: Excludes imports of crude. Source: Own elaboration from Uruguay XXI (2020).

In addition, the fall in the price of oil is good news for Uruguay because of its position as a net importer. As of today, this fall has allowed deferring the upward adjustment in retail sales of fuel. The latter, in turn, has important implications for the national production chain due to the importance of fuel in production costs.

The realization of greater benefits will depend on how long this phenomenon lasts and how ANCAP can capitalize it. In this respect, in recent years, the State company has maintained an active policy of forward purchasing of crude which seeks to guarantee the price in the future. In this vein, at the beginning of March, the State company closed hedges of the price of crude for a large part of the needs for the second half of the current year.⁷ This, combined with the depressed demand for fuel due to the effects of lockdown makes greater capitalization by the State company of the lower crude price in the short term difficult, in that crude storage space is limited.

Thus, it can be argued that the impact of the shock on the price of commodities exported by the country is moderating, and that, in addition, a major fall in the oil price can be observed. This means that despite the complex external scenario that we are currently experiencing, the ratio of terms of trade for our country has not been felt. However, the uncertainty remains high and, as described, a strong contraction in demand is expected in the remainder of the year.

⁷ Based on: www.ancap.com.uy/innovaportal/v/8574/1/innova.front/ancap-cerro-cobertura-de-petroleo-para-el-segundo-semestre.html.

Figure 3. Uruguay: Commodities relevant* to export and oil (Price index; Jan-14=100)

*Soya, Meat, Rice, Dairy, Cellulose weighted by incidence in exports.
Source: Own elaboration from Bloomberg.

Lastly, with respect to tourism exports, a major blow can be expected due to the current health situation. In any case, it is difficult to calibrate this impact given the uncertainty regarding how long the processes of lockdown of the economy will continue –including closure of borders– to be high given the non-economic nature of the shock. In addition, it may happen that, even if these restrictions are lifted, the lack of an antiviral treatment could keep demand for international travel depressed. This would be explained by greater risk aversion on the part of individuals concerning the possibility of contracting the disease and, in particular, doing so while abroad. In this regard, it is still not possible to discount lasting impacts linked to the change in habits of the population in relation to certain subjects, such as travel or attendance at places which mean crowds of people gathering (such as shows or the attractions of traditional tourist centres).

At the same time, the current economic situation in Argentina –right in the middle of a debt restructuring– reinforces the negative outlook with respect to tourism activities. This is due to the importance of visitors from that country out of the total number of visitors and the associated expenditure.

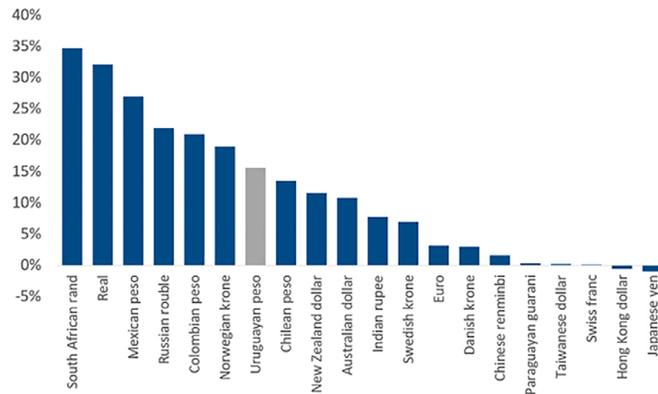
In addition, with respect to the financial channel, Uruguay was not immune to the impact suffered by the emerging economies on their exchange rates and risk premiums due to the “flight of capital” process. In this respect, estimates by the Institute of International Finance (IFF) suggest that the magnitude of this phenomenon will exceed episodes of a similar nature. Among these, the financial crisis of 2008 and the start of monetary normalization by the FED announced by Ben Bernanke in the middle of 2013. In particular, the IFF estimates that the flow of capital from emerging economies is 0.4% of their GDP. In addition, the Managing Director of the IMF, Kristalina Georgieva, has stated that the outflow of capital from emerging economies is the greatest outflow of capital on record.

With respect to the exchange rate, Uruguay was not alone in facing this problem, but its depreciation has been one of the most intense in the year⁸ – it is important to bear in mind that Uruguay lagged behind in correction of the exchange rate. In particular, the depreciation experienced by the Uruguayan peso is similar to that of the countries in the region (such as, for example, Chile)⁹ but higher than that of some competitors such as New Zealand and Australia. This trend in the exchange rate generates contrasting effects on the Uruguayan economy.

⁸ Although at the time of writing this document, the depreciation of the Uruguayan peso seems to have lessened in intensity compared with the first days of March.

⁹ Although less than that experienced by Brazil.

Figure 4. USD vs other currencies (cumulative annual variation at 20 April)



Source: Own elaboration from Bloomberg.

On the one hand, it will allow, in the short term, a partial reversing of the deterioration of prices compared with some competitors and partners, something which could translate into modest improvements in Uruguay’s global competitiveness. Whatever the case, it must be considered that this will lead to a world with less aggregate demand and a lower propensity to trade. Furthermore, as was pointed out, this also imposes greater pressure on the tradable components of the consumer basket, which means higher inflation (although mitigated due to the recessionary impact of the shock on activity, which limits the pass-through to the level of prices

Conversely, the depreciation of the peso will have a negative impact in the immediate term on private consumption and imports due to the loss of purchasing power of incomes in dollars and the lowering of consumers’ expectations which is typically associated with these types of phenomenon. As will be seen below, this will have negative consequences for the country’s trade and industry.

Figure 5. Nominal exchange rate (left) and real bilateral exchange rate with the US (right)



Source: Central Bank of Uruguay and Federal Reserve Economic Data.

With respect to the risk premium, while the country risk of Uruguay increased in the last few weeks, in line with what happened in the rest of the emerging countries, the good management of public debt in recent years has enabled the development of a sound financial profile and a reduction in the risk associated with this channel of transmission

Figure 6. EMBI (basis points)



Source: Own elaboration from JP Morgan Chase.

In particular, it has been successful in constructing an adequate maturity profile for public debt which does not contemplate emergencies in the short term, while at the same time it has made progress in reducing its risk profile. In this respect, the proportion of debt in dollars has been reduced and almost all the debt has been taken on at fixed interest rates.

This allows reducing the country’s exposure to intense depreciation and sudden increases in interest rates, which prevents these situations –frequently temporary– in turning into a more severe problem of sustainability for the public debt.

ii. Domestic channels

Added to the deterioration in the external terms of trade and finance, in the early days of March, the first case of coronavirus was confirmed in Uruguay. Since then, the Uruguayan Government has decreed a Health State of Emergency and has adopted a series of social distancing measures which seek to limit the rate of spread of the virus in the national territory. The following table summarizes some of them.

Social distancing measures announced by the Government

Compulsory quarantine of 14 days for persons coming from countries declared at risk or symptomatic.
Closure of borders with Argentina and Brazil.
Suspension of leaving the country for tourist purposes for Uruguayan citizens and foreign residents.
Prohibition of disembarking of passengers and crew of cruise ships.
Suspensión of flights from Europe.
Closure of marinas which do not have a migration office.
Suspension of shows, camping sites and public holiday centres. Exhortation to private centres to do the same.
Closure of shopping centres.
Suspension of classes at all educational levels.
Extension of special leave for construction to 13 April.
Reduction of the number of public transport units circulating at the weekend.
Restrictions on local non-food fairs.
Permanent transfer of adult homeless to hostels.
Public officials over age 65 years must not go to work. Dependent workers in private activity in this age group urged to do the same.

In addition to these compulsory measures, it should be mentioned that the Government has urged the population to reduce their travel in the national territory to the minimum possible, as well as their daily social contact –both at work and leisure– but without making it compulsory. In other words, the Government has opted not to order

compulsory quarantine for the whole population, as has been done in other countries in the region and the world, at least up to the time of writing this document.

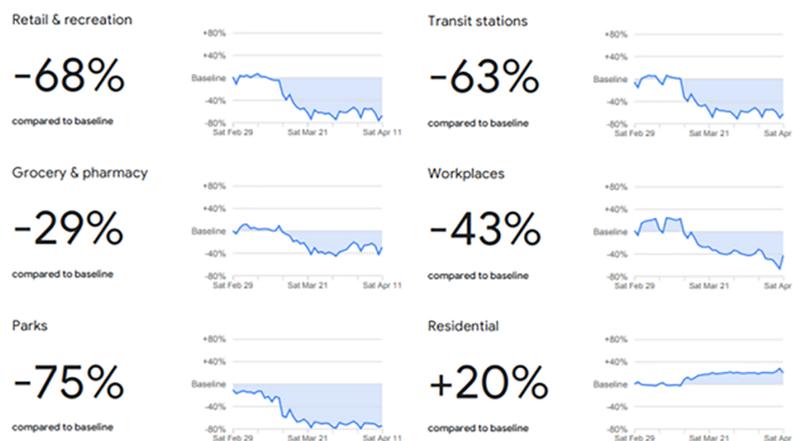
On the one hand, the speed with which the Government implemented these confinement measures should be highlighted, thus reducing the risk of exponential contagion by the virus within society and avoiding an exponential contagion curve. On the other side, there is no doubt that Uruguay’s economic activity will be particularly felt due to the adoption of these measures. Even in a scenario where distancing measures are prolonged for a relatively short time (for example, two months), the impact on the level of activity and level of employment will be significant. In addition, it may be expected that these impacts will be distributed unevenly among the different sectors of activity, as is happening with the trade and financial shocks described above. This, as we shall see, has comparable asymmetric effects on the labour market.

Below we present some high frequency indicators which illustrate the effect that the social distancing measures are having on the daily activity of Uruguayans. In particular, these indicators show patterns of behaviour and mobility of people within the country.

On the one hand, according to the report “Comportamiento del tránsito en Montevideo”¹⁰, prepared by the Government of the Department, vehicle movements at the points in the city corresponding to the majority of urban zones fell by 40% between 9 and 23 March. In addition, traffic leaving the city in Tourism Week 2020 (from 6/4 to 12/4) was 46% lower than Tourism Week the previous year, while traffic entering fell by 40% in the same period of time. In addition, the Montevideo Government estimates that the number of passengers using public transport was reduced by 80% compared to levels before the health crisis.¹¹

On the other hand, the Google report “COVID-19 Community Mobility Report”¹² estimates the type of places that Uruguayans are avoiding. This estimate is obtained from records of movements provided by smartphones. Although the data may not be representative of the total population, they present an initial approximation of this phenomenon for the case of Uruguay.

Figure 7. Google COVID-19 Community Mobility Report



Source: Extracted from “COVID-19 Community Mobility Report” (Google, 2020).

In specific terms, according to the report produced by Google, Uruguayans substantially reduced their visits to shops (apart from food stores and pharmacies), places of recreation, parks, public beaches and workplaces.

¹⁰ “Comportamiento del tránsito en Montevideo” (Traffic patterns in Montevideo) (IMM, 2020): montevideo.gub.uy/noticias/movilidad-y-transporte/comportamiento-del-transito-en-montevideo.

¹¹ www.elpais.com.uy/informacion/sociedad/caida-venta-boletos-coronavirus-aproxima.html.

¹² “COVID-19 Community Mobility Report” (Google, 2020) www.gstatic.com/covid19/mobility/2020-04-11_UY_Mobility_Report_en.pdf.

At the same time, and consistent with this, they reduced the frequency of use of transport stations (public transport stops or bus stations). From this it can be inferred that commerce and sectors related to tourism and leisure activities are suffering considerable reductions in demand, as was to be expected, based on the characteristics of the shock and the impact that it has had on economies which have lived with the virus for a longer period of time.

In line with the reduction in vehicle mobility, during the month of March, sales of fuel showed falls year-on-year. According to SEG Ingeniería data,¹³ sales of oil and diesel fell year-on-year by 18% and 7% respectively. In any case, in line with the declaration of the health emergency and the social distancing measures and exhortations which followed it, it is plausible that demand was uneven throughout the month, i.e., sales were particularly affected during the second half of the month

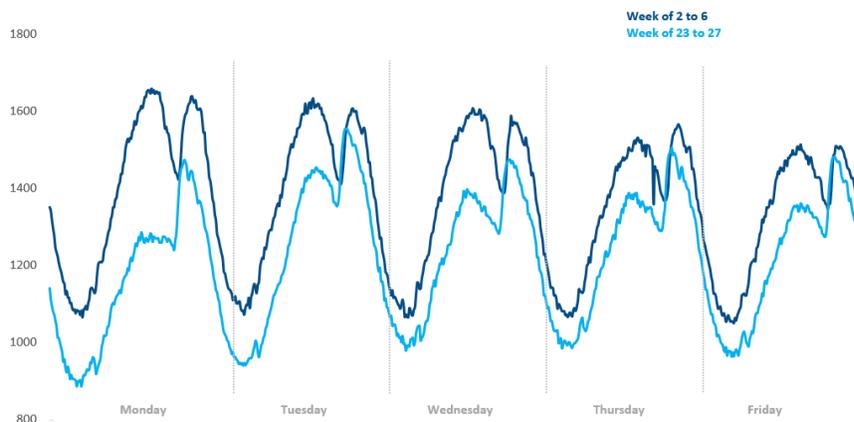
Figure 8. Sales of fuel in the domestic market (March; thousands of m3)

	Diesel	Oil
2019	79	71
2020	74	57,9
Variation	-7%	-18%

Source: Own elaboration from SEG Ingeniería

For its part, another indicator of high frequency which is typically used to analyse the level of activity of the Uruguayan economy is consumption of electricity. The same SEG Ingeniería report (“Energy Indicators”) suggests that, while it increased year-on-year, and showed a new record for the month of March since data have been recorded, when the month-on-month trend is analysed, a varied pattern of behaviour can be seen which could be explained by the social distancing measures on this activity. In this respect, the report finds that, when the days of the month are divided into two periods depending on whether they are before or after the declaration of the emergency, average daily electricity consumption for the first is 12% higher than in the second. Likewise, if the two weeks within each of these two periods are considered when the ambient temperature was similar, it is found that electricity consumption was 1% lower after the health emergency was declared. The following graph shows this last analysis

Figure 9. Demand for electricity (March 2020; Mw)



Source: Extracted from SEG Ingeniería.

¹³ “Indicadores Energéticos” (SEG Ingeniería, 2020): www.segingeneria.com/wp-content/uploads/2020/04/Indicadores-Energ%C3%A9ticos_2003-1.pdf

It is important to note that this fall does not reflect a contraction in electricity consumption by productive activities which are reflected in national accounts, as this is offset by the probable increase in electricity consumption of residential homes due to the greater time people spend there.

3. Sectoral impact in Uruguay

The impact of the spread of the new coronavirus on activity will be profound, including in a scenario of relatively early recovery. While it is envisaged that the effects will be asymmetric in terms of depth and duration, the impact is generalized among the major sectors of activity, all of which are already experiencing difficulties in their operations.

There are various factors which determine that the repercussions of the shock on production are unevenly distributed between sectors. On the supply side, it is fundamental in that the degree of restrictions on mobility and the social distancing measures prevent or hamper their performance. It is clear, for example, that restaurants and hotels have found it practically impossible to operate, while farming activities function fairly normally. In addition, one must consider the flexibility of businesses and sectors to adapt to working methods which minimize risks, through strategies which reduce (or eliminate) the gathering of workers together, such as shift work and working from home. Finally, the dependency of branches of activity on the affected industries and foreign suppliers must be borne in mind, to the extent that the economic impact is global and international supply chains are faced with interruptions.

In this regard, sectors of activity which represent over 30% of the Uruguayan economy, and which employ approximately 40% of the employed population, are being severely affected. If industrial activity is included in the event that the lockdown measures are intensified, these percentages would increase to over 40% and 50% respectively.

Figure 10. Demand for electricity (March 2020; Mw)

Principal sector of activities in Uruguay	Relative weight (% GDP)*	Employment (Q) (%)	Employment (Q)	Average remuneration (\$)	Impact of shock on SUPPLY	Impact of shock on DEMAND
Primary activities	6.3%	8.3%	135.323	26.120	LOW	MODERATE
Industry	12.0%	10.3%	168.093	31.192	MODERATE	MODERATE
Commerce	9.7%	17.5%	285.437	26.122	HIGH	HIGH
Restaurants and hotels	3.9%	3.9%	62.995	21.624	HIGH	HIGH
Construction	9.7%	7.3%	118.780	28.005	MODERATE	MODERATE
Information and communications	1.9%	2.2%	35.472	53.703	LOW	HIGH (+)
Transport and storage	3.5%	5.0%	81.380	36.807	HIGH	HIGH
Energy, gas and water	2.3%	1.2%	18.907	41.536	LOW	MODERATE
Public adm. and defence	5.4%	6.6%	107.010	42.384	LOW	LOW
Health and social services	6.5%	8.4%	136.915	35.971	LOW	HIGH (+)
Education	4.9%	6.8%	110.530	35.075	HIGH	MODERATE
Other activities/services	33.9%	22.6%	367.336	27.085	MODERATE	MODERATE
	100%	100%	1.628.178			

Source: Own elaboration from Central Bank of Uruguay and ECH of INE *Current prices.

On the demand side, it must be considered, in the first place, how the reduction in household disposable income and company profits due to the global fall in activity might affect the various sectors. In this regard, the activities associated with basic products and services would be less depressed. In addition, the dependency on the export sector must be borne in mind, especially when the principal buyers of the goods and services are in the countries and areas most affected by the pandemic. Looking beyond the short term, and depending on the duration of the health emergency, the pandemic could lead to a reconfiguration of consumers' preferences which affects certain businesses, which would extend beyond the duration of the contingency measures. In the light of these considerations, the sectors that will be most heavily affected in the short term will be commerce, restaurants and hotels, and transport and storage. Presented below is a brief consideration of the impact on those sectors which will face the greatest difficulties.

i. Commerce, restaurants and hotels

This will be one of the groups that will feel the current economic situation the most. All tourism-related businesses have seen their activity virtually paralysed following the severe restrictions that were adopted, such as the suspension of the majority of flights and the partial closure of borders. In this regard, the restaurants and hotels sector has been struck a severe blow. In addition to the current almost total inactivity, it is envisaged that it will be these businesses which suffer a more lasting impact over time, to the extent that it is foreseeable that the easing of contingency measures will be prolonged more in this type of establishment, while the current situation affects medium-term reservations.

In terms of employment, approximately 4% of those employed work in “accommodation and catering services”. This sector is characterized by above-average informal working (25%), which is around one third (defined as not contributing to any pension scheme). This is probably the product of the greater incidence of seasonal employment, receptive tourism, and the large number of events and festivities that take place at different times of the year. In the current situation, however, of particular interest is the distinction of formal working for paid employees, in the sense that it is essential to know the possibility of access to unemployment insurance. The number of private employees in the category that pay no, or only a partial, contribution to social security is 23%.

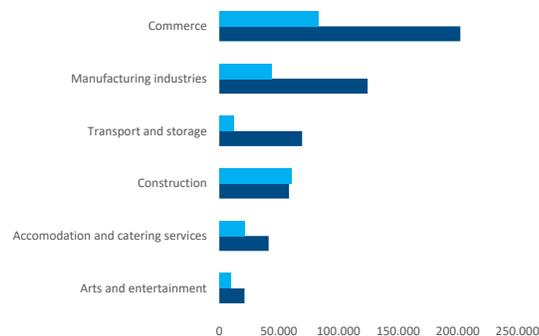
As regards commerce, its contraction means an enormous problem given its weight in employment and total GDP. In this context, sales are affected on various fronts. The confinement measures discourage competition among local shops, many of which have closed their doors, both on their own initiative and encouraged by the Government, as is the case of businesses in shopping centres. In addition, the fall in household incomes affects consumption in general, and the depreciation of the Uruguayan peso affects imported goods, in particular, in the same way. The latter are also affected by possible disruption of international supply chains. It should be emphasized that it is a highly heterogeneous activity where the range of possible strategies to address the difficulties caused by this crisis can be greater or less. This will be determined, among other things, by the capacity of the business to set up on electronic business platforms, the level of indebtedness and the capacity to access credit based the link with the banking system.

Many businesses, especially small ones, are highly exposed to liquidity problems affecting their solvency in the short term. Specifically, over 17% of all people in an occupation work in this sector, which determines that their negative prospects means a significant problem in terms of employment. The number of those occupied in commerce who do not pay contributions is some 28%, while among private sector employees, 14% of the total do not pay contributions or pay partial contributions. It is important to note that, within this group, it is likely that the impact will be the deepest and most prolonged in the case of restaurants and hotels (compared with commerce), given that the impact of the shock on tourism will be more long lasting (it is not possible to discard the idea that this situation will generate a profound change in patterns of consumption and people's propensity to avoid agglomerations, even when the pandemic is under control).

ii. Transport and storage

With regard to transport and storage, the negative outlook reflects the halt in tourism activities and the general decline in movement, both of goods and people. The enormous drop in demand for transport in the capital exemplifies the repercussion of the restrictions on mobility in a sector which employs over 80,000 people. In this sector, the problem of not paying contributions is fairly low, a situation which covers some 15% of employees. The figure rises to 10% when the non-contribution and under-registration of private employees is considered.

Figure 11. Formal and informal workers (selected sectors)



Source: Continuous Household Survey (INE, 2018). Note: Informal means someone not registered in pension scheme.

The other sectors would not, a priori, receive a shock of such magnitude as those described above, although the situation is far from being homogeneous. In other words, the sectors analysed above would suffer a double shock (supply and demand) and, therefore, will face a more challenging and complex panorama. Despite this, the remaining sectors will also be affected by this new economic situation, although not in all cases will they face such a delicate situation.

iii. Other sectors of activity

With regard to manufacturing industry, which is a fundamental sector in terms of employment, the activities encompassed within it are diverse and the scale of the impact differs from one to another. The effects of the supply shock on the industry could be greater in those categories which are more dependent on the supply of intermediate goods, due to the impact on supply chains, and this could also affect continuity in industrial plants which involve high levels of transit and concentration of persons. On the other side, the demand shock would have a negative impact, and an important one, on certain specific industries (such as refrigeration, high dependency on the export market), but others not substantially (such as pharmaceuticals). Anyway, in general terms, the outlook for industry in the first half assume low expectations of recovery after facing a fall in the last quarter of 2019. In this vein, the Survey of Expectations conducted by the Chamber of Industry in companies in the sector shows that among those who expect to be the worst hit by the current situation are SMEs, in particular those serving the domestic market and whose production does not relate to food and beverages. This is the case, for example, of clothing and shoes. It is important to note that from the second half of the year, a slightly more favourable panorama might be configured, in that the building supplies branches would benefit from the works which are ancillary to the installation of the UPM Plant.

With respect to construction, this is a branch which depends relatively little on the external sector and whose activity has not been one of the first affected by the health measures, thus the direct shocks received would not, a priori, be of significant magnitude. Whatever the case, supply was affected temporarily due to a tripartite agreement to cease activities which extended to 12 April. Thus, from 13 April, there was a return to work on most sites, under strict prevention protocols. In addition, on the demand side, the pro-cyclical character of the sector's activity suggests that it is likely that works and investments will be deferred in a negative and highly

uncertain economic context. The works associated with the second UPM plant, if they advance as planned, would partially offset this trend during the second half of the year.

Primary activities, for their part, would be the activities least affected by the supply shock which arises from the current state of emergency. In this regard, the social isolation measures imposed pose no difficulties so far for the continuation of productive processes of a biological nature and the supply of food. Nevertheless, the continuity of cashflows in some branches is also threatened, such as in meat production, which depends on the continued operation of the refrigeration phase, an activity which involves high concentrations of people and which could be affected by quarantine or social distancing measures. At the same time, it should be assumed that global demand will remain weakened in the short term, especially in markets such as the European Union. This is an aspect which could slow the traction of an export-led recovery such as experienced in 2004 or 2009.

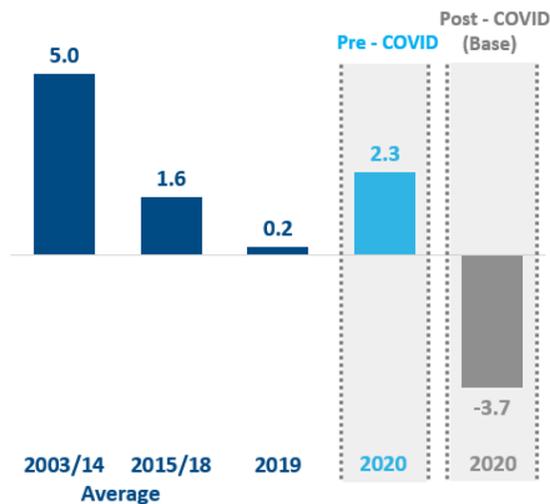
Finally, among other activities, artistic, cultural and leisure activities, as well as personal services, should be highlighted, as they are being severely affected by the government rules on holding of public shows and the exhortation to avoid gathering of people. The special nature of this sector is that it has a high degree of informality in the private sector. Only a third of those employed have the possibility of protection through unemployment insurance, which means a high degree of vulnerability. This is in addition, moreover, to the previous remarks concerning the persistence which could be assumed with the normal resumption of activities. Thanks to its diversity, this is a sector which could benefit rather more than the rest from the possibility of working remotely. In addition, several of the services which are centred within this group would not see their functioning drastically altered, such as health services or financial services.

4. The new macroeconomic scenarios

Prior to the COVID-19 shock, we estimated GDP growth of 2.3% and 1.9% for 2020 and 2021 respectively. In the specific case of 2020, a breakdown of growth showed an expansion of 0.6% based on the macroeconomic scenario, supplemented by an additional stimulus of 1.7% from the construction of the new UPM cellulose plant (UPM II) and the associated infrastructure works. In effect, without the latter, the outlook for activities in the next biennium were meagre, in line with that observed since 2015.

As can be seen from the above analysis, the outbreak of this shock means a dramatic change in the short-term outlook. In addition, it introduces enormous uncertainty, given that it has its genesis in a component that is not economic, and there are no certainties concerning the timing and intensity of the lockdown going forward. Given the foregoing, according to our base scenario, the impact of COVID-19 on the Uruguayan economy means a correction to the forecast for 2020 of 6 percentage points. In this connection, we expect a contraction of GDP of 3.7% this year, followed by a rebound in 2021. Indeed, the construction of UPM II and the associated infrastructure works will not offset the decline in activity during this year.¹⁴

¹⁴ On this point, it is important to bear in mind two risks, at least. Firstly, there are risks related to the redefinition of contracts, Secondly, there are risks associated with potential liquidity or supply chain problems in some works.

Figure 12. GDP projections (year-on-year % variation)

Source: Own elaboration.

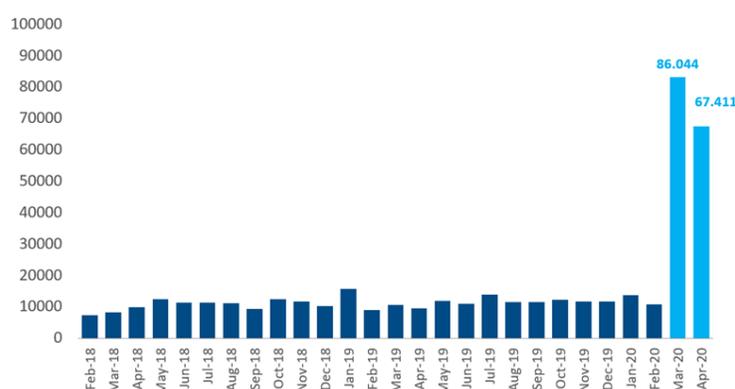
Following the above, a partial lockdown for 180 days is assumed. In this regard, Uruguay will reverse its social distancing measures, albeit slowly and gradually, from May or June 2020. This means that the impact on different sectors of activity will vary markedly. In some cases, activities will continue with relative normality, or even with a slight boost. Among these, health or telecommunications are two illustrative examples. In the case of the farming sector, the impact will be less in that it involves biological processes. At the other extreme, activities such as restaurants, hotels, travel agents or transport will be severely hit during the coming quarters.

Between one extreme and the other, activities such as construction, industry or some of those which are centred in other activities will be partially affected. Under this scenario, the most intense recessionary impact is set in the second quarter, with a fall which could far exceed 8% year-on-year.

From the point of view of aggregate demand, the depreciation of the Uruguayan peso is similar to that of the countries of the region, but higher than some of its competitors such as New Zealand and Australia. Assuming that the weakness of the Uruguayan peso against the dollar extends for a second quarter, and peaks between July and August (Q3.20), the deterioration in prices relative to some competitors will be partially offset, which could translate into modest improvements in Uruguay's global competitiveness. However, as was mentioned, this would occur in a world with lower aggregate demand and a lower propensity to trade. This pattern, with some exceptions, marks a significant difference compared with what happened in 2003 and 2009.

On the other side, the depreciation of the peso will have a very short-term negative impact on private consumption and imports, due to the loss of purchasing power of incomes in dollars and the lowering of expectations of consumers which tend to be associated with this type of phenomenon. Thus, despite the stimulus associated with the UPM II works, aggregate demand will be severely depressed during the current year.

In the case of the labour market, the last data published corresponds to the month of February and thus does not pick up the impact of COVID-19 on the Uruguayan economy. However, the information on the evolution of monthly unemployment insurance payments published by BPS gives a partial approximation of what has been happening between March and April. Specifically, the first known indicators following the decree of the health emergency (13/03) show a pattern of exponential growth of applications for unemployment because of the paralysation of activity and reduction in hours worked. Specifically, applications increased in March to 86,044, almost eight times higher than the monthly average in the last two years (approximately 11,200 applications). In April, with data up to the fifteenth of the month, applications reached 53,488

Figure 13. Applications for unemployment insurance

Source: Social insurance bank.

To put these numbers in perspective, it is important to bear in mind that, during the crisis of 2002, unemployment insurance payments peaked at around 11,541 (August 2002). Thus we are in the presence of an unprecedented episode in the labour market. However, as pointed out by Bai et al. (20/4/2020),¹⁵ it is not possible to draw a direct comparison, given that this crisis is of a different nature, and that from that time, Uruguay recorded a significant process of formalization.

Thanks to that, the number of workers who are now covered by social security is much higher, as progress was made in including sectors not previously covered. For this reason, as soon as the deterioration in the labour market began during the second half of 2014, unemployment insurance payments reflected the higher increases compared with those seen in the previous crisis.

At the level of branches of activity, the sectors which are over-represented in this universe are commerce, restaurants and hotels, manufacturing industry and transport and communications.

Figure 14. Applications for unemployment insurance by branch of activity (March 2020)

Branch	% applications in March 2020	Weight of formal employment in the private sector
Commerce, Restaurants and Hotels	41%	25%
Manufacturing industry	15%	14%
Transport and Communications	15%	10%
Communal, social and personal services	14%	28%
Services to business	8%	10%
Construction	4%	5%
Farming and mining	2%	8%
Electricity, Gas and Water	0%	1%

Source: Bai H; Carrasco P; Dean A & Perazzo I. (2020). "Los seguros de desempleo ante un mercado laboral en terapia intensiva. Insumos para enfrentar la pandemia".

Looking ahead, the deterioration in the labour market will continue to worsen during the coming months. While the uncertainty about the evolution of the virus and the effectiveness of the containment measures

¹⁵ Bai H; Carrasco P; Dean A & Perazzo I. (2020). "Los seguros de desempleo ante un mercado laboral en terapia intensiva. Insumos para enfrentar la pandemia" (unemployment insurance in a labour market intensive care. Inputs to tackle the pandemic).

deployed by the authorities mean that it is very hard to estimate the degree and timing of the impact, we expect that unemployment will reach over 16% during the second quarter of the year, gradually falling back towards December. Without prejudice to this, unemployment is likely to end the year above 12%. In employment terms, the fall envisaged for 2020 is slightly under 7% considering annual averages. In this respect, the relative impacts on employment would be greater than on GDP (which will rebound more quickly).

For its part, on the inflationary front, the increase in the consumer price index is likely to consolidate above 10% year-on-year during the second and third quarters of the year, and moderate slightly after that. On the one hand, the adjustment of public tariffs in the month of April will have an upward impact on the level of inflation which is already fairly high: 9.2% year-on-year in March. On the other, the depreciation of the peso will have an impact on the tradable components of the consumer basket, which will drive inflation independent of the recessionary scenario through which the economy is passing. These effects will more than offset the lower inflationary pressures associated with the fall in demand, and the lower pass-through of the dollar price in price levels due to the fall in economic activity. As a result of the foregoing, the purchasing power of wages in pesos will suffer during the coming months.

On the fiscal front, there will also be a significant deterioration during 2020, the product of the fall in tax collection and the temporary increase in spending to address the pandemic. Specifically, the public sector deficit will increase steadily between April and September, and may rise to slightly over 9% of GDP in the third quarter. Consequently, the Government will have to introduce a fiscal readjustment in 2021 to repay the debts contracted during the economic and social emergency, which could include actions not only in the spending area, but also incomes.

Considering this scenario, and despite the measures taken, a deterioration in the area of poverty, unemployment and inequality can be expected. On the one hand, during recent years it has been interrupted on both fronts and there has been a slight change in the trajectory with respect to that observed during the years of greatest economic dynamism. On the other, as is analysed below, the impact of the shock and the social distancing measures to contain it, is not distributed evenly within the population. On the contrary, the impact will be asymmetric, and especially intense in the case of the most vulnerable segments.

5. Considerations on the impact of COVID-19 on inequality

i. Regressive impact of teleworking

The surge and rapid expansion of COVID-19 will mean major changes in many aspects of our daily lives. In particular, it is possible to speculate that the pandemic will be the final push for many changes which have already been happening, but which were moving at a gentle pace. This is the case, for example, of teleworking. Indeed, technological advance has allowed a growing number of tasks to be performed remotely. However, the social distancing measures deployed to contain the advance of the virus, and to safeguard the capacity of health systems to respond, has tended to accentuate this trend, while at the same time expanding its scope to a wider group of occupations and sectors of activity. In this way, many tasks can continue to be performed with a certain degree of normality in the face of this new reality. However, this possibility is not distributed evenly among all workers. Because of its characteristics, a considerable part of the labour force is left outside this new model of employment and at present has no possibility of continuing to work. Furthermore, the distribution of these teleworking capacities not only leaves a significant proportion of people on the fringe of the labour market, but this is the part which, in general terms, exhibits a greater degree of vulnerability to the current situation.

For this reason, an alternative approach to the profile of the population most disadvantaged in the face of this crisis involves identifying how that capacity to perform tasks remotely can continue. In the Uruguayan case, a strategy of this nature was addressed by various authors. Prominent among these are Caporale, Pereira and

Zunino,¹⁶ Guntín¹⁷ and de los Santos and Fynn.¹⁸ Taking different approaches, their contributions allow us to address this issue and take an additional look to understand the composition of the universe of workers who will see their economic situation most affected by the COVID-19 shock.

In all the cases, the studies use data corresponding to the Occupational Information Network developed by the United States Department of Labour (O*NET), using the Continuous Household Survey of the INE to adapt it to the Uruguayan case.

In the first case, the authors developed the “index of possibilities of distance working” (IPTD), to identify the limitations on distance working between three groups particularly vulnerable to the situation. These are informal workers (outside the social protection system), independent formal works (they are formal, but do not have access to unemployment insurance) and formal paid workers on low incomes (although they receive unemployment insurance benefit, they face problems of sufficiency). Among the principal results, the following stand out. The index takes values between 1 (cannot work remotely) and 5 (without limitations), whereby those who show an IPTD less than 3 are defined as vulnerable.

Firstly, all the occupations in our country which face some kind of restriction on carrying out tasks normally, although this restriction differs in the degree of severity. Secondly, within the universe of informal workers, approximately 270,000 (70%) are especially vulnerable in the light of their incapacity to continue their activity remotely. Thirdly, within the group of independent formal workers, almost 45,000 have difficulties in remote working. Fourthly, within the last group, there are three distinct realities: (i) 75,000 individuals with unemployment subsidies face problems of sufficiency; (ii) 135,000 are most affected because of suspension; and (iii) 59,000 have subsidies for reduced hours.

Figure 15. Workers and possibility of remote working

	Not remote	Proximity	Quantity
Private (total)	77%	22%	1.353.383
Poor	88%	24%	86.458
Informal	87%	27%	391.505

Note: “Not remote” workers for whom it is not easy to work remotely; “Proximity” workers who work in activities with close contact.
Source: Guntín, R. (2020). “Remote working and with contact in Uruguay”.

With a similar approach, Guntín finds that 77% of workers have difficulties in working from home and 22% of workers work in proximity (meaning work which requires being less than an arm’s length from another person).

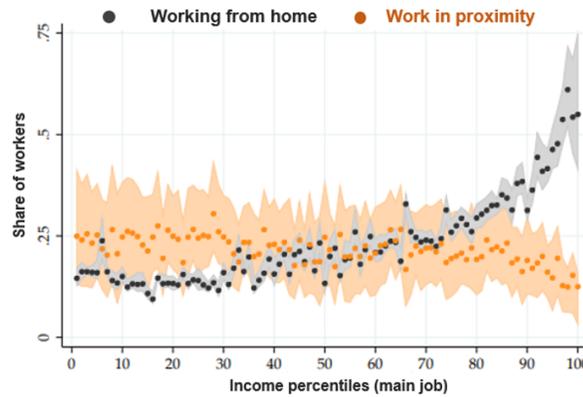
In addition, poor or informal workers have greater difficulty in performing work from home (this affects 87% and 88% respectively), and these are those who perform the greatest proportion of work which requires proximity (22% and 27% respectively). Lastly, Guntín analyses the foregoing in terms of the distribution of incomes, and it emerges that the number of workers with possibilities of distance working increases significantly with income, and that the proportion of workers with close contact falls with higher incomes.

¹⁶ Caporale F, Pereira M and Zunino G. (March 2020). “Coronavirus y las vulnerabilidades de la Red de Protección Social en Uruguay”. Observatorio de Seguridad Social de Cinve: www.suma.org.uy/coronavirus-y-las-vulnerabilidades-de-la-red-de-proteccion-social-en-uruguay.

¹⁷ Guntín R (April 2020). “Trabajo a Distancia y con Contacto en Uruguay”: www.rquntin.com/other/employment_uru/employment_uru_covid.pdf.

¹⁸ De los Santos D & Fynn I. (April 2020). “COVID-19: Los límites a la informalidad en tiempos de distancia social”. Blog Razones y Personas: repensando Uruguay: www.razonesypersonas.com/2020/04/covid-19-los-limites-la-informalidad-en.html.

Figure 16. Number of workers with possibilities of distance working and incomes



Source: Guntin, R. (2020). “Remote working and with contact in Uruguay”.

Finally, De los Santos and Fynn construct a classification of effects of approaching the distribution of workers in terms of whether or not they are informal and whether or not they can work remotely. Based on this, they find that 69% of informal workers have no possibility of performing tasks remotely.

Nevertheless, as the authors point out, the problem is not limited only to the capacity to continue working remotely, but there are a multiplicity of factors linked to the reality of each household which refine the results. Within informal workers who could work remotely, there is an overcrowding rate of 13% (higher than the 5% of formal workers who can work in a remote context). In addition, 20% of workers who are informal and have the capacity for teleworking live in households where at least one basic necessity is unsatisfied in relation to accommodation (in the case of formal workers with the capacity for teleworking, it is 6%). Furthermore, 42% of informal workers who can continue to work do not have an Internet connection in their home and 36% do not have a computer. Lastly, it is crucial to bear in mind that in the face of the containment measures deployed to contain the advance of COVID-19 (especially the closure of education centres), caring tasks are restricted exclusively to the orbit of each family.

Figure 17. Workers by characteristics of occupation and possibility of distance working

	Informal	Formal	Total
Cannot work	17%	36%	53%
Can work	8%	39%	47%
Total	25%	75%	100%

Source: De los Santos, D. & Fynn, I. (2020). “COVID-19: Los límites a la informalidad en tiempos de distancia social”.

This, as was analysed, means an asymmetric load between the man and the woman. According to the authors, “35% of informal workers with the possibility of distance working live with at least one child under 12 years in the household. In the specific case of informal women workers with the same characteristics, 41% live with at least one child under 12 years in the household, and 17% with more than one”.

To sum up, incorporating the capacity of workers to maintain their sources of employment income through remote working enhances the analysis in terms of identification and characterization of the groups which are especially vulnerable in the face of the current situation. However, it is important to bear in mind that other factors influence the foregoing, which are of multiple origins and associated with the dynamic and reality of each household. Finally, they must be considered when designing public policies to prevent the current crisis exacerbating pre-existing weaknesses and gaps.

In conclusion, it is worth noting that these results are in line with other studies carried out in relation to the impact of this dimension. Of particular note is the document entitled “The asymmetric impact of quarantine: Estimates based on a characterization of occupations” which was published on 16 April by the Centre for Distributive, Labour and Social Studies for the Argentine case¹⁹, (also based on O*NET data).

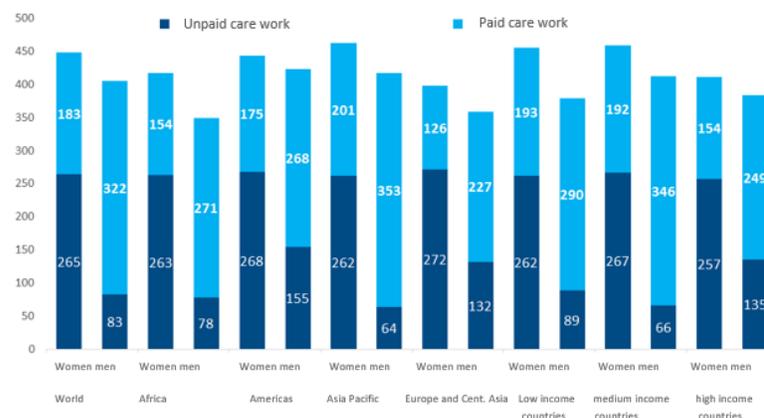
In short, they also find a high degree of dispersion between the applicability of teleworking by occupation and sector, the occupations least compatible with teleworking being those which concentrate the greatest proportion of informal workers and self-employed, with the lowest levels of education, qualifications and wages. As a result of this, they estimate that the greatest impact in the short term will be suffered by the segments with the least resources, generating a significant increase in poverty and income inequality in the country (despite the mechanisms of public transfers deployed up to now). It is important to bear in mind the differences from the Argentine case, both in terms of starting point, the social protection net and the severity of the restrictions on mobility which were implemented by the Government (quarantine).

ii. Lockdown, care and gender inequality

The shock caused by the spread of the COVID-19 pandemic at global level has negative effects on the strategic, social and economic plane, and its impacts are distributed unevenly between women and men. In this regard, women suffer a heavier burden for many reasons. On the one hand, women do most of the work related to health and social assistance. They are over-represented among health workers, where they account for two thirds of personnel in this activity, which exposes them to a greater probability of contagion²⁰.

They also concentrate the bulk of unpaid work, which makes it difficult to reconcile teleworking when this is possible. According to the International Labour Organization, women carry out 76% of all unpaid care work, and spend 3.2 times more time doing it than men. The estimates based on survey data on use of time in 64 countries show that, per day, they devote 16,400 million hours to unpaid care work. This corresponds to 2,000,000 people working eight hours a day without receiving any remuneration²¹.

Figure 18. Time devoted daily to unpaid care work, paid work and total work; by sex, region and income group (last available year)



Source: ILO (2018).

In addition, women face a greater situation of economic vulnerability than men. Women’s participation rate in the labour force in 2018 was 48.5%, while for men it was 75%, which represents a gender gap of 26.5 percentage

¹⁹ Bonavida Foschiatti, C. and Gasparini, L. (2020). “El Impacto Asimétrico de la Cuarentena”. CEDLAS working document N° 261, April, 2020, CEDLAS-FCE- La Plata National University.

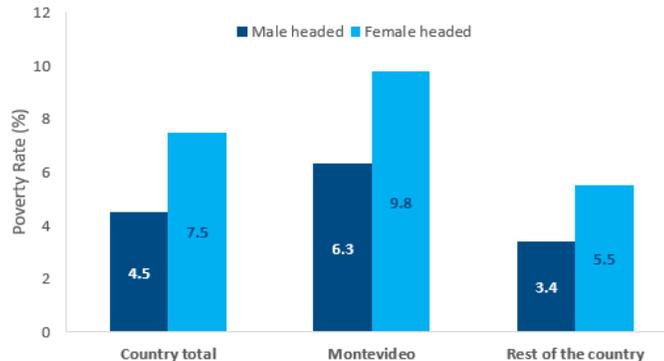
²⁰ read.oecd-ilibrary.org/view/?ref=127_127000-awfnqj80me&title=Women-at-the-core-of-the-fight-against-COVID-19-crisis.

²¹ Care work and care jobs for the future of decent work / International Labour Office – Geneva: ILO, 2018.

points.²² lastly, the risks of suffering situations of gender violence increase in periods of crisis, quarantine or social distancing. For all these reasons, women are among the groups most affected by the current crisis.

Indeed, the economic vulnerability of women is greater in the face of this economic situation. Although there are practically no differences between men and women living in poor households, it is more likely that a household will be in a state of poverty when the head of household is a woman. In 2019, 7.5% of households with a female head were in a state of poverty, compared with 4.5% of households with a male head, a situation which is more pronounced in Montevideo than in the interior of the country.²³

Figure 19. Incidence of poverty in households by major geographical area by sex of head (%; 2019)

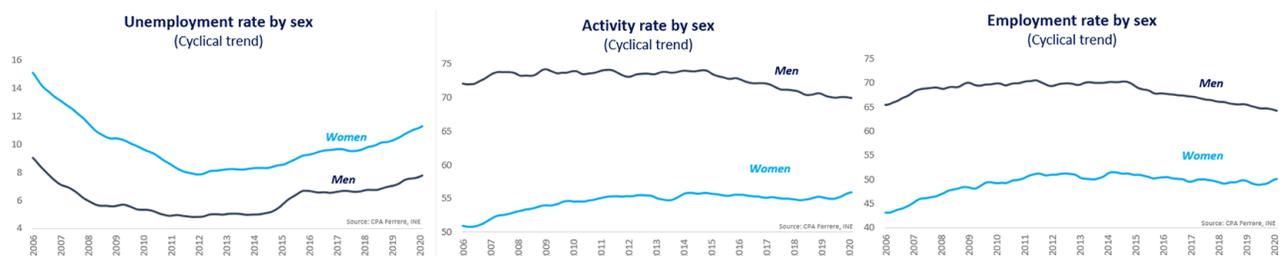


Source: National Institute of Statistics.²⁴

Despite progress made in this respect, the position of women in the labour market is still markedly different from that of men. In our country, women continue to face lower rates of activity and employment than men, and higher unemployment rates.

In addition, they have a greater probability of finding themselves in the informal sector²⁵ of the economy and, ultimately, remaining on the fringe of the social protection network.

Figure 20. Rate of unemployment, activity and employment by sex



Source: National Institute of Statistics (2020).

Combined with the foregoing, women also receive lower remuneration and have fewer possibilities of accessing entrepreneurial and executive positions²⁶.

²² ILO (2018).

²³ Parada, C; Querejeta, M and Grupo Jueves (04/2020); El coronavirus no discrimina: Inequidades de género en la pandemia. La Diaria. ladiaria.com.uy/articulo/2020/4/el-coronavirus-no-discrimina-inequidades-de-genero-en-la-pandemia/#nref:6.

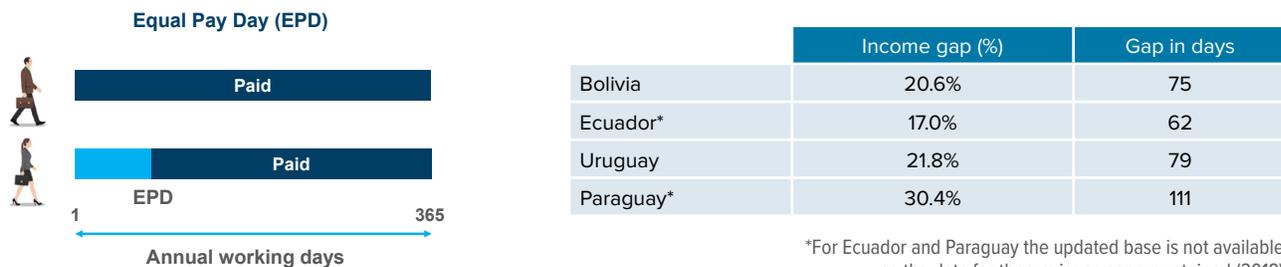
²⁴ INE (2020); Estimate of poverty by the income method, 2019 – Technical Bulletin.

²⁵ Parada et al (2020). La Diaria.

²⁶ Social and employment perspectives in the world: Global progress in women's employment trends, 2018. International Labour Office – Geneva: ILO, 2018.

In relation to the former, according to the report “Equal Pay Day (EPD)” prepared by Ferrere in 2020²⁷, the wage gap between women and men is currently around 21.8%. The EPD would symbolize the day of the year when women, despite working since 1 January, would begin to receive income for their work. Expressed another way, it allows us to visualize the income gap as free working days in the year. Given that the report covers the four countries in which our firm is present, it is possible to compare, at least partially, how Uruguay stands in relation to some of its peers in the region.

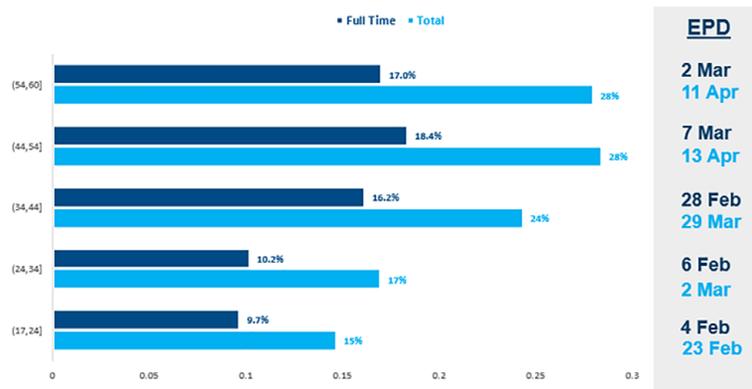
Figure 21. Equal Pay Day and income gap by country



In this respect, Ecuador is the country where the gender gap is lowest – 17% in 2018. EPD in that country is 3. March. It is followed by Bolivia, with a wage gap of 20.6%, where EPD falls on 15 March. In third place is Uruguay, where EPD is on 15 March, with a gap of 21.8%, and lastly, Paraguay, whose EPD is 21 April, with a gender gap of 30%. In turn, the report also allows an analysis, for Uruguay, of the actual reality in terms of the various age group.

This is shown in the following chart.

Figure 22. Income gap (%) and EPD by age group



Source: Elaborated from ECH data (INE).

In addition, at international level, there are marked gender differences in occupation in the care sectors (education, health and social work) and Uruguay does not escape this tendency. These sectors, where women’s activity predominates, has been intensely affected by the pandemic and the resulting measures which were deployed to contain it.

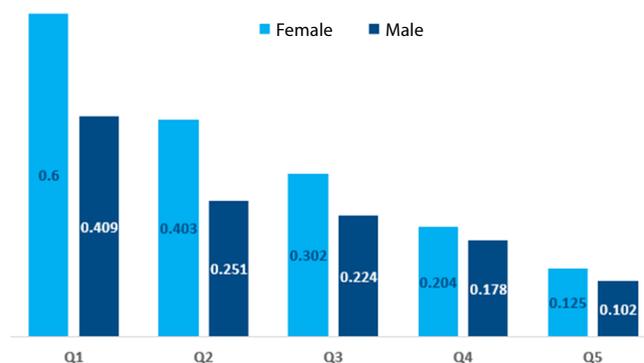
²⁷ The launch of Equal Pay Day in 2017 was one of the projects on which FERRERE embarked after the signing of the HeForShe commitment of UN Women, in line with its commitment to gender equality.

On the one hand, in Uruguay, women represent 76% of health workers, which puts them in the front line of the battle against COVID-19. On the other, another set of activities with high women's representation was severely affected by the measures taken to contain the spread of the virus, such as those employed in households, where women represent 89% of all workers, social services with 77%, education with 74% and other services with 61%.²⁸

Women also face a greater burden of unpaid work. According to the Time Use and Unpaid Work Survey (2013), women devote approximately double the number of hours as men to this type of work. In the case of women, almost two thirds of their work time is devoted to unpaid work (65%) while for men, the proportions are inverted. They devote one third of their time to unpaid work (31.9%) and two thirds to paid work (68.1%).²⁹

In addition, rather more than 1 in 3 women (35.2%) say that they carry out activities for care of dependents, while this happens for 1 in every 4 men. The majority of these tasks related to childcare. Lastly, the survey shows that the workload done by women for care of dependent increases as personal income falls, the rate of women's participation in households in the first income quintile is 60%, while in the fifth quintile, it is 12.5%. And the gender gaps increase as personal incomes decrease.

Figure 23. Rate of participation (%) in care of dependents by sex and income quintile (2013)



Source: INE (2013).

This takes on relevance in the current context, to the extent that the COVID-19 crisis has unleashed an increase in demand for care of dependents, in particular, children, caused by the closure of education centres. The new situation could increase further the tension in the difficult balance between employment and unpaid work, in particular, care of dependents. Women who can telework (although women seem to have greater participation than men in jobs where it is not possible to telework)³⁰ will have to reconcile this with their multiple activities in the household, and in the extreme, some may have to leave the labour market as a consequence of the increase in the workload in the home.³¹ Thus, reinforcing gender differences.

A final consequence of the new context, which was mentioned above is linked to the upsurge in gender violence in the home. The problems linked to the economic crisis and restrictions imposed by social isolation represent an additional risk to the situation of women, boys and girls.

For all these reasons, the impact of COVID-19 from a gender perspective has, or should have, implications for the design of social protection measures to overcome the crisis. As was pointed out, the impact and costs

²⁸ Parada et al (2020). La Diaria.

²⁹ INE (2013); Use of time and unpaid work in Uruguay. Available at www.ine.gub.uy/documents/10181/35933/Usode+del+tiempo+y+el+trabajo+no+remunerado/579b-3fdb-c0e8-4745-ab1d-a9aef24ab5a5

³⁰ De los Santos, Daniela and Fynn, Inés (04 2020) COVID-19: Los límites a la informalidad en tiempos de distancia social. Blog Razones y Personas. www.razonesypersonas.com/2020/04/covid-19-los-limites-la-informalidad-en.html

³¹ Parada et al (2020). La Diaria.

of this crisis are not fairly distributed across society, which particularly affects women, especially in the most vulnerable economic strata of the population. This is a key factor that must be carefully addressed in the design of public policies.

Indeed, the outbreak of the pandemic will exacerbate pre-existing inequality and vulnerabilities, which, despite, the progress achieved, have proved extremely persistent. The COVID-19 crisis has become a crisis of the care system, where, as has been seen, women have a disproportionately high responsibility, both through their participation in unpaid work and the feminization of the sectors of occupation linked to care. This demands a response to the crisis which takes gender factors into consideration in the measures adopted.

To adequately address this enormous challenge, it is essential to take account of the changes that are taking place in the dynamic of households, all of which have disproportionate implications for the feminine population (collapse of incomes, episodes of violence, greater demand for unpaid work). For that reason, greater social protection measures are needed, such as income support for households that suffer sudden reductions, and protection of informal workers. Also, however, we could work together with the sectors which face a fall in demand for their services or facilities, such as those relating to the tourism sector, to house women and children if they need to leave their homes due to situations of violence

In addition, it would be beneficial to progress with collection of data related to COVID-19 broken down by sex (such as infections, comorbidity, effects on employment and incomes) in order to be able to take better decisions to target help.

6. The economic policy response in the short term

As mentioned, the external shock caused to Uruguay by the current global crisis is a drastic change in the scenario for the economic policy conducted by the new Government to recalibrate the objectives, priorities and tools of the short-term macroeconomic agenda.

i. Measures adopted up to now

In this framework, in the last few weeks, the Uruguayan Government has announced measures which indicate a redefining of the priorities of economic policy in the right direction considering the nature of the shock. The announcements made up to now are in line with the measures adopted internationally and are designed to “support” the economy in the face of the disruptions generated by lockdown. In particular, on the one hand, it is sought to protect the most vulnerable population and economic activities. On the other, it has sought to provide liquidity and make tools available to companies to address the problems of liquidity and prevent them becoming a solvency issue.

Among the measures designed to protect the most vulnerable population and companies are:

- » Expanding and facilitating access to unemployment insurance.
- » Deferring payment of taxes and social security contributions for micro and small enterprises.
- » Increasing and expanding Ministry of Social Development (MIDES) programmes.
- » Generating sickness subsidy for private workers over the age of 65 years and announcement that public workers in this age group do not have to come to work.
- » Incorporate the coronavirus as an occupational disease for health personnel.
- » Implement benefits for the payment of instalments on housing loans.
- » Expand Internet access to homes with the basic plan.

To minimize distortions in the functioning of the economy, the following measures were announced:

- » Channelling funds of multilateral institutions to finance credits to companies in sectors affected by the crisis.
- » Increase funds for the National Guarantees System to leverage loans to small and medium-sized enterprises.
- » Relax the criteria for access to credit programmes for micro and small enterprises managed by the National Development Agency (ANDE).
- » Authorize financial institutions to extend maturities of credits to the non-financial sector by up to six months.
- » Temporary reduction in reserves in national currency for banking institutions to expand liquidity and stimulate credit.

Listed below are the principal measures announced with a brief description:

Measure	Description
Fiscal measures to support the real economy	
Monetary transfers to the most vulnerable people and companies	
Strengthening and expanding the MIDES programme	Extending the timetable and creation of new hostels for homeless people, and strengthening of INDA (National Food Institute) plans.
	One-off doubling of the amount of the Uruguay Social Card amount. Half will be transferred on 31 March and the rest one month later. This benefit will reach 87,000 households.
	Doubling of the share of the National Food Institute (INDA) destined for canteens, snack bars, churches and other institutions. The amount of food destined for municipal canteens in the interior of the country and baskets for local offices will also be doubled, both actions undertaken by the Ministry of Social Development.
	One-off doubling of the amount of family allowances under the Equity Plan. This benefit will affect 118,000 households.
	Allocation of a basket of vouchers to buy basic foods, for people without formal employment, children or social coverage. The beneficiaries can access this voucher for 1,200 pesos through a mobile phone application.
	Subsidies for monotaxpayers covered by the Ministry of Social Protection. The subsidy amounts to 6,700 pesos per month for two months.
Deferral of taxes	
Taxes	Deferral of payment of minimum VAT (section E) for February and March. This must be paid from May in six equal instalments and without payment of interest.
	Extension of payment of taxes of the DGI (General Tax Office) for liabilities for March to the 27th of the month.
Social security	
Deferral of contributions	Deferral of payment of employer's contributions for March and April for monotaxpayers, single-person and personal companies with up to 10 employees whose contribution scheme is the Industry and Commerce scheme. In addition, the State will assume 40% of these contributions.
Flexibilization of unemployment insurance	"Flexible" unemployment insurance for all sectors of activity.
Generation of sickness insurance	Public employees over the age of 65 years must stay at home and it is announced that private dependent workers and employees in industry and commerce, construction, rural or domestic service will be paid sickness subsidy to encourage them to stay at home.
	To protect medical personnel during the health emergency, coronavirus will be added to the list of occupational diseases.
Leave from employment for construction	Special leave agreement up to 5 April with workers in construction. In particular, the agreement covers workers in construction and other related branches (extraction, ceramics, concrete and toll booths). The benefit per worker is a one-off payment of UYU 16,505.52. Financially, it is divided as follows: 30% by the State; 50% by business chambers and the remainder by the workers.
Other	
Public services	Antel will include for the month of April free recharges of 50 gigabytes for the Universal Household Plan ³² The most basic Internet plan for residential services)

³² Most basic broadband Internet access for residential services is included in the fixed telephone service and there is no extra charge. The benefit will cover some 120,000 subscribers, according to the report of the Presidency.

Monetary measures – regulators to provide liquidity to the financial sector and stimulate credit in the real economy	
Benefits for mortgage loans	Benefits in payment of housing loan instalments of the Uruguay Mortgage Bank and the National Housing Agency.
Strengthening of guarantee funds	Increase in funds of the National Guarantee System to allow financial institutions to grant loans up to USD 2,500 million to small and medium-sized enterprises. In addition, 70% of the commission charged by the system is waived.
Expansion of credit lines	Opening of “soft” credit line (lower rates, longer repayment periods, grace periods in BROU of USD 50 million with possibility of expanding to USD 125 million. Possibility of using it for working capital or refinance matured loans.
	Expansion of the ANDE Targeted Credit programme for micro and small enterprises affected by COVID-19. The programme subsidizes interest rates charged by micro finance institutions to SMEs so that they can access financing at lower cost. In addition, existing beneficiaries of the programme have a deferral of their instalments during the following month.
	Implementation of loans for single person companies through the National Development Agency. These will be 12,000 pesos for the months of April and May
Flexibilization of the criteria for classification of debtors	BCU authorizes banks, financial services companies and credit administrators to extend payment periods of credits to the SNF for up to 180 days.
Temporary reduction of compulsory minimum reserves in national currency	BCU is temporarily reducing the compulsory minimum national currency reserves for financial institutions. This reduction will be conditional on an increase in credits in national currency compared with the February level.

Source: Own elaboration based on Presidency (2020)

According to statements by the Presidency, the measures announced up to the first days of April, together with the spending associated with the increase in persons covered by unemployment insurance or sickness insurance amounted to USD 400 million,³³ or approximately 0.7% of GDP.³⁴

To finance this expenditure, the Government ordered the creation of the “Coronavirus Fund”. In the first instance, the Fund will be fed by disbursements from contingent loans from multilateral credit institutions – discussed in section 1.1 – accumulated profits of the National Development Corporation (CND) and a percentage of last year’s surpluses of the Bank of the Oriental Republic of Uruguay (BROU), and collection of the new tax created on public officials and politicians with high incomes and the extension of the tax on Social Security Assistance – which is charged on high levels of pension.

“Coronavirus Fund”	To meet the expenditures arising from the activities of protection of the population; prevention, mitigation, care and rehabilitation borne by the National Emergencies System; financing of the MSP and other public and private providers; payment of unemployment and sickness insurance because of the health emergency established from 13 March; and financial assistance to the BPS given the fall in tax collection due to the lower economic activity. The sources of financing will be: profits of the BROU; accumulated profits of the CND%; collection of the new “COVID-19 Health Emergency Tax; donations, funds from loans by multilateral institutions; contributions of non-state public entities. ³⁵
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³³ negocios.elpais.com.uy/noticias/medidas-economicas-vienen-detalle-financiamiento-tomas.html

³⁴ Calculated using GDP in dollars for the year 2019.

³⁵ Based on Act N°19.874.

The following table summarizes the new taxes created to finance part of the “Coronavirus Fund”.

“COVID-19 Health Emergency Tax” ³⁶	Monthly tax charged on nominal remuneration and social benefits greater than \$120,000 from personal services provided to the State, government departments, autonomous entities and decentralized services, and non-state persons under public law and state-owned entities on which the State or any other public entity has a majority participation. The amount of the charge depends on the nominal incomes of each person and varies between 5% and 20%. At the same time, the tax is charged at 20% on political office and positions of trust and those officials who perform tasks abroad. Health personnel are exempt from payment of the tax. ³⁷
Extensión al IASS	An extension is created the Social Security Assistance Tax (IASS) charged on retirement benefits, pensions, military and police retirements, and similar discharge benefits, for service in public, parastatal and private institutions, on the same scale as the COVID-19 Health Emergency Tax. ³⁷

Each of the sources of financing of the new “Coronavirus Fund” has different magnitudes. On the one hand, as of today, disbursements from multilateral have been received in the amount of USD 800 million.³⁸ In addition, profits of the BROU for the year 2019 totalled approximately USD 504 million, which means³⁹ that the State could access some USD 151 million to finance the “Coronavirus Fund”. The accumulated profits of the CND at December 2019 amounted to UYU 2,193 million,⁴⁰ equivalent to USD 59 million.⁴¹ Lastly, the collection of the new “COVID-19 Health Emergency Tax” and the extension of the IASS is estimated at USD 20 million to each month in which they are actually in force.

Below, the policies implemented are analysed in more detail and opportunities for improvement are identified in the event of the need to strengthen or expand these mechanisms. In particular, emphasis is placed on social protection measures and provision of credit to the productive system.

ii. Evaluation of the measures adopted and recommendations

a. Social protection

The Government has acted quickly once the health state of emergency had been decreed and resolved to strengthen the existing social plans which seek to assist the country’s most vulnerable population. Specifically, on the one hand, it was decided to increase the budget for food plans implemented by the National Food Institute, seeking to strengthen the network of canteens for the destitute. At the same time, the timetable was extended and new hostels were created for these people. Among the latter, the most vulnerable groups were identified so that they could be settled in places prepared for them, and spatial centres were created for destitute persons who have contracted the disease.

On the other, monetary transfers relating to the Uruguay Social Card were doubled –to be paid in the months of March and April – and family allowances under the Equity Plan– to be paid in the months of April and May. At the same time, the provision of food baskets was extended to people without traditional social protection and do not receive benefits from the Social insurance bank.

With respect to the monetary transfers and the provision of food baskets, the Government leveraged the pre-existing programmes of the Ministry of Social Development; the Uruguay Social Card and the Family Allowances under the Equity Plan. This allowed it to provide a rapid response monthly to the needs of these people who are

³⁶ Both for the “COVID-19 Emergency Health Tax” and the extension of the IASS, there are lower limits below which the liquid incomes of contributors cannot fall. The effect of both taxes is two months –April and May–, and the Executive Power may extend them for a further two months.

³⁷ Based on Act N° 19.874.

³⁷ Based on Act N° 19.874.

³⁸ Although it is not known how much of these disbursements were allocated the “Coronavirus Fund”.

³⁹ According to Act N° 19874 and Act N° 18.716.

⁴⁰ Based on: “National Development Corporation: Individual Financial Statements at 31 December 2019”

⁴¹ Using the closing exchange rate for 2019.

among the most vulnerable in society. In both cases, the amount paid to the beneficiary households in receipt of these benefits was doubled, one time only.

It must be considered that the households which receive the transfers under the Uruguay Social Card can also receive the family allowances under the Equity Fund. This is taken into account in the measures announced by the Government, in that the households which receive the double amounts of the Uruguay Social Card will not receive the double amount of the benefits for households belonging to the family allowance programmes of the Equity Plan. The reason for this is to avoid some households receiving double benefits.

As was mentioned, as well as strengthening these pre-existing plans, the Government decided to extend the issue of food vouchers, like those granted to the beneficiaries of the family allowance under the Equity Plan, to people without formal employment who do not receive social benefits from the BPS, retirement benefits, pension, among other things. Unlike the family allowance under the Equity Plan, the issue⁴² of this voucher basket through a mobile phone app, developed in conjunction with Antel and the BROU, which they can download onto their mobile phones. In this respect, those eligible must apply for the benefit by telephone or through the Ministry website. In both cases, the information provided by the applicant will have the character of a sworn statement with the potential consequences set out in the Criminal Code.

As the Government explained, this extension is intended to benefit everyone who before the pandemic was not a recipient of the existing social benefits for the social insurance bank, and neither did they have benefits from the traditional social security system, because they are not registered workers.⁴³ These would be people who, once they saw their traditional source of income reduced due to dismissal or illness, they could not access traditional social security mechanisms, which means that they could be significantly vulnerable in the present situation.

Thus, strengthening and extending these social plans by the Government are a step in the right direction, as the households in receipt of these benefits are in situations of extreme vulnerability⁴⁴ to the current health and economic situation.

Without prejudice the above, as the lockdown is extended over time, it is plausible that households, as well as requiring greater monetary assistance, will need to face expenses of a nature other than food. These, in some cases, could require payments in cash, something which it is not possible to do through some of the current transfer mechanisms – Uruguay Social Card, physical basket or mobile voucher

One possibility could be to open a bank account for each of the beneficiaries of the temporary transfers or deposit money in accounts already belonging to them. This would be accompanied by the issue of a debit card with which these people can make purchases with the deposited money or withdraw it directly from a cash machine. Complementary to this, for the case where the most vulnerable households who actually receive the Uruguay Social Card, the possibility of authorizing withdrawals of money from bank automats could be evaluated so that these people can access cash to meet other types of expenses.

⁴² For households in the interior of the country, there is also the possibility of obtaining the physical basket.

⁴³ It must be borne in mind that persons entitled to benefit from the Uruguay Social Card or the family allowances under the Equity Plan are not eligible for this benefit. The other members of the household may, however, make use of it.

⁴⁴ As suggested in the work “Las políticas económicas y sociales frente a la expansión de la pandemia de COVID-19: aportes para el debate” (IECON, 2020), there are households which lost their benefits under the Equity Plan during the last year, for example, for failure to fulfil educational or health requirements. This would mean that households with the identical composition and similar levels of vulnerability could be receiving different benefits, related to the doubling of the benefits under the Equity Plan and the extension of transfers to informal workers or those without BPS benefits. Thus, in the same way as contemplated in the IECON work, those requirements could be relaxed temporarily so that these households can be beneficiaries of the doubling of the benefit. Alternatively, this benefit could be provided directly to those households, as it is possible that they are included in the administrative records of the MIDES.

This could be a key differential with respect to the handover of monetary transfers through a mobile application. While this mechanism could be more efficient in the distribution of the monetary transfers. The impossibility of withdrawing the allocated money⁴⁵ could limit the capacity to use it.⁴⁶

Lastly, it should be mentioned that monetary transfers by the State could be complemented by strengthening unemployment insurance⁴⁷ and other social security mechanisms, as suggested in the document “Los seguros de desempleo ante un mercado laboral en terapia intensiva. Insumos para enfrentar la pandemia”.⁴⁸ This would make it possible to ensure a minimum income threshold for persons who are not beneficiaries of the monetary transfers but who also find themselves in situations of vulnerability, such as under-employment or unregistered multiple employments. At the same time, the possibility of providing them with greater, temporary, flexibility, to this type of instrument could be considered, both in terms of the requirements, and for the time in which the benefits are paid.⁴⁹

In this way, strengthening these instruments would help to stretch a contingency safety net for the most vulnerable persons within whereby they have access to formal social security instruments.

One measure of this kind would be complementary to the monetary transfers, in the sense that the households would not be beneficiaries of them, but they would have access to traditional social security instruments. They would be beneficiaries of a subsidy which would mitigate the possibility of a situation beyond their control leaving them in a worse socioeconomic position, such as dismissal or contracting a disease which deprives them of work for a prolonged period.

b. Provision of liquidity to the financial system and stimulus for credit to the real economy

At the same time as social protection measures were announced for the vulnerable population, the Government also announced measures which seek to avoid the distortionary effects of the lockdown on the real sector of the economy. Specifically, as was mentioned, these seek to provide liquidity to the financial system and make tools available to companies to address problems of liquidity and avoid them potentially becoming solvency problems.

Thus, these measures can be divided into two pillars: those designed to increase the level of liquidity at home and those whose purpose is to stimulate credit to the real economy, paying particular attention to small and medium-sized enterprises which could be experiencing greater difficulties in accessing financing.

On the one hand, with respect to the liquidity measures, the Uruguay Central Bank decided to ease the criteria for categorizing debtors. This allows financial intermediary institutions, financial services companies and credit administrators to extend maturity periods, both for capital and interest, of credits to the SNF for up to 180 days without the need to reclassify the category of credit or the category of the debtors.

From the business angle, this brings two benefits. On the one hand, it allows debtors to move the payment schedule forward so that they can allocate their scarce resources to cover other operating expenses more important to the functioning of the business. This is complemented by the deferral of (i) payment of contributions to the BPS by monotaxpayers and owners and shareholders of single person companies and

⁴⁵ Currently it is also not possible to divide the money credited.

⁴⁶ Mention could be made of “cash-back” where shops, on presentation of a valid QR code, give the person the money in cash. In any case, for this to be possible, the shop would have to have the tools to be able to accept this type of payment method, and would have to be ready to issue physical money in exchange for that credited in the same amount to a bank account.

⁴⁷ As suggested by: Bai H. Carrasco P. Dean A & Perazzo I. (2020). “Los seguros de desempleo ante un mercado laboral en terapia intensiva. Insumos para enfrentar la pandemia”. Institute of Economics of the University of the Republic (IECON).

⁴⁸ Again, as suggested by: Bai H. Carrasco P. Dean A & Perazzo I. (2020). “Los seguros de desempleo ante un mercado laboral en terapia intensiva. Insumos para enfrentar la pandemia”. Institute of Economics of the University of the Republic (IECON).

personal companies with up to 10 employees whose contribution regime is industry and commerce;⁴⁹ and (ii) payment of VAT for companies included in section E, small companies under the *minimo-VAT* regime for the months of March and April.⁵⁰

On the other hand, by waiving the need for banks to reclassify credits or recategorize debtors, these companies, at least no more than now, do not see their possibilities of access to financing on accessible terms downgraded.

In the same vein, the monetary authority implemented a temporary reduction, applicable until 30 June, of the mandatory minimum national currency reserves, the Uruguayan peso and Indexed Unit, for financial institutions. This reduction of compulsory minimum reserves is conditional on the increase of credits by each institution to the non-financial private sector compared with the value of its portfolio at the end of February, and has limits with respect to the current compulsory minimum reserves. According to the BCU, if the increase in credits reaches the total allocated, credits to the private sector would have increased by a total of UYU 14,000 million.

Figure 24. Compulsory minimum reserves for liabilities in national currency

	Current rate	Reduction	New rate
Liabilities with maturities up to 30 days	22%	7%	15%
Liabilities with maturities between 30 and 90 days	11%	5%	6%
Liabilities with maturities between 91 and 180 days	7%	5%	2%
Liabilities with maturities between 181 and 366 days	5%	3%	2%

Source: Own elaboration from Central Bank of Uruguay.

Both measures seek to increase the level of liquidity in pesos in the local sector. This said, the first seeks to directly improve the financial situation of companies in the real economy which it seeks to assist, while the second seeks to ensure an adequate level of liquidity in the local financial sector so that institutions belonging to the financial system do not see their supply of credit reduced due to problems of liquidity.

This type of measure is a requirement for credit to flow normally, into the real economy, which is what it needs most at the moment, unlike others where liquidity needs were in the financial system. In any case, as mentioned above, it must be borne in mind that these measures might not be sufficient in that the financial institutions could opt to reduce their supply of credit, or at least not match the needs of the real economy, due to the exogenous increase in credit risk in a context of extreme uncertainty.

Bearing this in mind, the decision to reduce minimum compulsory reserves conditional on the increase in credits would seem to be a certain movement by the authorities to ensure that liquidity flows to the market only if it is destined to finance the productive sector. The possible retraction of the supply of credit by the banks in a context of greater liquidity could generate unwanted pressures on the exchange rate with the consequent impact on inflation.

To mitigate the problem of the supply of credit, the Government announced the strengthening of the National Guarantee System (SIGA) through the creation of an SIGA⁷ Emergency Fund. This latter will provide partial guarantees of credit to smaller companies, so that they can access financing on favourable conditions. According to what was announced by the Government, the fund will leverage, through the guarantees, a total of USD 2,500 million in credits for these companies.

⁴⁹ In addition, 40% will be subsidized by the State, thus the remaining 60% of these 6 instalments from the month of June.

⁵⁰ This tax is financed in six instalments from the month of May.

As regards the guarantees, companies can obtain these to apply for credits destined for working capital, investment capital or restructuring of existing debt up to 1,200,000.⁵¹ In the first two cases, the guarantee covers up to 80% of the capital lent. In the case of applications for credit to restructure existing debts, the guarantee covers between 50% and 70% of the credit balance. In addition, the minimum amount of the guarantees is IU 16,000 while the maximum is IU 1,200,000.

This mechanism allows financial institutions to share the credit risk assumed in each of their new transactions with companies in the real economy with the Government. This reduces the risk assumed for a given level of uncertainty, which allows the credit offer for this level of uncertainty to be increased.

To complement these measures, other mechanisms were also announced which seek to facilitate obtaining low cost financing for small and medium-sized enterprises. These are the Targeted Credit of the National Development Agency and a “soft” credit line from the BROU.

On the one hand, the Targeted Credit programme of the National Development Agency (ANDE) subsidizes credit lines granted by microfinance institutions so that micro, small and medium-sized enterprises can access financing in national currency on good terms, long maturities, lower interest rates and/or extended grace periods. These credits can be used to finance working capital or to refinance existing debts. The terms of the credits will depend on the currency in which the credit is requested, and its purpose. In addition, a credit line has been made available by the BROU for micro, small and medium-sized enterprises that will have flexible terms for the companies that apply. According to the Government, this line will be able to finance up to USD 50 million, and work is going on to expand it to USD 125 million. In any case, it must be borne in mind that at the time of writing this document, this credit facility is still not operational.

At the same time, and with the objective of directly assisting micro and small enterprises that are more vulnerable to the suspension of activity as a result of the social distancing measures, provision was made for the payment of a subsidy to taxpayers registered as monotaxpayers with the Ministry of Social Development and the National Development Agency will provide a direct loan to the small enterprises most affected by the coronavirus.

With respect to the former, a monthly subsidy was introduced for enterprises registered under the MIDES monotaxpayer regime. This amounts to UYU 6,779 and will be paid for the months of April and May. This will not have to be repaid and will only be granted to enterprises that paid their corresponding obligations in 2019. In addition, with respect to the direct loan by the National Development Agency, this is targeted at owners of small businesses registered in the Social Insurance Bank under the monotaxpayer regime, or those whose area of activities is in the industry and commerce sectors. Specifically, the ANDE will grant a loan in IU for the equivalent of UYU 12,000 pesos, for the months of April and May. Like the BROU soft credit line, this facility is not yet operational at the time of writing this document.

⁵¹ Which allows access to credits of between USD 2,000 and USD 153,000 if it is assumed that 80% of the amount is guaranteed 80%. Source: www.siga.com.uy/garantias/siga-emergencia.

Figure 25. Enterprises eligible for direct credit from the National Development Agency

Tax regime	Type of company	Conditionalities
Monotaxpayer	All	All
Small company – Section E	Single person	No employees
	De facto companies*	Max. 2 partners and no employees
	SRL*	Max. 2 partners and no employees
VAT – Non-professional personal services	Single person	No employees and max turnover of IU 1,000,000
General regime	Single person	No employees and max turnover of IU 1,000,000

*In these cases, both partners can request credit. Source: Own elaboration based on National Development Agency.

As can be seen from the table, some beneficiary companies of this National Development Agency credit are the same as those covered by the deferral of tax payments and social security contributions. This allows them to access resources that will be used to finance the operation of the business and avoid it using the financing to pay liabilities to the State.

Just like the social protection measures, the measures announced to date are going in the right direction, in the sense that they are well targeted and could help to mitigate the disruptive effects of the lockdown on the chain of payments and the productive capital of the economy. However, certain considerations may be made which could represent opportunities to improve on what has already been announced.

On the one hand, while the majority of the measures are aimed at stimulating and facilitating access to credit for micro, small and medium-sized enterprises, it could be the case that large companies also face this type of problem, in particular those whose area of activity is the most affected by the lockdown. To avoid this potential problem, mechanisms should be introduced which minimize the risk of a contraction in the supply of credit for large formal companies which may be facing these severe problems of liquidity. Among these, one might think of repurchase of loans granted by financial entities to the non-financial sector and/or greater strengthening of guarantee funds for credits to large companies. This, in turn, could have positive knock-on effects for micro, small and medium-sized enterprises in the payment chains. Adequate levels of liquidity in the latter could allow them to grant financing facilities – discounts on invoices to flexibilization of payment of debts, to the former⁵².

iii. Final comments: brief notes for “the day after”

Finally, while it is not the purpose of this document, it is worth making a brief commentary relating to another type of measure which will eventually have to be evaluated thinking of the state of the process of reactivation. In relation to this, it is fundamental to underline the exceptional nature of the economic situation and the difficulties of identifying with precision the timing of the type of measures that it may be appropriate to deploy and the sequence at each moment of time (containment-reactivation, supply-demand). Without prejudice to the foregoing, as well as the measures deployed to soften the impact of the shock to the most vulnerable population and mitigate the risk that it will destroy the productive fabric (acquiring a more permanent rather than transitory nature), it is important to think about the design of other measures which might begin to drive the reactivation in the next few months, as the evolution of the virus becomes better calibrated. This is the case of the measures aimed at stimulating aggregate demand, especially investment

In relation to this, national legislation has developed a tax incentive scheme for investment consisting of the Investment Promotion Act (Act 16.906), schemes for specific sectors, the Free Zones, Industrial Estates Act and the Free Ports and Airports Act. At the same time, there are other specific sectors promoted through laws and

⁵² Based on: “¿Cómo evitar restricciones crediticias en tiempos de crisis?” (Julio de Brun, 2020).

decrees which establish specific tax exemptions, such as remote call centres, shared services, forestation, the software industry, tourism, foreign financial intermediation (can operate only with non-resident agents and are exempt from all taxes on their activity) or private investment in housing.

In particular, the Investment Promotion Act declares it of national interest to promote and protect investment by national and foreign investors in the national territory. The same treatment is guaranteed for foreign capital as for local, and the free transfer of capital and profits abroad is guaranteed. This Act is of a general character and sets out exemptions from the tax on Income from Economic Activities (IRAE) to be according to a given timescale, depending on the fulfilment of the objectives of the employment generation plan, decentralization of economic activity, increase in exports, investment in clean technologies or research, development and innovation, as well as other specific indicators depending on the Ministry which evaluates the project. In addition, other tax benefits are established, as in the case of (i) capital tax exemptions on fixed assets comprising the investment in the project, (ii) exemption from taxes and duties on imports of fixed assets declared not competitive with the domestic industry, and (iii) advance reimbursement of Value Added Tax (VAT) included in acquisition of materials and services for the construction of public works.

Since its creation in 1998, the legislative framework which governs the Investment Promotion Act has been amended to adjust to changes in the economic environment. In this regard, we have passed through Decrees No.455 of 2007, No.002 of 2012 and No.143 of 2018, currently in force. In addition, the Executive Power has issued other decrees on temporary incentives with the specific objective of offsetting the effects of the lower investment in specific periods or directly increasing the percentage exemption of the IRAE granting an additional 10% (as happened in 2008, 2015 and 2018).

Looking at what has happened during the last few years, it is possible to argue that the regime has lost its attraction in a framework of low economic growth and problems of profitability. For many years, the generosity of the regime meant that its use was fairly widespread among investors, which drove the materialization of a wide range of projects in various sectors of activity. However, this was changing as the economy became more dynamic and recorded rates of growth above its trend potential. In this framework, the requirements of the regime were increasing the effects of promoting investment with spillover into quality employment (although not quantity) or care of the environment.

By way of illustration, Decree 143/018 introduced changes in the evaluation matrix of investment projects. This means on the way in which points were allocated to each project in accordance with its characteristics, and, ultimately, the way in which the tax benefit was allocated. It is important to remember that in 2018, the economy was already going through a complex scenario, characterized by a marked slowdown in the rate of growth, fall in investment and loss of jobs. For this reason, the change in the regulation sought to address these problems by relaxing some of the criteria that were introduced years earlier, when the economy was growing at rates above 5% and unemployment was at historic lows. For example, the weight of the employment indicator in the matrix was increased and the way of calculating was simplified to give equal weight to the hiring of a worker independent of his wage grade. In addition, the legislative framework was introducing changes to promote more innovative projects and projects which included an environmental component, with preference to the latter. In short, the above highlights the capacity of the investment promotion regime to adapt to changes in the economic scenarios or the objectives or priorities of the authorities.

In the present context, it seems enough to redesign the legislative framework so as to make it attractive again to stimulate its use as the impact of the shock begins to fade and it is necessary to deploy reactivation measures on the demand side. This will mean evaluating the lifting of some restrictions, facilitating access to the instrument, and monitoring and control instruments. A similar path could be adapted for specific regimes for different sectors of activity. In addition, stimulus measures could be adopted in the sphere of public investment. A strategy like this would require adopting other types of action to lift some of the restrictions which are now in effect, and which are particularly strong in the light of the state of the public accounts in this economic situation.

Indeed, the challenges for “the day after” will be of a significant scale and will require introducing reforms of a structural character. While this has already been taken on board by the new authorities, and formed part of a growing consensus among the rest of the relevant actors, the shock associated with COVID-19 will force us to impose a greater sense of urgency and expand the scope of the initiatives.

Specifically, and without claiming to be exhaustive, this means introducing changes in the field of international insertion, education, access to and payment for infrastructure, institutionality and sustainability of the public finances (which includes budgetary reform), public companies, modernization of labour bargaining, promotion of competition and transparency in the non-tradable sector. Indeed, the counter-cyclical policy measures (to shorten the length of the recession and soften its impact) must be complemented by actions designed to restore the growth rate in the long term, restore fiscal sustainability, and improve and complement the design of the social protection network.

Finally, by way of conclusion, it is important to note that the disruption associated with COVID-19 could transform many of the features of the global economy. Specifically, the outlook for key aspects in the investment sphere is still uncertain, especially with regard to foreign investment, capital flows or value chains

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Coronavirus in Colombia: Vulnerability and Policy Options

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Abstract

The COVID-19 pandemic poses complex policy challenges. The main challenge is to prevent a massive contagion that will collapse the health system while avoiding an increase in poverty and the destruction of the fabric of economic life. The need to respond to this challenge raises an additional concern: the fiscal viability of the measures required to reduce the harmful effects on public health and mitigate the economic losses generated by isolation measures.

In this document we present a brief description of the current situation in the Colombian economy and, based on this, we formulate policy proposals having three objectives: (i) Contain the contagion and adjust the health infrastructure. (ii) Mitigate the negative effects of the crisis on the incidence of poverty and thereby achieve compliance with care and self-care measures for living with the virus. (iii) Protect formal employment and help companies to survive.

Finally, we review the measures already implemented and announced by the government in these three dimensions, we analyze the relevance and possible effectiveness of these policies, we propose additional policy measures and, finally, we discuss the possibilities for financing these proposals.

1. Introduction

The situation we face in the current pandemic is full of challenges and uncertainty. On the one hand, there is a health challenge that, until now, has been dependent on the effectiveness of the lockdown measures decreed by the government, the strengthening of the health system and self-care exercised by citizens. On the other hand, there is an economic challenge that depends on the government's effectiveness in maintaining the economy, ensuring the sustainability of those most vulnerable and avoiding repercussions that could destroy the well-being acquired in recent decades. Of course, these challenges are interdependent and actions must seek a balance between public health and economic growth. The way in which we analyze, design and evaluate actions to face these challenges will be definitive for alleviating the effects of the crisis over the long term.

Focusing exclusively or as the main priority on maintaining the short-term operation of the economy would lead to a collapse of the health system and the ensuing health consequences would have a negative impact on the labor supply. Such a human tragedy would result in a worse recession and, consequently, in an increased need for public spending and in productivity losses over the medium term. However, focusing solely on health measures to avoid the collapse of health services would imply paralyzing the productive apparatus and the consequent loss of jobs and companies, with particularly serious consequences for the poorest and vulnerable middle-class households. This would reduce the pace of an eventual recovery.

Therefore, government actions should be directed in such a way as to take both dimensions into account in a complementary manner. On the one hand, taking care of public health means minimizing the risks of contagion and increasing the capacity of the health system to care for the affected population during the peak of infections. An initial lockdown is useful for decreasing contagion and thus avoiding system overload, but it also opens a window of time for investing in educating citizens about self-care and for preparing health infrastructure. However, the quarantine cannot be maintained until the eventual creation of a vaccine, since the government would not have the means to sustain the economy for such a long period of time.

Confinement, by definition, paralyzes much of the economic activity that depends on workers leaving their homes. This in turn decreases the income generated from such production for these workers to be able to purchase goods and services. The longer confinement lasts, the greater the decline in production and income, also generating a decrease in demand for goods whose production may not have been affected at first. Such a vicious circle could end up destroying the productive apparatus, leading to a noticeable decrease in investment, the demise of enterprises and an unprecedented increase in unemployment. This dynamic is particularly worrisome in the context of a labor market with a high incidence of informal economy employment and the fragility of formal employment.

That is why it is necessary to mitigate the negative effects of the paralysis generated by confinement, especially by concentrating on protecting the poor and vulnerable population and minimizing the loss of formal employment, as well as initiating the gradual reopening of the economy. In this regard, the National Government has taken measures that go in the right direction. On the one hand, by means of transfers to the poor and vulnerable population, who are unable to save and where each day of confinement is a day that means a drastic drop in the level of consumption. These transfers, in turn, help this part of the population to comply with the lockdown measures. On the other hand, by means of financing guarantees and payroll subsidies aimed at decreasing labor costs and avoiding layoffs and the loss of jobs.

All this must be done within a framework of fiscal sustainability. An excessively long lockdown would require increasing spending to sustain the economy and, over time, more sectors would be affected by the paralysis of activity and it would take longer to recover. Such higher public spending would mostly be financed by debt. However, excessive indebtedness would discourage future investment, due either to the expectation of higher taxes or the risk of an eventual default. This would reduce long-term growth and the possibility of a fairly rapid

recovery from the crisis. For this reason, it is imperative to balance the length of any lockdown against its financial consequences.

This document highlights the need to analyze and design public health and economic measures to face the challenges posed by this situation. So, by identifying the most vulnerable sections of the population in terms of health and income generation, it is possible to propose actions that overcome the false dilemma between health and the economy. With this purpose in mind, this document is divided into 6 sections, the first of which is this Introduction. The second section focuses on the effects of the pandemic on different economic sectors. The next section addresses the health risks from the epidemic and the eventual easing of the lockdown. The fourth section offers some recommendations, while the fifth section deals with how to finance them. In the last section, we offer some conclusions.

2. Sector and labor market weaknesses

On Wednesday, March 18, the National Government announced a yellow alert after the declaration of a global pandemic by the World Health Organization (WHO). The first government response included canceling events with more than 500 participants, 14 days of mandatory quarantine for anyone arriving from Europe or Asia and the restriction of all airline travel. Two days later, several municipalities (comprising about 45% of the total population) imposed quarantines and general curfews. On March 21, the Government declared a lockdown throughout the national territory starting on March 24 and initially ending on April 13. Then the quarantine was extended until May 25, with a gradual reopening of manufacturing and construction starting April 27, and the inclusion of certain areas of commerce starting May 11.

In addition to the direct shock produced by the lockdown measures, there has also been a shock due to the instability of international markets, particularly for raw materials, and the sharp devaluation of the Colombian peso against the U.S. dollar. In the next subsection we will examine the effect of these shocks on the sectors that have been most affected.

2.1 An overview of the sectors most affected

The sectors that have been directly affected by the general lockdown were commerce, tourism, entertainment and those whose activities are considered to be nonessential, including much of the manufacturing sector. These measures directly affect more than 9.2 million workers (See Table 1) since a large part of the employees in the sectors with the highest levels of employment were idled for 33 days.¹ The relaxation of the quarantine starting April 27, however, has not brought much benefit.

Table 1. Jobs affected by the lockdown by sector

Branch of activity	Total Employment	Idle due to lockdown (% of jobs affected)
Mining and quarrying	39,241	100%
Manufacturing industry	2,500,991	68.11%
Construction	1,520,329	100%
Wholesale and retail commerce, auto and motorcycle repair	4,244,889	56.14%
Transport and warehousing	1,456,198	68.59%
Lodging and food services	1,653,706	100%

¹ In a recent study, Botero and Montañez (2020) estimate a computable general equilibrium model in order to simulate the effect on productivity of not taking containment measures or the expected effects of contagion even with containment measures that decrease the spread of the virus. In our present study, we do not consider the morbidity-linked effects on productivity, and therefore our analysis should be understood as a lower estimate of the effects of the current crisis.

Artistic, entertainment and recreational activities	308,580	100%
Other activities and services	1,025,826	1.38%
Private home services	646,155	100%

Source: DANE, GEIH-19. The list of sectors was elaborated using the International Standard Industrial Classification of All Economic Activities (ISIC) [revision 4].

Branches like manufacturing, which represents 11% of GDP² and employs 2.5 million Colombians, also have to face the shock of the 20% devaluation of the peso. This devaluation implies an increase of approximately 3% in costs for the entire economy and is another dimension of vulnerability that deserves attention, since intermediate consumption of imports is high for many sectors (Table 2).

It should be noted that most of the manufacturing sectors that are most dependent on imports were excluded from the lockdown beginning with Decree 593 of 2020. Although the reason for excluding them was not their dependence on imports, the measure does provide some relief for sectors that have been hit hard by the devaluation. However, the positive effects of this partial reopening may be limited by global interruptions in the supply chains required by these sectors.

Table 2. Intermediate consumption of imported goods, principal Central Product Classification (CPC) products

Sector	Average annual production (billions of COP, 2014-2017)	Intermediate consumption of imported goods (total percentage of intermediate consumption)	Total employees in the sector
Coke oven products; refined petroleum products; nuclear fuels	47.345	29.7	66.936
Agricultural and horticultural products	46.208	18.3	600.721
Meat, fish, fruits, vegetables, oils and fats	33.406	28.8	64.556
Other chemical products; manufactured textile fibers	22.161	44.3	209.597
Knitted or crocheted fabrics; clothing	15.177	29	76.649
Pulp, paper and paper products; printed matter and similar items	14.884	22.1	15.453
Common metals	13.470	54.1	42.904
Basic chemical products	12.569	64.3	480.590
Rubber products and plastic products	11.611	33.8	91.519
Transport equipment	8.545	65.2	485.738
Processed metal products, except machinery and equipment	6.141	33.9	131.916
Leasing services	6.067	38.4	173.921
Leather and leather products; footwear	4.183	20.3	18.033
Machinery and electrical devices	3.315	62.4	599.353
Wood, cork, straw and plaiting material products	2.995	19.1	77.174
Special-use machinery	2.639	84.8	103.296
Yarns and threads; woven textile fiber fabrics, including suedes	2.269	51.3	33.251
General-use machinery	2.013	81.1	101.694
Textile items (except clothing)	2.000	41.9	27.388
Other minerals	912	28.1	20.993
Medical devices, optical and precision instruments, watches	882	86.6	111.165
Tobacco products	570	30.7	172.627

² Figure according to the National Accounts (DANE) for the end of 2019.

Radio, television and communication equipment and devices	400	94.4	107,932
Office, accounting and computing devices	49	94.5	2,582,204

Data source: National Statistics Department (DANE), Matrices de oferta-utilización [Supply-use matrices] (2014-2017) and Matriz utilización desagregada en productos nacionales e importados [Disaggregated use matrix for domestic and imported products] (2014-2017p); Gran encuesta integrada de hogares [Large Integrated Household Survey] (GEIH).

In aggregate terms, the contraction in world economic growth will lead to a drop in global demand for Colombian products and a decline in the terms of trade. On the one hand, the value of exports will experience an unprecedented fall due to the collapse of raw material prices. The decline in the price of oil has exceeded even the most pessimistic forecasts. This lower oil price will imply a 32% reduction in the total value of Colombian crude oil exports in 2020 compared to the previous year, which usually represent about half of Colombian exports. In addition to this, the WTO has projected a decline in international trade of close to 35% for this year. Both factors combined will lead to a decrease of at least 30% in exports for 2020, compared to 2019.

On the other hand, projections for the decline in annual GDP range from 2.5% (Goldman Sachs) to 7.9% (Fedesarrollo), with an estimate of a 5.5% drop made by the National Government itself. Our calculations indicate that the negative impact on labor income will be between 17% and 46% of monthly GDP. If these negative effects last for two months, the annual drop in labor income will be between 2.8% and 7.66% of annual GDP. These figures indicate the proportion of the decline in demand explained by the loss of labor income, but also allow a rough estimate of the decline in supply due to the loss of a large number of workers.

In the next subsection we will delve into the effects of the crisis on employment, income and poverty.

2.2 The fragility of employment and the informal economy

Both the direct effects of the lockdown on vulnerable sectors and the indirect effects on other sectors due to reduced demand lead to an overall drop in the demand for labor. So, the lockdown measures have a negative effect on workers' incomes, with a direct impact on the level of poverty in the country.

In the face of the health and economic crises, forecasts for an economic upturn and a decrease in unemployment cannot be made for 2020. The perspectives for 2020 appear to be far from the unemployment rate of 10.9% and labor income of 23.64 trillion pesos recorded at the end of 2019 (Table 3). The most recent figures on the behavior of the labor market, for the first quarter of this year, already show a loss of 1.58 million jobs and an unemployment rate of 12.6%, almost 2 percentage points more than in March 2019, and the highest since 2010. The fragility of the labor market, associated with the high proportion of employment in the informal economy,³ particularly affects micro and small companies and the productive sectors most affected by the lockdown, as well as female wage-earners (Table 4).

Table 3. Labor force in Colombia at the end of 2019

Economically active population (millions)	24.9
Women	10.7
Men	14.2
Total employment (millions)	22.3
Women	9.2
Men	13.1

³ For this analysis, we consider a person's job to be part of the informal economy if they do not make the legal-required contributions to the pension system. This indicator is the most appropriate one because it reflects the fact that they are outside the standard legal employment contract framework and, therefore, they are either the product of verbal agreements or they are self-employed workers who carry out their activities without the protection of a social security system.

Total unemployment (millions)	2.6
Women	1.5
Men	1.1
Unemployment rate	10.50%
Women	13.62%
Men	8.16%
Monthly labor income (trillions of COP)	23.64
Monthly income of women	8.96
Monthly income of men	14.68

Source: Own calculations based on the GEIH-19, DANE.

With regard to gender, although the labor participation rate is higher for the male population, working women's income is lower than that of their male peers and their unemployment rate is higher, which suggests that, in the employed population, economic vulnerability is greater for women. The situation for women is a cause for concern, given that, according to data from the last population census, 40.7% of households are headed up by women. 29.6% of the members of these households are below the poverty line.

Table 4. Informal employment rates by sex and overall, at the end of 2019

	Employees	Self-employed	Employer	Total
Informal employment rate – men	39.90%	87.00%	71.11%	60.56%
Informal employment rate – women	45.31%	86.01%	72.92%	60.54%
Overall informal employment rate	42.25%	86.61%	71.6%	60.55%

Source: Own calculations based on the GEIH-19, DANE.

Most jobs in Colombia are concentrated in small firms with a high incidence of informal employment or self-employment in low skill-level jobs. In private-sector employment in urban areas, 12.5 million people are either self-employed or work in companies with between 1 and 50 employees, that is to say, about 75% of private employment in urban areas (Table 5). In both urban and rural areas, the incidence of informal employment particularly affects the self-employed and micro and small businesses.⁴ It is important to note that self-employed workers represent about 37% of the labor force (7.6 million) and workers employed in microenterprises (less than 10 workers) represent 31.5% (7.0 million). In these two groups, more than 85% are informal jobs (82.91% in urban areas). These characteristics are cause for concern in the current situation because it makes it difficult to ensure earnings for the majority of the employed population, but also because any future recovery for microenterprise owners and the self-employed will be difficult in the absence of policies specifically aimed at protecting these forms of production, which are often passed over when aid is offered through liquidity credits or subsidies to formal payrolls.

⁴ Decree 957 of 2019 modifies the official classification for micro, small and medium-sized companies. As of the effective date of the decree, the classification of firms is now defined by their gross sales levels. Before the decree, they were classified by the number of workers. In this document, we are using the DANE classification prior to Decree 957 and, consequently, we will consider medium-sized firms to be those that have between 51 and 100 workers. As can be seen in Table 5, more than 75% of employment is concentrated in companies with 100 or fewer workers.

Table 5. Distribution of employment, informality and size of firms

	Urban	Rural		
Panel I: Rural -urban employment in the public sector				
Public sector employment (thousands employed)	777	51		
Panel II: Rural-urban employment in the private sector and incidence of informality				
Private sector	Total employment (thousands)	% informality	Total employment (thousands)	% informality
Self-employed	5.819	88.88%	2.028	97.86%
Micro-enterprises 2–10 employees	4.902	75.78%	2.099	89.70%
Small enterprises 11–50 employees	1.721	25.58%	230	47.07%
Medium enterprises 51–100 employees	490	10.58%	68	21.01%
Large enterprises more than 100 employees	3.82	5.41%	281	11.06%
Total private	16.752	57.16%	4.706	85.35%

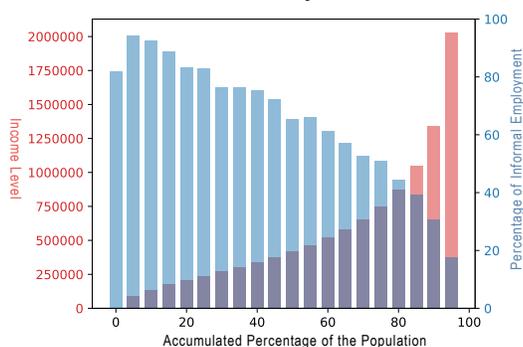
Source: Own calculations based on the GEIH-19, DANE.

Informality, in addition to job insecurity and instability, is associated with low incomes and, therefore, low savings capacity. Figure 1 shows the distribution of total household income (average income per percentile in red) and the proportion of households that depend on income from informal workers in each of the income distribution deciles (blue bars). Informal labor earnings are generally lower, and there is a high concentration of informal workers in the lowest income percentiles, with an evident decline in this proportion as the level of income increases.

In the self-employed group, a distinction must be made between independent professionals, mostly from the liberal professions, and those with low educational levels. Only 14% of self-employed workers have studied at higher education institutions, while around 56% achieve a middle-school education at most (9 years of study or less). Earnings from work activity reflect different educational levels. For those who finish high school, the average income was 634,589 pesos per month in 2019. This represents labor income equal to about 14% less than the minimum wage. In contrast, those having a higher education had an average monthly labor income of 1,164,886 pesos in 2019 (40% above the legal minimum wage).

The median monthly labor income for informal economy workers is close to 500,000 Colombian pesos, compared to 1,100,000 Colombian pesos for formal economy workers. Nearly 3.5 million Colombian households lived below the poverty line in 2018.⁵

Figure 1. Distribution of labor income for informal economy workers



Source: Own calculations based on the GEIH-19, DANE.

⁵ The last official calculation of the incidence of poverty in Colombia, estimated by DANE, is for 2018. Below, we will make estimates for 2019 using a methodology in line with the one reported by this institution, in order to analyze the effects of the current crisis on poverty.

In the current situation, informal economy employees and self-employed workers (both formal and informal) may see their sources of income dry up for two possible reasons: (i) confinement prevents them from going to work, or (ii) even if they do not comply with the quarantine, there is reduced demand for their products or services due to the effects of the lockdown. In the case of formal economy employees, the loss of income occurs to the extent that employment ties are broken.⁶

Remittances have also played an important role in Colombian household income in recent years. According to Banco de la República figures, in the fourth quarter of 2019, 35% came from the United States, 20% from Spain, 13% from Chile, 4% from the United Kingdom and 29% from the rest of the world. Global economic circumstances and, in particular, the situation in Spain and the United States, lead to forecasting a sharp drop in remittances. Despite the devaluation, the Colombian Banking Association estimates that they will fall by 30 to 45% this year.

In order to divide our analysis between a look at the loss of short-term income and a possible longer-term effect, we will first consider the income-loss scenarios particularly associated with the paralysis of sources of income for informal and self-employed workers, and/or those who work in micro and small companies. Then we will delve into the possible effects on formal employment. This separation will allow us to differentiate in our discussion between supportive policies to remedy income loss among the poorest or vulnerable middle-class households, and policies to protect formal employment.

2.3 Fall in labor income and increases in poverty

2.3.1 Characterization of the population vulnerable to a loss of income.

Based on updating the poverty line estimated by DANE for 2018⁷ with information from the GEIH-19,⁸ we found that 29.7% of Colombians –around 14.5 million people– lived in poverty at the end of 2019 (Figure 2).

The vulnerability of a worker's income depends on the interactions among informality, firm size or self-employment, and exposure to a shutdown of production or sector vulnerability. The sectors most affected by the lockdown are, in turn, those with the highest incidence of informality and degree of association with small enterprises (between 10 and 50 employees) (Table 6). In particular, self-employment is practically a synonym for informality in Colombia.

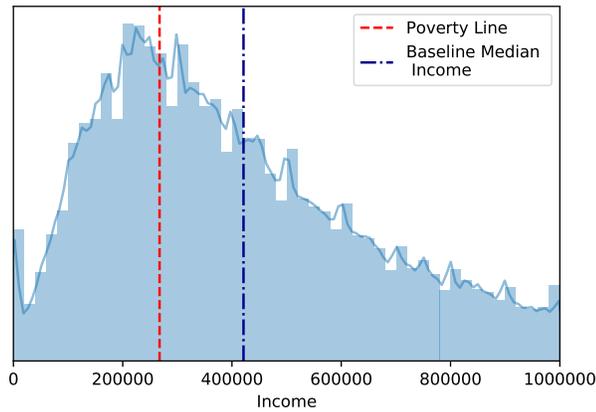
The most vulnerable sectors have higher levels of informal employment, and informality decreases with increased company size. Similarly, women's participation in the labor market is less than men's, the percentage of informal and self-employed workers is higher for women and the percentage of women workers in microenterprises and vulnerable sectors is higher than the percentage for men.

⁶ In these circumstances, transfers in kind and in money are essential to protect informal economy workers, and protective policies are essential for formal economy employment so that jobs are not lost.

⁷ The monetary poverty lines for large geographical domains (large metropolitan areas, other urban areas, and rural and sparsely populated areas) used by DANE in 2018 have been updated with the 3.9% change in the low-income Consumer Price Index for 2019. We use a poverty line adapted by domain for the data reported here. In order to get a graphic idea about the incidence of poverty, we show a national poverty line in the graphs that is equivalent to 267,472 Colombian pesos per capita per month, which is closer to the poverty line for urban centers. It should also be noted that the graphs show the distribution of per capita income based on estimating the income of the spending unit (household) divided by the number of members in that unit. Per capita income is estimated in this way for each individual reported in the survey, whether child or adult, and this therefore represents the entire population.

⁸ Using this information, we calculate the per capita income of each member of the household. Households are considered to be the expenditure units declared by the respondents and the calculation of per capita income follows the DANE income composition methodology, including a procedure for imputing housing rent and the elimination of extreme values and false zeros.

Figure 2. Income distribution and the poverty line: 2019 baseline.



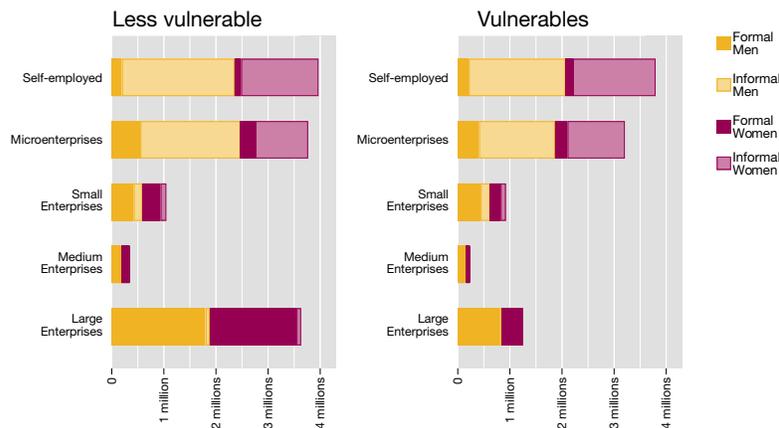
Source: Own calculations based on the GEIH-19.

Table 6. Distribution of the labor force by firm size and informality

Business size	Total workers	# Jobs in a sector less vulnerable to lockdown	Proportion of informal workers in less vulnerable sectors	# Jobs in a sector vulnerable to lockdown	Proportion of informal workers in vulnerable sectors
Self-employed	7,847,054	4,025,576	92.22%	3,821,478	90.12%
Microenterprise (2–10 employees)	7,000,219	3,822,598	79.40%	3,178,622	80.43%
Small (>10–50 employees)	1,970,600	1,076,662	26.29%	893,938	29.68%
Medium (>50–100 employees)	579,224	356,044	11.83%	223,180	10.75%
Large (>100 employees)	4,889,183	3,708,838	4.45%	1,180,345	6.14%
Total	22,287,280	12,989,718	55.53%	9,297,562	68.39%

Source: Own calculations based on the GEIH-19, DANE.

Figure 3. Formal and informal employment by company size (women and men)



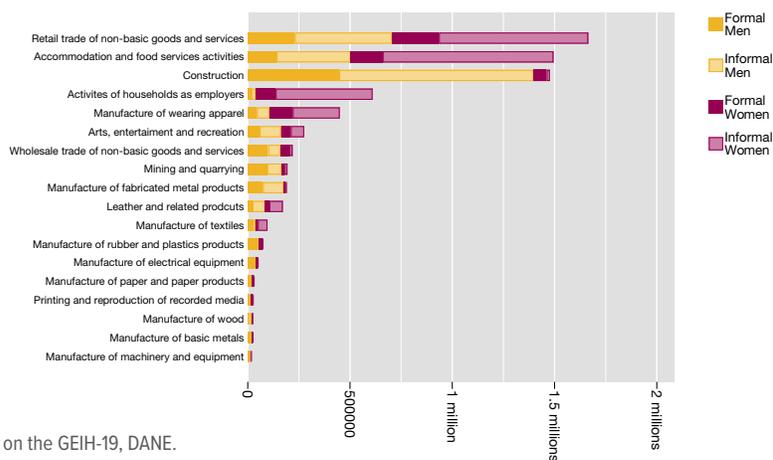
Source: Own calculations with data from GEIH-19, DANE.

Note: Self-employed includes self-employed workers and sole proprietorship workers

High rates of informality occur mainly in the retail trade, construction and domestic service activities. These are activities that were directly affected by the lockdown, and that, with the exception of construction, will surely remain idle until the end of the current crisis.

If we analyze the distribution of informality, distinguishing between sectors that are more vulnerable to a halt in their activities due to the lockdown, we find that the incidence of informality is higher in those that we will refer to as being more vulnerable. In this sense, two dimensions of economic vulnerability come together for these sectors: a higher incidence of informality and higher risks of contagion due to the nature of their occupations. Again, women represent a high proportion of this last highly vulnerable sector (Figure 4).

Figure 4. Formality and informality in vulnerable sectors

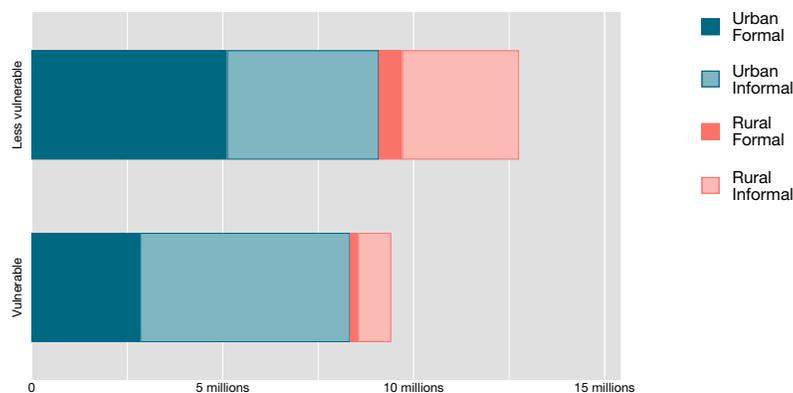


Source: Own calculations based on the GEIH-19, DANE.

Exposure to contagion and economic vulnerability may be lower for the agricultural sector since, as an essential sector, it has continued to operate, has a lower population density and fewer channels for contagion (Figure 5). However, the increase in the cost of imports makes producing these goods more expensive and restaurant and hotel closures reduce the demand for agricultural goods. Furthermore, the rural population is vulnerable due to a lower income level and the shortage of health infrastructure.

Rural areas also have a higher prevalence of housing conditions that increase the risk of contagion and the risk of diseases that may be exacerbated by exposure to this virus (chronic risk). This implies that the economic cost of contagion would be higher for a rural worker than for an urban one, although the probability of contagion is lower.

Figure 5. Formality and informality in rural areas versus urban areas, and in vulnerable sectors versus less vulnerable ones



Source: Own calculations based on the GEIH-19, DANE.

2.3.2 Possible increased poverty scenarios

Below, we present different scenarios for changes in poverty caused by the quarantine. In each of the scenarios, we simulate the effect of the quarantine without including the measures that the government has taken and, subsequently, we analyze the effect of the transfers that the government has implemented to reduce the harmful effects of the crisis on poverty.

The uncertainty of the situation in which we find ourselves makes it necessary to analyze possible scenarios in order to identify and design adjustments to such measures. These scenarios cover three dimensions: employment vulnerability taking into account the fragility of employment ties; employment vulnerability due to lockdown inactivity; and company size. It is important to distinguish between the probably temporary loss of earnings on the part of informal workers, and the possible loss of formal jobs that would take longer to recover in the context of a prolonged recession.

The scenarios allow us to analyze the effects of these dimensions (as well as the effect of combining them in some cases) on: the number of jobs affected; the aggregate loss of labor income; the new remaining situation in regard to employment and unemployment in the labor force; and, finally, the incidence of poverty.

Table 7 summarizes and compares the different scenarios considered. Scenario A supposes short-term paralysis of more vulnerable employment in all economic sectors, i.e. informal workers, the self-employed and informal jobs in companies with 100 workers or less. In these companies, due to limitations on their liquidity, all informal employment would be lost, because they are the easiest jobs to dispense with. In scenario B, we consider the complete loss of both formal and informal jobs at companies with 100 or fewer employees in the sectors most vulnerable to economic paralysis due to lockdown measures. In scenario C, we consider the effect on the same vulnerable sectors as in scenario B, but limiting ourselves to informal jobs and self-employment in micro and small enterprises (50 employees or less), excluding those who report being proprietors or employers.

The plausibility of each of these scenarios depends on the duration of the paralysis, the ability of government policies to maintain informal workers' incomes and formal jobs in the most vulnerable firms due to their size and the sector where they operate, and also on gradual reopening strategies and their effectiveness.

Scenario C reflects five elements that have interacted in recent days: 1) informal workers cannot secure their incomes because payment and hiring commitments are not binding or they simply have lost the demand for their services or the ability to offer them, which is the case with the self-employed; 2) the liquidity of small firms has reached its limit and very few of them manage to operate due to the paralysis not only of their production but also of their supply and marketing chains; 3) the reopening of the economy has already begun; 4) formal firms will receive payroll subsidies from the government; 5) the "United for Colombia" Special Guarantees Program has increased the guarantees granted by the National Guarantee Fund for micro and small enterprises.

This scenario, however, does not include the dissolution of formal employment contracts that, in light of the latest data, has already begun to occur, and it is difficult to anticipate the effect of employment protection policies. In addition, it is too soon to assess the effect of employment protection policies. In this sense, it is an optimistic scenario because, as already mentioned, the unemployment rate in March 2020 reached its highest level in the last 10 years. These figures allow us to see the tip of the iceberg in regard to the effects of the crisis, since they only include a few days of lockdown at the end of March. However, this situation will deepen if we do not act quickly with strategies to sustain formal employment, which is more difficult to recover, and to protect the most vulnerable companies' ability to maintain payroll payments in the absence of income. Moreover, it is possible that the paralysis of activities for workers in the informal economy may only be temporary, but they will also be affected by the decline in demand. This would have the effect of increasing the unemployment rate, to the degree to which these workers seek sources of income on which their livelihood depends.

We might presume that with the extension of the lockdown beyond the first month, we are moving from scenario C toward scenario B, where we assume that all jobs in vulnerable sectors are affected. The latter scenario becomes more likely the longer the quarantine lasts. As we will explain in detail later, the loss of formal economy jobs, initially in the sectors vulnerable to closure, may be followed by losses in other sectors.

In scenario B, what is most notable is the increase in the loss of informal economy jobs in companies with 1 to 100 workers, including these companies' proprietors and employers. The number of formal economy jobs lost in scenario B is 1.9 million. Their average monthly labor income is 1.2 million pesos. The total monthly labor income that is suspended in this scenario is about 7 trillion pesos, of which 2.2 trillion come from income from formal jobs, for which recovery will take a long time.

Table 7. Summary of scenario results

	Scenario A	Scenario B	Scenario C
	Affects all fragile jobs in any activity sector	Affects all jobs in vulnerable sectors	Affects only fragile jobs in vulnerable sectors
PANEL I: Change in the labor force			
Jobs affected, in millions	14.9	8.27	6.5
Women's job loss, in millions	6.2	3.49	2.9
Men's job loss, in millions	8.7	4.78	3.6
Jobs affected as a percentage of total employment	66.77%	37.11%	29.41%
Women's jobs affected as a percentage of total female employment	67.40%	37.86%	31.60%
Men's jobs affected as a percentage of total male employment	66.32%	36.58%	27.87%
Estimated monthly income loss (trillions of COP)	10.94	6.7	4.03
Women's estimated monthly income loss (trillions of COP)	3.85	2.59	1.26
Men's estimated monthly income loss (trillions of COP)	7.09	4.11	2.77
Monthly income loss as a percentage of total labor income	46.30%	28.35%	17.96%
Women's monthly income loss as a percentage of women's total labor income	43.03%	28.95%	20.29%
Men's monthly income loss as a percentage of men's total labor income	48.30%	27.98%	16.54%
PANEL II: Labor force results for each scenario			
Total employed population (millions of people)	7.4	14.02	15.73
Women employed (millions of people)	3	5.73	6.31
Men employed (millions of people)	4.4	8.29	9.42
Total unemployed population (millions of people)	17.5	10.89	9.17
Unemployed women (millions of people)	7.7	4.95	4.37
Unemployed men (millions of people)	9.8	5.94	4.8
Unemployment rate	70.26%	43.72%	36.82%
Unemployment rate for women	71.84%	46.33%	40.92%
Unemployment rate for men	69.07%	41.75%	33.75%
PANEL III: Increases in the incidence of monetary poverty (percentage points of the total population below the poverty line)			
Total increase in the incidence of monetary poverty (percentage points above the baseline)	28.9	17	10.2
Urban	22.5	19.2	13
Rural	35.8	10.0	9

Source: Own calculations based on the GEIH-19, DANE.

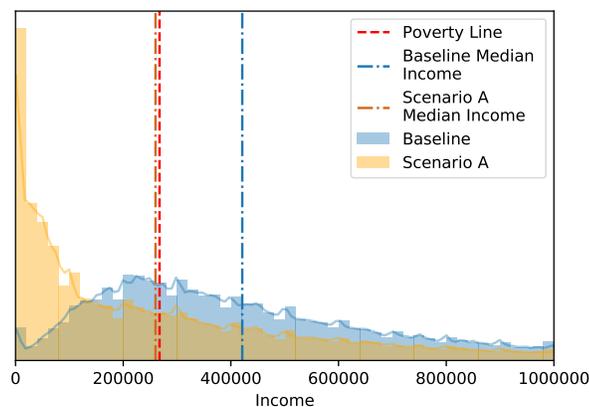
In scenario A, we assume that everyone employed in the informal economy or who is self-employed⁹ will lose their labor income in all sectors of activity. The estimated loss of aggregate income would be 11% of the 2019 total annual GDP if the loss of income lasts for an entire year, and the percentage of the workforce that is idle might reach 70.6%. Consequently, even when preserving formal employment, the magnitude of this reduction can have permanent effects on private investment and the country's social stability. The magnitude of this effect depends on the duration of the lockdown, but also on the longer-term effect on sectors facing a significant loss of demand due to the effect of voluntary social distancing and the drop in consumer demand, which will occur naturally during the rest of this year. Although it is difficult to estimate the depth of these impacts, this scenario allows us to gauge how the fragility of informal employment in all sectors represents the potential for greater fragility of the country's social fabric. Although this scenario is an extreme one and unlikely to occur, due to the actions currently being undertaken by the government and because lockdown measures are beginning to be lifted, it is nevertheless worth considering as an upper limit for short-term social impacts.

The immediate effects on poverty from these different scenarios allow us to observe the dimensions of the direct social impact of the lockdown. Figures 6A, 6B and 6C show the results of our estimates for the incidence of monetary poverty using the situation in 2019 as the baseline and comparison level (Figure 2).

In scenario A, the incidence of poverty would increase by 28.9 percentage points. This is because the income of about 15 million people would fall below the monetary poverty line. At least temporarily, 60% of the population would be poor and the median per capita income (the solid orange line in Figure 6A) would be below the poverty line.

As stated above, it is possible that the loss of income on the part of informal workers may be transitory because a significant part of this group of workers are self-employed and, in this case, the effect on poverty would then also be transitory. However, for the most vulnerable population, the drop in income may affect nutrition and, therefore, the accumulation of human capital. For these reasons, it is important to avoid a situation in which households or individuals cannot meet their basic needs.

Figure 6A. Income distribution and poverty in scenario A



Source: own calculations based on the GEIH-19, DANE.

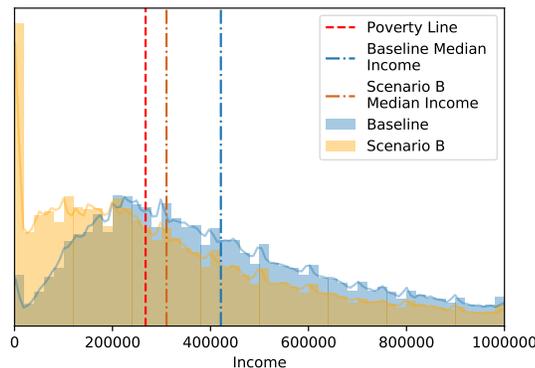
This scenario, although not very probable, reveals the fragility of recent achievements in the reduction of poverty and the growth of the middle class in Colombia. Many households receive income mainly from informal or self-employment activities, corresponding to a very large number of people who would completely lose their income.

⁹ It is worth noting that among the self-employed, about 800 thousand are in the formal economy and contribute to the pension system. This is a more educated labor force than the self-employed in the informal economy. Their average income is about 1.5 million pesos a month, according to information from the GEIH-19.

In scenario (B), only formal economy companies with more than 50 employees maintain employment and overcome the crisis. In this scenario, we find a contraction in labor income of up to 6.7 trillion pesos per month (approximately 7% of GDP if the loss occurs for an entire year), a loss of 8.4 million jobs, and an unemployment rate over 44%, at least, during the months of paralysis. This would lead to an increase in poverty of up to 17 percentage points (Figure 6B) due to the loss of income for the vulnerable middle class, with a distribution median slightly above the poverty line.

This is, of course, an extreme scenario, since formal-sector workers can move over into the informal economy (instead of unemployment), which would translate into reduced earnings but not the total disappearance of their earnings. However, if informal economy workers' incomes during quarantine are below the poverty line, the result for the rate of poverty would be maintained.

Figure 6B. Income distribution and poverty in scenario B

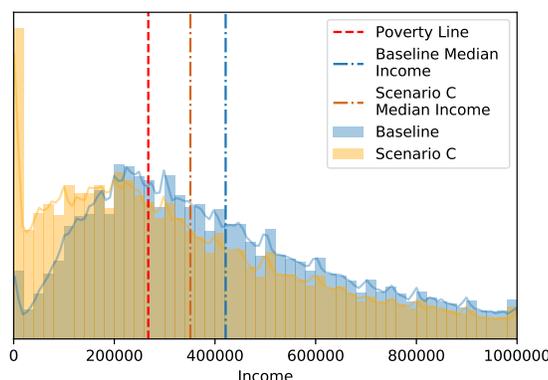


Source: Own calculations based on the GEIH-19, DANE.

If the most fragile jobs in the vulnerable sectors are lost, we would find ourselves in scenario C, where it is possible to analyze the loss of income on the part of workers with low income-generating capacity who live from day-to-day and do not have a safety net. We assume that employment in the public sector is maintained, as well as the labor income of company owners and their management cadre. Although this is an unlikely situation, since various formal-sector medium and large enterprises are already sustaining losses due to the fall in demand, it is probable that this assumption will affect the income distribution level but not the rate of poverty.

In this scenario, there is an estimated loss of 4.3 trillion pesos in monthly labor income, or approximately 4% of GDP if the loss lasts for a full year. About 48% of Colombian households, i.e. 6 million households, would face partial or total loss of income. The median individual income is just over 60 thousand pesos below the baseline and a similar distance above the poverty line (Figure 6C).

Figure 6 C. Income distribution and poverty in scenario C



Source: own calculations based on the GEIH-19, DANE.

These features reinforce the idea that the level of vulnerability is very high in the current situation for the population that is not the target of government aid programs, because they are not below the poverty line. It was estimated that close to 3 million households were in extreme poverty at the end of 2018, according to the information system used to target subsidies (SISBEN IV). These are the households that currently receive the most important government aid, such as the Families in Action program. In addition, the National Government has decided to implement emergency programs to reinforce this aid (which we will discuss later) as a way to protect the most vulnerable population at this juncture. However, transfers are also required for households that were not previously poor but have a high probability of falling into poverty in the wake of the crisis. The government is making very important efforts for its programs to cover vulnerable households and populations that fell outside the target criteria for subsidies like Families in Action, Senior Citizens or Youth in Action. One of the most important achievements in regard to these efforts in recent weeks has been to reach new households, and especially those with informal and very unstable incomes close to poverty levels, who were not previously targeted for assistance because of having material conditions of life above those specified in the targeting criteria.

Although Colombia managed to reduce extreme poverty and, to a lesser degree, inequality during the first two decades of the 21st century, these results are fragile. Increased labor income, greater participation of household members in the labor market, as well as the expansion of transfers, achieved a reduction in extreme poverty in the country (World Bank, 2014). The current crisis situation reveals with unusual force how the vulnerability of the middle class to economic cycles requires more structural responses over the medium and long term, as well as unprecedented short-term emergency action to help low-income workers in the informal economy.

According to our estimates, the additional 145,000 pesos through Families in Action would only lead to a reduction of 1 percentage point (less than 500,000 people) in the poverty level that goes up 10.2 percentage points in scenario C. This money is assigned to households that are already targeted by the same program (about 2.5 million).

The central message of scenario C is precisely that any disturbance in income for fragile households represents increased poverty due to income reduction for the vulnerable middle classes. Even if this disturbance is temporary, the deterioration in the living conditions of about 5 million people must be addressed. This requires reaching just over 1.3 million households in addition to the 2.6 million already covered by the subsidies. If the assistance is similar to what is already defined in the Solidarity Income program, at a rate of 320 thousand pesos per household in two installments of 160 thousand pesos for the two months of confinement, the cost of broadening the program would be 208 billion pesos. However, this amount of assistance per household may not be enough for spending units that have lost most of their income to avoid falling into extreme poverty levels of consumption (approximately 122 thousand pesos per person in 2019), for a household of 4 people.

If, on the other hand, the 160 thousand pesos assistance were to reach 5 million people, the cost would rise to 800 billion pesos during the support periods. This help might prevent most households from falling into extreme poverty and might prevent, at least temporarily, another important group from falling into poverty who have just emerged from it in recent years.

2.4. The vulnerability of formal employment

In the scenarios we have considered above, the paralysis of informal employment and the loss of formal jobs in sectors vulnerable to the lockdown were quantified. However, once the quarantine ends, the effects of changes in employment will be very different for formal and informal economy workers. During the lockdown, self-employed workers in the informal economy may not work or have no demand for their products, but once the lockdown is over, they will be able to return to conditions similar to those before it. This implies that, in terms of employment, the negative shock for the informal sector is transitory and the recovery of this sector

will probably be faster than that of the formal sector. In terms of income, the recovery of the informal sector will not be as quick, since the contraction of the formal sector will generate lower demand for products and services produced by the informal sector. It is also possible that the informal sector may grow significantly due to a probable transition to informal jobs by those losing formal employment, which may accentuate the fall in the incomes of informal economy workers.

A situation similar to the one experienced in Colombia during the last severe crisis (1999-2000), when the rate of informality (measured by not contributing to pensions) reached more than 70% (Flórez 2002).

Similarly, informal enterprises are not usually registered as legally constituted companies. For this reason, although their sales may be severely curtailed, it is likely that they will not have fixed costs related to paying taxes or paying interest. Formal enterprises, in contrast, must pay taxes and pay off their debts and, in the event that they cannot pay these fixed costs, they will have to close, thus eliminating formal-sector jobs.

This implies that, in the face of reduced incomes for informal economy workers and enterprises, the policy response should be based on monetary transfers that mitigate the economic blow of the quarantine, while for formal economy workers and enterprises, employment protection policies and financial support for enterprises are required.

Assuming that enterprises that have 100 or more workers will be the most resilient to the effects of the crisis, we focus our attention on the possible losses in formal employment in micro, small and medium-sized firms,¹⁰ and we include the formal-sector self-employed. Table 8 shows average labor income, the percentage of formal economy workers with fixed-term and indefinite-term contracts, the percentage who are self-employed and the percentage of workers with nine years of schooling or less.

Using these indicators, we define a lower and an upper limit for job losses in the labor sector. At the high end, we assume that all workers who do not have indefinite-term contracts in all economic sectors will lose their jobs. In this case, 2.3 million jobs are lost and monthly income drops about 3.2 trillion pesos. At the lower limit, we assume that only self-employed workers in vulnerable sectors lose their jobs, which would represent 356 thousand jobs lost and a loss of monthly income of about 0.45 trillion pesos.

Table 8. Formal employment in firms of 100 or fewer workers

	Total workers (thousands)	% Self-employed	% NOT indefinite-term contract	% with 9 years of schooling or less	Average labor income (pesos/month)
In all economic sectors	4,110.5	20.66%	55.90%	29.18%	1,392.7
Vulnerable economic sectors	1,877.1	18.99%	55.40%	30.15%	1,281.9

Source: Own calculations based on the GEIH-19, DANE.

Obviously, the exercise of identifying ex ante formal jobs that may be lost is imprecise. For this reason, this exercise is most useful for getting an idea of the order of magnitude so as to identify payroll subsidy recipients. For the latter, the proposal recently brought forward by the National Government to grant payroll subsidies to firms that have been affected by a drop in income greater than or equal to 20% is appropriate. This is a way to identify vulnerable companies once these vulnerabilities have materialized.

¹⁰ According to the aforementioned firm size classification, medium-sized firms have 51-100 workers. More than 80 percent of employment is concentrated in firms with less than 100 workers, including self-employed workers.

However, the subsidies could focus even more on small and medium-sized companies, and only be given to employees who earn up to two times the monthly minimum wage. Support for large companies can be provided through loan guarantees, as the Government has proposed. In Section 4 we will delve into possible refinements to this policy.

On the other hand, the subsidy is only for legal entities. These represented 24.3% of the country's productive units in 2019.¹¹ In the case of businesses registered in the name of natural persons (75.7% of the productive units), individuals are responsible for the company's debts and obligations, while for legal entities, the company's –not the partners'– assets are used to pay off debts. In this sense, the policy is excluding vulnerable firms and individuals.

To avoid the massive loss of jobs, maintain the society's well-being that has been eroded by the lockdown, and avoid excessive government debt that may have perverse effects over the medium term, the gradual reopening of the economy is imperative. For this reactivation, it is necessary to take public health measures to keep the epidemic under control during the process and avoid future lockdowns that would block the path to reopening. In the next section, we describe the state of the current health infrastructure for dealing with the pandemic, the risks that the population faces, and the measures that are necessary to make the current lockdown more flexible.

3. Public health measures

Mandatory preventive isolation for the entire population was initially imposed until April 13 and later extended until May 25. The idea behind this restriction was to “flatten the curve” and buy time to prepare the health infrastructure and the contagion prevention strategy. In addition to this measure, the government has released a preventive measures protocol for the general population¹² and has established protocols for companies in the sectors that remain active. An effort has also been made to increase the number of tests to identify infections. During the month of March, the number of daily tests was less than a thousand; in April this number rose to two thousand and so far in May it has fluctuated between four and six thousand.

Currently, some productive sectors are resuming their activities and the possibility of further extensions of preventive isolation is being discussed. In this context, it is prudent to analyze the current state of the health infrastructure and the ability to test and trace in order to implement a selective quarantine policy.

It is well known that massive testing is essential to follow, monitor and reduce the rates of contagion and, in this way, the harmful effects of the epidemic. Testing makes it possible to detect asymptomatic cases, applying selective confinement actions, identifying possible contagion and, at the same time, estimating the risk of infection in specific population groups.¹³

The number of tests per million inhabitants in Colombia is relatively low (less than three thousand on May 6) compared to successful cases of virus control such as South Korea (more than ten thousand), and even in the case of more affected countries, such as Italy (more than twenty thousand) and the United States (about twelve thousand). The figure is also low compared to other Latin American countries: Peru and Chile have carried out more than eleven thousand tests per million inhabitants, Ecuador has carried out a little over four thousand five hundred tests per million inhabitants.

¹¹ According to CONFECAMARAS's Registry of Societies and Enterprises. By the end of 2019, there were 1.5 million registered firms; 1.1 million were registered under an individual's name, and 360 thousand represented legal entities.

¹² Glove and mask use, posture changes, medicine supply, etc. See: www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/infografia-coronavirus-adulto-mayor-19.pdf

¹³ Colombia uses the RT-PCR test, which detects the virus's genome, is a reliable way to confirm the existence of infectious diseases. Nonetheless, it has several limitations: (i) It takes time to process, which limits the amount of results that can be reported in a single day. (ii) Global demand for this test's components and reagents surged, causing a shortage of these supplies. (iii) Contamination or degradation can cause false positives or false negatives. (iv) These tests can only indicate whether an individual has the virus at the time of testing, but do not report whether the individual had the virus and recovered. This last point shows the importance of carrying out both PCR and serological tests, since the latter can detect antibodies resulting from immune response to previous infection.

However, although the number of tests per million inhabitants provides an idea of the magnitude of the effort, a more appropriate metric for determining if there are sufficient identification and tracking resources may be the number of tests per infected individual. In a recent paper, Siddarth and Weyl (2020) point out that, if there is imperfect tracing, about 140 tests are required for each confirmed positive. With around 12,000 confirmed cases in Colombia, it would be necessary to apply more than one and a half million tests, a figure much higher than the one observed. If contact tracing is perfect, the number of tests is reduced to 11 per infected individual. This implies that at least 6000 tests should be performed daily. However, given the increasing trend in the number of cases, the need for tests will also grow and, on the other hand, the perfect tracing assumption is rather extreme. Of course, in addition to the number of tests, tracing speed and the ability to quarantine people who have possibly been infected are also very important.

In addition to the foregoing, testing should be extended to people in unconfined population groups and to workers in essential sectors. Proper monitoring and control of contagion also requires random testing of workers in reactivating sectors.

It is difficult to estimate the exact need for testing. However, if the 10,000 daily test threshold is exceeded, we will have a much more accurate knowledge of the contagion rate, case fatality and vulnerability of different population groups. In addition, we would be doubling the number of tests in thirteen days.

Recently, the Minister of Health stated that the country is capable of carrying out 12,000 tests a day, i.e. 360,000 tests a month. Applying this number of tests would have a monthly cost close to 120 billion pesos but would also allow a targeted preventive isolation policy, significantly reducing the costs of the current quarantine.

3.1 Differential risk

Considering the differential risk of contagion (acute risk) and the consequences of the disease (chronic risk) is essential for targeting health measures. Individual and contextual factors determine acute and chronic risk levels. Housing characteristics (access to public services, sanitary facilities, overcrowding, construction materials, cooking methods) also influence risk (Table 9).

Table 9. Housing conditions and COVID-19 risk.

Acute risk	Chronic risk
Type of sanitary service	Energy source for cooking food:
- Septic tank	- Oil, gasoline and/or kerosene
- No pipe connection	- Firewood or wood
- Latrine	- Mineral coal
- No sanitary services	- Waste materials
Use of sanitary service shared with other households in the housing	Housing wall construction material
Overcrowded housing	- Zinc or cloth
No piped water service	- Rough wood
No sewage service	- No walls
Source of water for human consumption	Housing floor material
No pump system	- Earth, sand
Rainwater	- Rough wood
Public trough	No piped water service
	No sewage service
	Source of water for human consumption
	- No pump system
	- Rainwater
	- Public trough

In Colombia, there are more than 18 million people whose housing conditions increase acute risk; more than 10 million live in conditions that increase chronic risk, and more than 19 million are at both acute and chronic risk due to lack of a lack of water and sewage service (Table 10). The differences in the number of people at risk in urban and rural areas are important, indicating the need for differential policies for each setting.

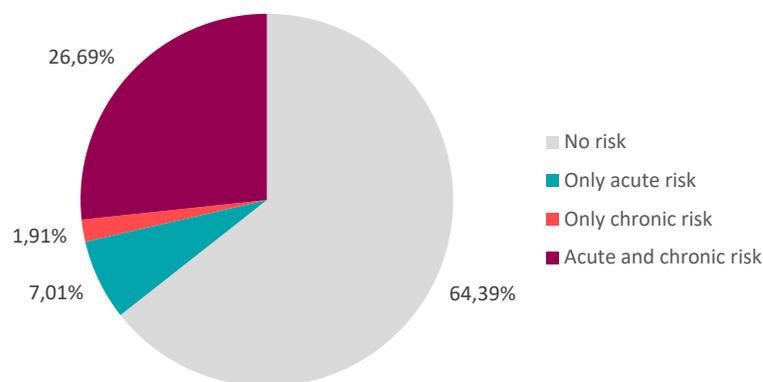
Table 10. People in acute and chronic COVID-19 risk conditions

Housing conditions	Urban	Rural	Total
Housing conditions that increase acute risk			
due to type of sanitary service	2,548,417	9,554,878	12,103,295
due to use of sanitary service	1,698,407	439,054	2,137,461
due to crowding	2,831,717	1,693,058	4,524,775
Housing conditions that increase chronic risk			
due to energy source	432,934	5,211,006	5,643,940
due to wall construction material	891,799	2,010,768	2,902,567
due to floor material	1,390,093	2,585,054	3,975,147
Housing conditions that increase acute and chronic risk			
due to lack of sewage system	2,648,566	9,545,807	12,194,373
due to lack of piped water	801,328	5,059,203	5,860,531
due to water source	339,173	1,535,492	1,874,665

Source: Own calculations based on the GEIH 2019, DANE

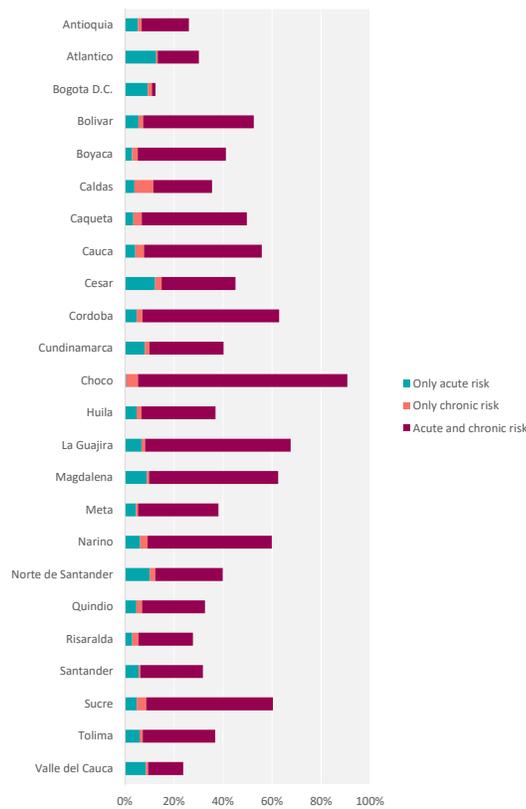
In Colombia, at least 31.7 million people live in housing with characteristics that may put its inhabitants at acute and/or chronic risk. Figure 7a shows the percentage of people who are at some risk level. There are also regional differences (Figure 7b) and age range differences (Table 11).

Figure 7a. National distribution of acute and chronic COVID-19 risk due to the housing conditions in which they live



Source: Own calculations based on the GEIH-19, DANE.

Figure 7b. Geographical differences in acute and chronic COVID-19 risk



Source: Own calculations based on the GEIH-19, DANE.

Given these risk characteristics, the consequences of COVID-19 are more severe as age increases. Taking into account the fatality rate for this disease reported by CDC (2020), Table 11 shows the number of people in each risk category by age range.

Table 1. Deaths in each age group due to acute and chronic COVID-19 risk

Age ranges	Fatality rate	No risk	Only acute risk	Only chronic risk	Acute and chronic risk	Total losses
Under 40	0.002	39.184	5.249	1.128	17.893	63.454
40–49	0.004	15.632	1.232	406	5.951	23.221
50–59	0.013	45.910	3.213	1.475	15.061	65.659
60–69	0.036	85.990	5.054	2.909	28.206	122.158
70–79	0.08	105.52	5.460	3.726	35.914	150.619
Over 80 years old	0.15	100.457	4.802	3.933	29.233	138.425
Total losses		392.692	25.011	13.576	132.258	563.538

Source: Own calculations based on the GEIH-19, DANE.

It is important to note that age is not the only determinant of the fatality rate. A meta-analysis by Yang, Zheng, et al. (2020) shows that severe cases of COVID-19 were associated with comorbidities such as hypertension and respiratory and cardiovascular diseases. For its part, DANE (2020) constructed a contagion vulnerability index taking into consideration hypertension, diabetes, ischemic heart disease, chronic lung diseases and cancer. Some of these comorbidities are associated with the contextual factors included in our definition of chronic

risk, so this population segment may have a different fatality rate than the average for the general population. However, not all possible comorbidities are included, and it is being assumed that U.S. fatality rates are similar to what will happen in the case of Colombia. We therefore believe that this is a conservative estimate. This data points to the need for specific management by region, age group and incidence of comorbidities when designing isolation policies.

3.2. Differential risk and gradual reopening

The National Government has announced that the construction sector, some manufacturing subsectors,¹⁴ vehicle trade and repair, furniture wholesaling, and door-to-door sales of books, stationery and laundry items may gradually resume their activities under strict health protocols. In this section we estimate the health costs of this reactivation of the economy. For this purpose, we calculate the use of the installed bed capacity only for the population that meets the following two requirements:

1. Some household members have a formal job in the construction, manufacturing and/or commerce subsectors included in Decree 636 of 2020.
2. They live in crowded conditions.

Under the assumption that all workers who meet both conditions become infected and infect their families, it is possible to determine the size of the population at acute risk due to this measure. In addition, we use the parameters of the epidemiological model from the INS (2020), which indicates that only 2.8% of those infected require hospital care and 0.9% require intensive care.

Including construction sectors and part of manufacturing and commerce implies that 6.29% of those employed in 2019 go out to work. Despite being a small segment of the labor force, Table 12 illustrates that in departments such as Antioquia and Quindío, infections in this population would require more than 100% of the ICU capacity. Even a lower rate, such as the one for Bogotá (60.32%), is high considering that this scenario excludes other people being infected and other patients requiring intensive care.

Table 12. Use of the installed bed capacity at health care providers (IPS) having emergency care, by department.

	Use of available ICUs		Use of installed hospital capacity		Use of (maximum) hospital capacity*	
	only acute risk	acute and chronic risk	only acute risk	acute and chronic risk	only acute risk	acute and chronic risk
Antioquia	105.46%	6.94%	28.44%	21.30%	1.87%	1.40%
Atlantico	74.58%	20.44%	30.73%	18.26%	8.42%	5.00%
Bogota D.C.	60.32%	0.00%	22.61%	14.66%	0.00%	0.00%
Bolivar	46.88%	17.89%	16.19%	9.10%	6.18%	3.47%
Boyaca	15.16%	17.33%	3.92%	2.76%	4.48%	3.15%
Caldas	19.01%	11.72%	6.21%	4.18%	3.83%	2.58%
Caqueta	14.43%	3.16%	3.15%	1.58%	0.69%	0.34%
Cauca	11.01%	24.59%	3.55%	2.02%	7.93%	4.51%
Cesar	11.67%	0.00%	4.93%	2.79%	0.00%	0.00%
Cordoba	3.81%	5.05%	1.75%	0.97%	2.32%	1.29%
Cundinamarca	49.68%	22.55%	14.69%	9.99%	6.66%	4.53%
Choco	28.59%	7.12%	4.71%	3.09%	1.17%	0.77%
Huila	18.27%	0.00%	7.44%	5.59%	0.00%	0.00%
La Guajira	18.24%	18.58%	7.11%	3.50%	7.24%	3.57%

¹⁴ Decree 636 of May 6, 2020 defines lockdown exceptions.

Magdalena	33.59%	30.04%	7.37%	4.23%	6.59%	3.78%
Meta	40.71%	24.00%	9.98%	4.76%	5.89%	2.80%
Narino	6.16%	0.81%	2.16%	1.20%	0.29%	0.16%
Norte de Santander	26.22%	1.20%	9.45%	6.36%	0.43%	0.29%
Quindío	129.89%	68.93%	28.86%	17.71%	15.32%	9.40%
Risaralda	41.23%	0.00%	10.32%	8.31%	0.00%	0.00%
Santander	27.90%	11.03%	9.84%	6.42%	3.89%	2.54%
Sucre	12.01%	6.58%	5.37%	3.06%	2.94%	1.68%
Tolima	16.21%	0.64%	7.22%	5.48%	0.29%	0.22%
Valle del Cauca	19.07%	0.45%	8.33%	6.43%	0.20%	0.15%

Source: Own elaboration based on the GEIH-19 and REPS 2020.

* The installed hospital capacity includes basic and intermediate care beds for adults. The maximum includes all other available hospital beds, except for neonatal care, burn units, and obstetric beds.

This data confirms the need for region-specific management, given the heterogeneous effects in each one of them, but it also shows that the ICU deficit at the national level limits the possibilities of expanding reactivation to other sectors, especially for workers with a greater possibility of infecting other household members due to their housing conditions. This limitation is an argument for the option of temporarily relocating employees near their work sites. Moreover, it is crucial to evaluate the air management infrastructure in enclosed spaces, as well as the use of thermal and facial recognition cameras as part of reopening protocols.

The effectiveness of sanitary and health measures, i.e. increased testing, differential management by region and by household risk characteristics, and monitoring of working conditions will be essential to support the process of reactivating the economy without exacerbating public health risks.

Next, we will examine the policies that the government has announced to face the crisis, as well as recommendations that would complement them and allow for a more consistent way out of the current state of economic paralysis while maintaining health care.

4. Policy options and recommendations

Faced with current circumstances, policy measures should aim to: (i) Contain the contagion and adjust the health infrastructure. (ii) Mitigate the harmful effects of the crisis on poverty and, in this way, make it easier to comply with confinement. (iii) Protect formal employment and help companies to survive. Listed below are the proposed policy measures for each objective and what the Government has done so far.

(i) Containment of the contagion and development of health infrastructure.

Up until now, the National Government has announced an investment of 7 trillion pesos in the health sector for the adaptation of hospitals, of which 2.7 trillion have already been disbursed to hospitals and clinics. However, there appear to be limitations to expanding hospital capacity and the number of tests. A more determined push to increase ICU beds is imperative, especially in regions with limited infrastructure, as well as greater investment in local production of tests, biosecurity equipment and monitoring activities. For its part, the Bogotá government is considering a flexible working day with four shifts a day so as to reduce crowding on public transport.

The following are additional recommendations that we propose in this regard:

1. Adjust the supply of health infrastructure and prevention measures to the risk of contagion in accordance with the estimates made in Section 3 of this document.
2. Invest in collective testing and tracing capacity. Without a substantial increase in the daily number of tests, relaxing containment measures may be too risky. The cost of this proposal is 60 billion a month.

3. Adaptation of public infrastructure (transport, public sector offices) to reduce the risk of contagion.
4. Isolate the places most vulnerable to transmission of COVID-19 and that have high comorbidity where confirmed cases have not yet occurred.
5. Implement active surveillance systems in places where there is contagion and the health infrastructure is limited.
6. Adapt prevention measures for each area (rural and urban) in municipalities so that they can use them according to their risks. Also provide the necessary prevention tools, as well as guaranteeing access to clean water for washing hands.
7. Promote flexible working hours in companies that start up, selective isolation and sick leave for people with a high risk of contagion or having the least symptoms of respiratory diseases.

(ii) Mitigation of the harmful effects of the crisis on poverty.

The National Government has announced measures in the right direction aimed at cushioning the economic effects on the most vulnerable people. An increase in transfers for 12 million people, through programs such as the Colombia Elderly Program, Youth in Action and Families in Action, was complemented by the Solidarity Income program. The latter is a program designed and implemented in a few weeks, where they identified 3 million vulnerable households by cross-referencing different government databases that had not been consolidated. These households will be benefited with a subsidy of 160,000 pesos. Finally, the Government began providing compensation for the value added tax (VAT), which had been increased for this year after the approval of the Economic Growth Law. This compensation amounts to 75,000 Colombian pesos bimonthly per household and is focused on the poorest households in the Families in Action program. The total cost of current transfers through the different programs is 1.2 trillion a month.

However, as shown above, these transfers are not enough to keep these households from falling into extreme poverty, as they are not enough to compensate for the fall in their income. The amount of these transfers (160,000 pesos) should be made per person in the household, which in most households would imply multiplying it by 4.5 (the average number of people living in these households). For this, it is important that the different programs be consolidated in order to improve their targeting and avoid some beneficiary households receiving more transfers per person. This strategy would facilitate the subsequent design of a universal basic income program. Increasing these consolidated transfers would increase their total cost to \$2.4 trillion per month.

In addition to the 15 million people in monetary poverty covered by these measures (Table 13), it is necessary to include 5 million more people who were not poor before the crisis but who are likely to fall into extreme poverty given the magnitude of the shock. If the Government transfers 160,000 pesos to each of these people, the cost of the transfer program would increase by 800 billion pesos.

The Government also decided to defer the payment of public utilities for three months for the lowest strata, incurring a cost of 2.5 trillion, and began transfers to the unemployed through the Unemployment Assistance Program at a rate of two minimum wages in three monthly payments. The latter is a program that dates back to 2013 for all formal-sector workers who contribute to Family Compensation Funds and was therefore already funded.

The figures for March show that 1.8 million people lost their jobs this month; of which 1.5 million reported not being employed and not looking for a job, so they would not be beneficiaries of the subsidy. As of April 21, there were 453,577 applications for the program, although only a quarter met the requirements to receive benefits

and the program only had enough money to provide transfers to 90,000 people. Given the magnitude of the shock, the funds for this program will not be sufficient to respond to the coming rise in unemployment, and for this reason the government decided to redirect resources from other areas of the Compensation Funds to be used for this program and thus be able to reach 150,000 people.

Table 13. Policies implemented by the government and their cost

Policies implemented by the government	Population served	Amount per agent	Total amount (billions)
Families in Action	2.65 million households	145000	385,7
Youth in Action	274,342 students	35000	97,67
Program for the elderly	1.7 million adults	80000	136
VAT reimbursement	1 million households	75000	75
Operational costs - VAT reimbursement			3,5
Solidarity income	3 million households	160000	480
Defer (subsidize) public utilities	Strata 1, 2 and 3		2500
Health expenses			7000
Total Expenses			10.677,87

Source: Own calculations.

Listed below are policies that can be implemented to complement the foregoing:

1. Increase money and in-kind transfers to vulnerable households. Current transfers are not enough to cover all expenses, including rent payments, and many vulnerable households without formal lease agreements are being evicted. Our suggestion is that these transfers should be 160,000 pesos a month per person to keep households above the extreme poverty threshold.
2. Include subsidies for 5 million people who were not poor before the crisis, but are susceptible to falling into extreme poverty due to the magnitude of the shock. They can also be identified by cross-referencing DNP databases, but the thresholds to identify the beneficiaries must be more lenient, since many of these households were considered to be middle class before the crisis. In this regard, it may also be useful to expand the surveys for calculating SISBEN beneficiary selection level scores to a larger part of the population, in order to facilitate the identification of these households. Households should also be able to apply to be surveyed using a simple form that can be accessed online.
3. Ensure the distribution of school meals in good condition to public school students during the quarantine. This policy has been carried out since the beginning of the crisis when classes became virtual. However, there are several complaints about spoiled food and cost overruns in the contracts for providing it.

(iii) Protect formal employment and help companies to survive.

Initially, to protect formal employment, the Government preferred the approach of financing payrolls through credit guarantees (Table 14). Until the beginning of March, bank loans to companies backed by the National Guarantee Fund (FNG) enjoyed partial guarantees of up to 50% of the value of the loan. In response to the current crisis, within the framework of the “United for Colombia” Special Guarantees Program, the Government funded the FNG with 70 trillion pesos (an amount equal to 7% of GDP) to increase the guarantees granted, with guarantees of 90% for loans of up to 2,000 million pesos for covering the payroll of Small and Medium-sized Enterprises (SMEs); guarantees of 80% for loans of up to 2.4 billion pesos to finance the working capital of SMEs; and guarantees of 80% for the self-employed who request loans of up to 25 million. Although the terms vary depending on the beneficiary, the guarantees were designed to support 12- to 36-month loans, with grace periods of 4 months. However, interest rates and real access to credit depend on financial institutions.

These guarantees have not yet been used as expected because financial establishments perceive a high risk on these loans and they are not fully backed. Consequently, they have an incentive to reject a larger number of credits or to charge interest rates that are higher than the credit rates where firms provide their own collateral. According to data from the Financial Superintendence, the amount of loans provided by credit institutions in Colombia for commercial purposes has fallen by more than 40%. Unfortunately, there is still no data to indicate whether this lack of credit is mainly due to a demand problem or a supply problem.

As of May 7, loans backed by these guarantees totaling 7 trillion have been used. Of these, 4.8 trillion have gone to 90%-backed SME payroll loans, 1.8 trillion to 80%-backed capital loans, and the rest distributed among microenterprises and the self-employed. Thus, only a part of the resources available in the Guarantee Fund is being used, so (i) the objective of protecting formal employment is not being met and (ii) there are a large amount of resources committed to a program that is not bearing fruit.

The government opted for the loan guarantee mechanism instead of payroll subsidies, hoping that employment contracts would protect formal-sector workers from unemployment. In fact, companies responded in the first weeks of the crisis by granting forced vacations to employees who had accumulated vacation leave and unpaid leave for others. However, a month later, 70% of small and medium-sized businesses had fired at least one worker, and many announced their impending bankruptcy.

Faced with the ineffectiveness of the guarantee programs, on May 7 the government announced a subsidy to company payrolls to supplement employment protection programs. The subsidy consists of paying 40% of the minimum wage for each worker in formal-sector companies whose sales have fallen by 20% compared to the month of April 2019, only if these workers did not have their contracts interrupted during the month of April. The program will initially last for 3 months and is expected to benefit 6 million workers at a cost of 2 trillion pesos a month.

We believe that this last program will be more effective in protecting formal employment, by rewarding those firms that have made an effort to maintain their payroll despite the economic paralysis and have met formal economy requirements. Furthermore, in addition to having a direct effect on employment protection, it can stimulate the demand for credit on the part of the companies benefited and, in this way, increase the effectiveness of financing guarantees. However, we believe that the criteria could be further refined by following the example of other countries that have taken similar measures. Among these refinements is not granting aid to companies that distribute dividends or repurchase their own shares during this year and the next one, or that are headquartered in tax havens. Even more importantly, we believe that the subsidies should focus on small and medium-sized companies, and only be given to employees who earn up to two times the monthly minimum wage. This way, aid could be increased and reach a full minimum wage for these workers. Support for large companies can continue through loan guarantees, since these types of firms are less risky in the eyes of the financial sector.

Table 14. Guarantees offered by the Government to back loans to MSMEs

Loan guarantees	Description	Maximum Loan	Total Guarantee
90% guarantee for payment of SME payrolls	Government assumes 75% commission per guarantee	2000 million	12 trillion
80% guarantee for SME working capital		2400 million	3 trillion
80% guarantee for the self-employed		25 million	1 trillion

Source: Own calculations.

The Government has also offered subsidized credits to the agro-industrial sector through the Financing Fund for Agriculture (FINAGRO). To this end, it allocated 1.5 trillion pesos to be delivered at subsidized rates, and the program was designed so that 80% of the disbursements went to small and medium-sized companies in the sector. However, a report from the Comptroller indicated that during the month of April more than 90% of these

loans had ended up in the largest companies in the sector. In addition, only a quarter of the available resources were disbursed.

Another strategy devised by the government to alleviate cash-flow difficulties for formal-sector companies was to decrease workers' pension contributions from 16% to 3% of monthly pay.¹⁵ It also made the tax calendar for companies more flexible, allowing corporate income tax payments, originally planned for May, to be made at the end of the year. This last measure is equivalent to an interest-free loan by the Government to these companies.

Below we present some recommendations to supplement the foregoing ones:

1. Maintain a monetary policy that combines liquidity injections (which the Central Bank has already started to implement) and interest rate reductions to keep the cost of credit low.
2. Exempt companies from social security contributions and payroll taxes as long as the lockdown lasts. Although pension contributions have already been reduced, companies continue to have to pay health contributions and other taxes that finance early childhood care and the Family Compensation Funds administering the unemployment program. Given that it is important to finance these programs, our proposal is that this only be applied to companies that cannot operate during the lockdown.
3. Refine the requirements for payroll subsidies, by excluding companies that distribute dividends or are headquartered in tax havens. Also, focus them on small and medium-sized companies, and only for employees who earn up to two times the monthly minimum wage.
4. Related to the previous point, it is desirable to seek agreements between companies and employees so as to share the costs of the pandemic. To the extent that workers are willing to sacrifice part of their salary and the government subsidizes another part, there will be a greater likelihood of companies surviving.
5. Include pay subsidies for self-employed workers who filed taxes last year.

5. Policy financing

In this section we will deal with the maneuvering room that the government has for dealing with the pandemic and adopting the measures referred to in the previous section. For this purpose, we will first refer to the measures taken by the Central Bank, then to the government's fiscal position and the measures adopted to increase the availability of resources.

The independence of the Central Bank has guaranteed a low level of inflation, consolidating a strong monetary position for the country. This has allowed it to adopt expansionary measures that can contribute to lowering the cost of financing for the government and companies with access to capital markets and to maintaining the stability of the financial system, without changing expectations about inflation.

Up until now, the bank has bought 2 trillion pesos of public debt in the secondary market, while it has promised to buy 10 trillion pesos worth of private debt from financial establishments with maturities between 1 and 3 years (more than half of which has already been purchased). In a second intervention a week later, the Banco de la República reduced its interest rate from 4.25% to 3.75%. On Tuesday, April 14, it reduced the reserve requirement for financial deposits, releasing more than 9 trillion pesos into the financial system. Finally, on Thursday, April 30, it reduced its intervention interest rate to 3.25%. These measures have provided liquidity for

¹⁵ Contributions were cut partially but not completely to finance pension funds' administrative costs.

the financial markets and have reduced the costs of government financing, which had become more expensive at the beginning of the pandemic.¹⁶

On the other hand, Colombia's fiscal position has been less solid due to the constant increase in public spending associated with the guidelines set down by the national Constitution that has been in effect since 1991. While the fiscal deficit has remained stable at around 2.4% of GDP since the adoption of the fiscal rule in 2012, debt has increased from 34% of GDP in that year to 49.8% in 2019, mainly because most of the debt is denominated in dollars and the country experienced a currency devaluation of more than 90% between 2012 and 2019. In the wake of the pandemic, the currency was devalued by an additional 20%, increasing the debt by 8 percentage points in relation to GDP.¹⁷

The drop in oil and coal prices will also affect the country's fiscal deficit. Prices affect government revenue in three ways: tax revenue, dividend payments from the national oil company (Ecopetrol) and royalty payments. According to government estimates, for every dollar decline in the price of oil, tax revenues go down 400 billion pesos a year, of which 150 billion comes from taxes and 217 billion from dividend income.¹⁸ In this regard, Ecopetrol forecasts a decrease in revenue of 12.1 trillion pesos as a result of the fall in the price of oil and a reduction in production of 35,000 barrels per day.¹⁹ As a proportion of annual GDP, this represents a drop of 1.2 percentage points.

Government tax revenues will also be reduced due to the stagnation caused by the pandemic. The DIAN, the agency in charge of tax collection, estimates this decline at 10%.²⁰ Starting from an initial level of collection by the National Government of 15% of GDP in 2019, the fall in tax collections could represent 1.5 points of GDP, further reducing fiscal maneuvering room.

Taken together, these two decreases in government income would come to 2.7 percentage points of GDP. In terms of public spending, the programs announced by the government so far come to a total of 16.7 trillion pesos (the figures in Table 13 plus the 6 trillion price tag for payroll subsidies), equivalent to 1.7% of annual GDP. This would lead the fiscal deficit for 2020 to be around 6.8%. In this regard, the Fiscal Rule Committee announced a relaxation of the rule in the first week of May due to the current situation, allowing the deficit to reach 6.1% of GDP, taking into account the 5.5% decline in production estimated by the government.

This situation presents us with a rather pessimistic scenario in regard to the possibility of new government transfers being made due to an extension of the lockdown. What's more, the programs already announced would exceed the deficit proposed by the fiscal rule and would not leave room for increasing the programs proposed in this document. According to the analysis presented above, an additional increase in public spending of about 860 billion pesos per month (0.09% of annual GDP) would be required to deal with the effects of the current crisis for each month of lockdown in its current form (See Table 15).

¹⁶ Just before the pandemic started, interest rates for bonds maturing in 2018 neared 5.6%. When the COVID-19 crisis reached Colombia, rates climbed over 3 percentage points. The Central Bank's interventions pushed their return to about 6.3%.

¹⁷ Foreign debt represents about 40% of central government debt. Thus, a 20% devaluation of the Colombian peso leads to an increase of 8 percentage points in the total value of debt.

¹⁸ Valencia, Zapata & Ramírez (2018)

¹⁹ While tax income neared 16.1 trillion COP in 2019, Ecopetrol expects a cut to 4 trillion COP, assuming a Brent oil price per barrel of 35 USD and an average exchange rate of 3,900 COP per USD.

²⁰ This number is aligned with the estimated elasticity of tax income with respect to GDP of 1.15, according to the Ministry of Finance and the more pessimistic outlooks on GDP growth.

Table 15. Monthly cost of protection programs, in millions of pesos

Item	Monthly cost per program (millions of pesos)
Public health costs	60,000
Poverty mitigation costs at a rate of 160,000 pesos each for 5 million people that may fall into poverty (according to scenario C)	800,000
Monthly total in millions of pesos	860,000

Source: Own calculations.

The gradual recovery plan for the economy, which allows some sectors to return to their activities, may reduce these direct costs of protecting formal employment. For example, Decree 593 of 2020 authorizes a return to work in Construction and Manufacturing in the last week of April. In these sectors, approximately 1 million formal-sector workers could return to work, which, at best, would reduce the cost of the formal employment protection measure by about 350 billion pesos per month starting from the last week of April.²¹

To finance the proposed programs, and given existing fiscal constraints, the National Government has chosen to resort to existing sources of savings (FONPET, which is a public pension fund, the FAE or Savings and Stabilization Fund and the FRECH, pursuant to Decree 444 of March 21, 2020) for a total of 14.8 trillion pesos, enough to finance spending programs in various scenarios. As a second measure, the Government decreed forced investment by the financial sector of 9 million pesos through so-called Solidarity Bonds (TDS).

A third source of financing comes from borrowing from multilateral banks. On the one hand, the World Bank has already approved a loan of \$250 million dollars, equivalent to 0.1% of GDP. On the other hand, a \$11 billion dollar line of credit was renewed by the IMF, which has historically been used to maintain international reserves at levels that protect the country against external shocks. Its possible uses include payments on the foreign debt, which would free up the Government's ability to borrow more. Altogether, this money would come to 45 trillion pesos, or about 4.5% of GDP. This debt, together with the items mentioned previously, would make 69 trillion pesos available to the Government to finance spending over the next 3 months.

However, caution should be exercised with this strategy. The cost for the Government of the foreign debt has risen due to the impact of the epidemic, and despite the fact that the Central Bank's policies have managed to reduce this cost somewhat, it continues to be much higher than it was before the pandemic began.²² Prospects become even more difficult considering that Fitch Ratings reduced their investment rating on April 1 from BBB down to BBB-, with a negative outlook. Although this increased cost of sovereign debt is widespread among all emerging countries, several of them have decided to take this path. For example, Mexico increased its debt by \$6 billion dollars, Peru by \$3 billion and Paraguay by \$1 billion.

To finance public spending, the Government has also decreed a solidarity tax to be deducted from the salaries of public employees who earn more than 10 million pesos a month. With this, it hopes to collect 240 billion pesos. We believe that this initiative could be generalized to salaries of formal employees who continue to receive incomes above the cited amount, and even charge an extraordinary tax on liquid assets of more than 6,000 million pesos, which together might collect 10 billion pesos (1% of annual GDP). The Government also decreed a reassignment of 100 billion pesos from the Defense and Police budget to the Health budget. We hope that, if necessary, this reallocation could reach 10 trillion pesos, which would keep the Defense and Police budget above 2.3% of GDP, well above the allocation by other countries in the region.

²¹ Firms can only operate when they have met safety protocols, which may represent significant delays. Nonetheless, local governments expect all construction firms to start operations within 3 weeks of the announcement.

²² Before the pandemic, Colombia's sovereign 10-year debt indexed in USD faced a 3% interest rate. By the start of the crisis, the rate doubled, but interventions until May 6 decreased it to 4%.

A final financing option for the Government is a direct loan of money from the Central Bank. This strategy is usually frowned upon by the markets because it threatens the independence of the Central Bank and can result in inflationary spirals that will do more damage in the long run. We have already seen its devastating effects in neighboring countries. But these are not normal times, there are deflationary risks and capital has fled to safer assets, making borrowing more expensive. Therefore, at this time, seigniorage becomes an option to consider as a resource of last resort. So far, the United Kingdom has been the only country to have used this strategy. For Colombia to make this decision, it is important for more developed countries to resort to it, otherwise international markets may lose confidence in the monetary institutions.

Final Discussion

The pandemic has created a formidable policy challenge to keep the economy afloat while lessening its effects on citizens' health. Confinement was a necessary measure to slow the increase in the rate of infections, while preparing the health infrastructure to face its effects on health. However, this should only be a temporary measure because it can have lasting effects on the economic structure with perverse long-term consequences.

As long as the lockdown lasts, it will be necessary to make sufficient transfers to the households that are affected by the shutdown. It will also be necessary to support companies by means of credit guarantees and payroll subsidies to avoid their demise and the consequent loss of jobs. At the same time, investment in health infrastructure and a testing program that allows for better management of the health crisis must continue to be maintained. However, the government will not be able to carry the economy on its shoulders for many more months, since excessive indebtedness will also have repercussions in the future. This is why it is necessary to loosen lockdown restrictions so that economic activity can be reactivated, but accompanied by the necessary measures to keep the pandemic under control.

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COVID-19 and Vulnerability: a Multidimensional Poverty Perspective in El Salvador

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Abstract

This document offers an insight on the vulnerability of households in El Salvador in light of the COVID-19 shock, based on the scope of multidimensional poverty. Preexisting poverty conditions that determine some households to be more at risk than others facing the pandemic are identified using the Multidimensional Poverty Index (MPI). The MPI lists six deprivations that account for these risks: access to drinking water, access to health services, overcrowding, access to sanitation, underemployment and access to social security. It is estimated that 85.5% of households suffers from one of the aforementioned deprivations. Additionally, four groups of households with characteristics that present elements of risk or disadvantage facing COVID-19 are identified, these are: multidimensionally poor; dependents on remittances; households with people over 60 who are dependent, and households with women head. These households should be prioritized in the response to the current emergency; thus, we recommend immediate and early responses denominated resilience packages.

Introduction

The 2010 Human Development Report “The Real Wealth of Nations: Pathways to Human Development”, published in the framework of the twentieth anniversary of the reports on human development, presented the methodology for measuring multidimensional poverty based on the work of Alkire and Foster (2009) and the Oxford Initiative for Human Development and Poverty Reduction (OPHI).

Thus, in 2015 the United Nations Programme in El Salvador accompanied the national government in the first exercise in measuring multidimensional poverty, in defining its dimensions and calculating the Multidimensional Poverty Index (MPI). Thanks to this, the country now has four MPI measurements for 2014, 2016, 2017 and 2018.

Poverty is a condition that transcends income and encompasses multiple dimensions of development, such as education, housing, the community environment, the risk of natural disasters and access to basic services. The MPI allows us to consider these multiple edges of human development, taking into account multiple deprivations in different dimensions that affect who people are and what they can do with their lives.

Information on the multidimensional poverty measurement becomes more relevant in terms of natural catastrophes and pandemics, such as the current COVID-19, since its impact on people’s lives and their possibilities differs according to characteristics and ways of life. Aware of the need to contribute to the State during this crisis, UNDP presents the document: “COVID-19 and vulnerability: a perspective of multidimensional poverty in El Salvador”, aimed at contributing to and shedding light on how to face this health and economic crisis, based on scientific evidence and trying to attend to those groups that are left behind.

This document presents six risk factors related to COVID-19 based on the same number of deprivations considered in the MPI, namely: access to drinking water, access to health services, overcrowding in the home, sanitation, access to social security and underemployment. These elements are combined with other characteristics that generate vulnerability for the pandemic and its consequences within households, such as female heads without a spouse and/or with older adults and children; or dependence on remittance flows for subsistence. As a result, four groups of households are identified that must be considered to prevent contagion and bear the economic consequences of sanitary measures in households.

The recommendations in this document combine the elements indicated with the deprivations interconnected to risks posed by the COVID-19 epidemic. Therefore, measures of a sanitary and economic nature are proposed, which must consider two types of temporality: some of an immediate nature and others of an early recovery, which have been called “resilience baskets”. Immediate sanitary measures include responses to address deprivations from access to drinking water, access to health services, overcrowding and sanitation. Economic measures include those that address underemployment and social security.

The five resilience baskets (care, food, income, temporary work and non-contributory social security) are proposed for application/distribution according to the classification of the four groups of households in multidimensional poverty. We are aware that the scope and content of these baskets depend on the resources available to deal with the emergency, and given the restricted fiscal context, instruments should be available to try to make better use of these resources. This document proposes to do this by taking advantage of progress in the fight against poverty.

The document is divided into four sections. Section 1 explains how the calculation of multidimensional poverty and vulnerability arises; section 2 shows the characterisation of multidimensional poverty in Salvadoran households, at the territorial level. Section 3 analyses the risk factors of vulnerable households when dealing with the COVID-19 pandemic, based on the six deprivations; and section 4 shows the recommendations for an immediate response to the six types of deprivation.

1. Multidimensional poverty and vulnerability

Over the years many efforts have been made to identify who and where poor people are. Many resources have been invested to develop methodologies, programmes, and in obtaining knowledge about people living in poverty and vulnerability. Nowadays, there is consensus on minimum income thresholds; and it is recognised that poverty implies deficiencies that go beyond it. Recurring economic crises have repercussions on the number of people living in poverty. The health crisis generated by COVID-19 has shown that it requires measures that address the economic slowdown, since containment of the contagion implies a decrease in economic activity, which generates economic losses in terms of negative growth (Baldwin and di Maduro, 2020).

The measurement and analysis of multidimensional poverty gives us an idea of the vulnerability of people and households under different risk factors. This is brought about by the shock from COVID-19, which represents a health, humanitarian and socio-economic crisis. This instrument identifies a sector of the population that is more susceptible to economic losses, or rather, that vulnerability is many facets and natures.

Individuals and companies are inevitably exposed to what economists call “shocks” [crises], that is, adverse events that have the potential to cause marked decreases in living standards. The greater the crisis, the greater its intensity and duration, in addition to causing greater vulnerability, without taking into account other factors. (Stiglitz in UNDP, 2014)

In terms of human progress, Amartya Sen’s approach to human development captures the interaction between the operations –the “being” and the “doing” of a person– and the capacities required to achieve these operations (Sen, 1992 in UNDP, 2014). Progress in the area of human development often stagnates or dissipates if threatened by seizures such as global epidemics, climate change, natural disasters, violence and conflict. People in situations of vulnerability and marginalisation are the main victims (UNDP, 2016).

Formulating policies to reduce vulnerability requires taking a self-cause approach. The Multidimensional Poverty Index (MPI) marked an advance in the measurement and conceptualisation of poverty, vulnerability and well-being beyond income, based on the ground-breaking work of Alkire and Foster (2009). This was promoted by the Oxford Initiative for Human Development and Poverty Reduction (OPHI); and published globally by the United Nations Development Programme (UNDP) in 2010.

The 2016 Human Development Report for Latin America highlighted that one of the greatest threats to multidimensional progress in the region was the relapse of millions of households into situations of poverty and extreme poverty. This could affect between 25 and 30 million people in contexts of fragility and economic vulnerability (UNDP, 2016). The COVID-19 crisis raises this possibility and, therefore, requires special attention and measures that serve people in conditions of greater vulnerability.

The dimensional poverty measurement represents a qualitative leap in poverty care, since it meant going from measurements based solely on income to others based on multiple social, labour and environmental indicators, which is of great value for the definition of public policy (UNDP, 2016). Vulnerability has many facets because crises have different types and natures. This vulnerability is reflected in the deprivations and dimensions considered in the IPM. This document analyses the vulnerabilities of people to the COVID-19 pandemic from the perspective of multidimensional poverty and its economic, environmental, labour and basic service deprivations. The aim of this is to propose a public policy response focused on populations in the most vulnerable condition.

2. Multidimensional poverty in El Salvador

Although poverty has typically been defined based on income, it can also be defined in terms of the deprivations that people face in their daily lives (Alkire, Kanagaratnam & Suppa, 2019). The multidimensional

poverty measurement in El Salvador is based on the Alkire-Foster method (2008), which combines a counting and aggregation technique to identify people and households experiencing deprivation. In this method, multidimensional poverty is analysed from an incidence and intensity perspective.

Incidence is known as the multidimensional poverty rate (H). And estimates the proportion of people or households that are classified as multidimensional poor people. Intensity (A) reflects the average proportion of dimensions in which multidimensional poor people face deprivation. The combination of incidence and intensity (H x A) is the Multidimensional Poverty Index (MPI) (STPP, 2015, p. 32). In El Salvador, the MPI considers five dimensions: 1) education, 2) housing conditions, 3) work and social security, 4) health, basic services and food security, and 5) habitat quality.

In addition to the five dimensions, the MPI is also calculated on the basis of 20 indicators. Four indicators were selected for each dimension: a) for the **education dimension**: inadequate early care, school absences, educational backwardness and low education of adults; b) for the **housing conditions dimension**: inadequate roof, floor and wall materials, overcrowding and insecure land tenure; c) for the **work and social security dimension**: child labour, underemployment and job instability, lack of access to social security and unemployment; d) for the **health dimension**: food insecurity, lack of access to health, water and sanitation services; and e) for the **habitat quality dimension**: lack of public spaces for recreation, incidence of crime and crime, restrictions on daily activities due to insecurity, and exposure to environmental damage and risks (STPP, 2015, p. 33).

By 2018, in El Salvador, 28.8% of households and 33.8% of people lived in conditions of multidimensional poverty (see **table 1**). This is equivalent to more than 537 thousand households; that is, more than 2.2 million people in the country live in poverty, with significant deprivations.

Table 1. People and households living in multidimensional poverty, 2018

Multidimensional poverty	Men	Women	Total
People	1,092,588	1,154,577	2,247,165
Households	366,238	171,588	537,826
People %	35.0	32.8	33.8
Households %	31.2	24.6	28.8

Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

Before 2014, poverty was only measured in the country using the income method¹. This methodology, which accounts for monetary poverty, represents another way of understanding vulnerability through income; and its contrast with the threshold defined by the value of the Basic Food Basket (BFB), which represents the extreme poverty line. Specifically, the latest measurement available to date suggests that 26.3% of households in El Salvador live below the monetary poverty line².

In table 2, both methodologies are integrated (monetary and multidimensional). The result shows that 12.4% of households fall into the category of income poverty and multidimensional poverty. In these households, the per capita income is insufficient to cover the per capita value of the expanded basic basket (which is equivalent to twice the value of the BFB); and at the same time they experience seven or more deprivations in indicators of multidimensional poverty in the home. The proportion is equivalent to just over 230 thousand households, which could be considered hard core poor in the country.

¹ This method is considered indirect, as it focuses on the monetary capacity to acquire certain goods, rather than on their effective acquisition.

² Monetary poverty has a higher incidence in rural areas (30.0%) than in urban areas (24.1%). On the other hand, inequalities within urban areas are worse for female heads of households (25.0%) compared to their male counterparts (23.6%).

Table 2. Households according to monetary and multidimensional poverty conditions, 2018

	Without multidimensional poverty	With multidimensional poverty	Total
Without monetary poverty	57.4	16.3	73.7
With monetary poverty	13.9	12.4	26.3
Total	71.3	28.7	100.0

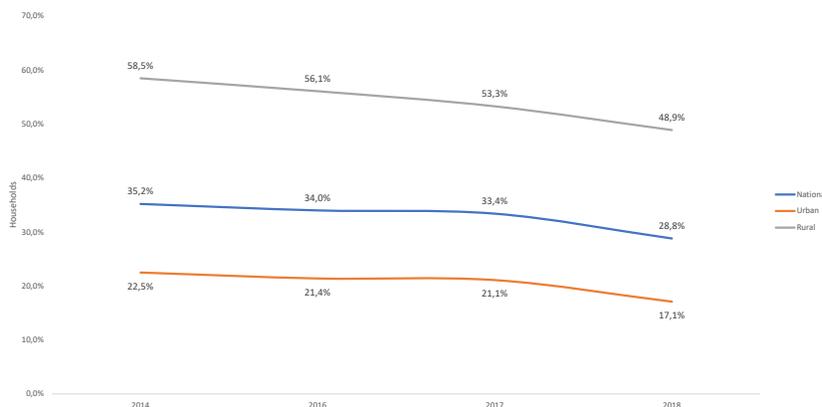
Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

The 2030 Sustainable Development Agenda establishes SDG 1: No poverty as one of its 17 objectives for ending poverty in all its forms. In particular, Goal 1.2 states: “(From 2015) By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions”.

For 2030, this means that the number of people living in monetary poverty will decrease to at least 20.3%. Likewise, for 2030, a commitment was made to reduce the number of people living in conditions of multidimensional poverty to at least 21.0%.

Despite the progress made in recent years, in terms of multidimensional poverty alleviation, more specifically in the reduction of 6.4 percentage points of households living in this condition between 2014 and 2018, a notable geographic gap still persists. Urban multidimensional poverty is 11.7 percentage points lower than the country’s general poverty rate; while poverty in rural areas exceeds the national rate by 20.1 percentage points.

For 2018, the latest multidimensional poverty data shows that 48.9% of rural households experience deprivation in the different dimensions of this indicator. This is equivalent to more than 330 thousand households, which could place them in a highly vulnerable condition at the outset of the COVID-19 pandemic (see **graph 1**).

Graph 1. Percentage of households in multidimensional poverty, according to geographic area of residence, 2014–2018

Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

As stated above, the multidimensional poverty methodology is based on 20 indicators, grouped into five dimensions, several of which stand out for the level of deprivation they reflect. Among them are: adult education; access to social security; underemployment and job instability; access to water and sanitation; and, restrictions due to insecurity (see **graph 2**).

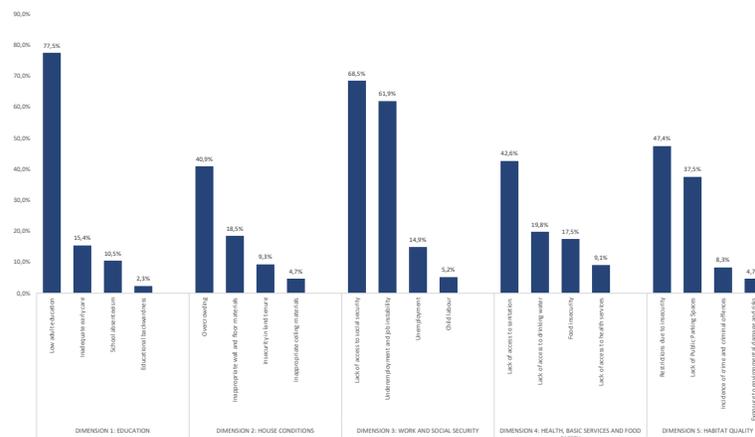
Deprivations due to education refers to the existence of low levels of education of adults in the home. This is one of the most important deprivations of the more than 1.8 million Salvadoran households considered in the EHPM. In El Salvador, 77.5% of households have adults with low levels of education. In other words, its

members, whose ages are between 18 and 64 years, did not complete secondary education, or also people of 65 years or more did not complete the sixth grade of basic education.

Two deprivations stand out in the work and social security dimension. The first is that 68.5% of Salvadoran households face deprivations in terms of social security, which is understood when at least one professionally active person is not a beneficiary or contributor to social security (including the ISSS³) or the Pension Savings System. The other deprivation is that 61.9% of households are deprived due to underemployment and job instability. This refers to the situation in which at least one person in the household is underemployed (by time or by income); or, due to having an unstable job in which there are periods of forced inactivity of more than one month per year.

In health, basic services and food security dimension, it should be noted that 42.6% of households face a lack of access to sanitation. This means that they are households without access to a sanitary service connected to the sewage network, that is, with a septic tank or when the sanitary service is shared and owned by another household. Finally, in the dimension of housing conditions, it stands out that 40.9% of households live in overcrowded conditions, that is, where there are three or more people per bedroom.

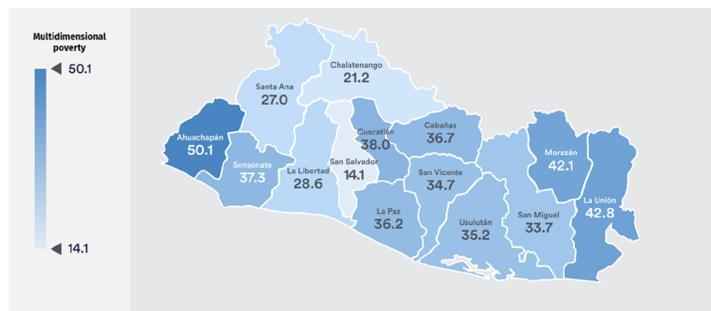
Graph 2. Deprivations in households, according to dimensions for 2018



Source: own elaboration based on EHPM 2018 (Minec-Digestyc).

In general, multidimensional poverty has a fairly marked territorial features. In this respect, the highest incidence is reported in the departments of Ahuachapán with more than half of the households living in poverty (50.1%); La Unión with 42.8% and Morazán with 42.1%. On the other hand, San Salvador and La Libertad report the lowest rates with 14.1% and 28.6%, respectively (see **map 1**).

Map 1. Incidence of multidimensional poverty in households, 2018



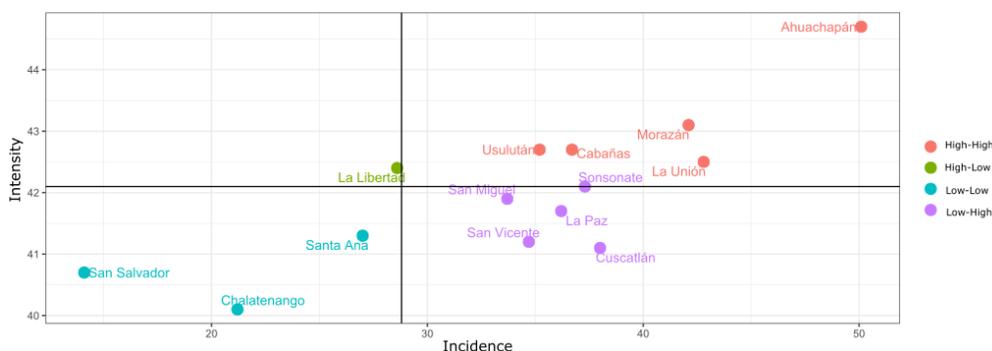
Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

As mentioned before, the multidimensional poverty methodology combines two elements to account for the phenomenon of poverty: the incidence (H), given by the proportion of households experiencing multiple deprivations, as well as the intensity (A) of said poverty, measured by the average proportion of deprivations experienced. **Graph 3** shows two reference lines: one for the intensity on the ordinate axis and the other for the incidence of poverty on the abscissa axis, based on the national values (42.1 and 28.8%, respectively) formed by the national average. The data corresponding to each of the 14 departments are presented in the quadrants formed by the reference lines.

The first group (in pink) is considered the most critical. It is made up of five departments that have high levels of intensity and incidence of multidimensional poverty: Ahuachapán, Morazán, La Unión, Cabañas and Usulután. In particular, Ahuachapán not only has the highest incidence rate of multidimensional poverty in households, but also has the highest intensity, 44.7. This means that households in multidimensional poverty, on average (weighted), are deprived of 44.7% of the indicators of this poverty measurement.

A second group (in purple) is made up of five more departments, in which a high percentage of households live in conditions of multidimensional poverty, although the intensity of this poverty is less severe than the national average. These include: Sonsonate, San Miguel, La Paz, San Vicente y Cuscatlán. The third group (in cyan) includes three regions: San Salvador, Chalatenango and Santa Ana, which could be thought to have fewer vulnerabilities than the rest, since they have a relatively low percentage of households in poverty, while the intensity of this poverty is lower than the national average. La Libertad falls into the remaining category and represents the closest to the national average of intensity and incidence (in green).

Graph 3. Incidence of households and intensity in multidimensional poverty by department, 2018



Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

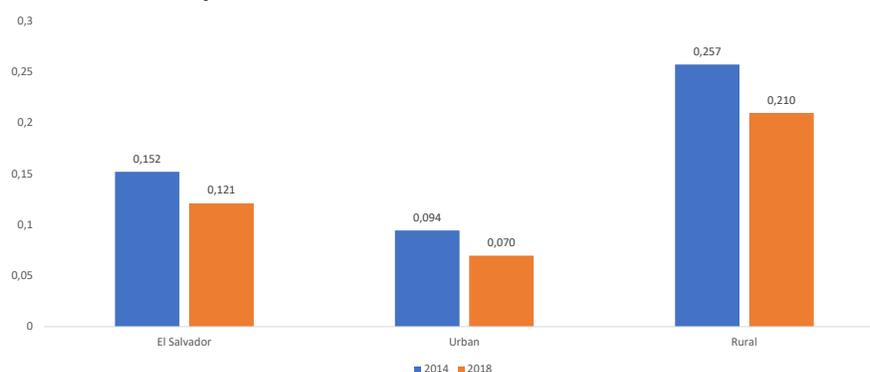
The territorial differences indicated are important in the face of public policies aimed at reducing the spread of COVID-19; and, for those designed for the recovery of living standards in the short, medium and long term. The combination of these two characteristics of this measurement (intensity and incidence) is emphasized because with them the Multidimensional Poverty Index (WPI) is obtained, which represents an incidence measure adjusted for the severity of the deprivations suffered by households. Graph 4 shows that the MPI only improved from 0.152 to 0.121 between 2014 and 2018.

Likewise, the alleviation of this poverty has occurred in both urban and rural areas, very much in line with the efforts made in light of the Sustainable Development Goal 1 Goals: End all forms of poverty. However, it must be guaranteed that shocks such as those experienced worldwide and in El Salvador, due to the public health measures necessary to flatten the epidemiological curve of COVID-19, as well as its economic and social effects, do not jeopardize progress achieved to date in terms of poverty reduction and the commitment to reduce the population living in any form of poverty to at least half by 2030.

According to Dercon (2001), there are at least three types of shocks that can affect vulnerability to poverty, which could occur in the current COVID-19 pandemic. The first type directly affects people's assets, in this case, for example, illness or contagion would impair a person's ability to perform paid work in the short term. The second type is the contextual shocks that people use to transform their assets into income, which would materialize in the loss of employment, suspensions or the inability to carry out trade due to the confinement measures and social distancing used to flatten the epidemiological curve. The third type refers to shocks to transfers, such as remittances from the United States, which could face a significant reduction as a result of the economic crisis in that country.

These three types of shocks must be mitigated with differentiated measures that attend differently to those who are affected by one or the other. For this reason, this document proposes to protect the progress achieved by creating **resilience baskets**, which broadly consist of public policies focused on the labour market, such as the generation of capacities and the promotion of productive inclusion, social protection and their universalization, care systems and access to physical and financial assets to protect people from the risk of falling into poverty (see UNDP, 2016).

Graph 4. Multidimensional Poverty Index, 2014 and 2018



Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

3. Vulnerable households and risk factors against COVID-19

The response to COVID-19 will mark a turning point in the task of ending poverty in all its forms (Alkire, Dirksen, Nogales & Oldiges, 2020). In this regard, multidimensional poverty measurement offers a look at the vulnerability of people and households under different risk factors. This tool allows us to identify approximately the size of vulnerable populations and those susceptible to economic, social and health risks.

In the face of the COVID-19 pandemic, it must be recognized that there are individuals and groups that will be able to overcome adversity better than others, and that after the pandemic this could result in a noticeable reduction in opportunities or in the immediate and subsequent impact on the level of life.

By their nature, health emergencies can cause household income or income to decrease and medical expenses to increase; while economic crises carry the risk that people will lose their jobs due to the recession or the deterioration of trade relations (UNDP, 2014). The crises indicated usually occur in a subsequent way or generated by each other, but in the COVID-19 pandemic both occur in a p way, in that sense it is worth asking what types of households would be most affected by the health and economic effects of the pandemic.

In this exercise, four **groups of households** have been identified that, for different reasons, have specific characteristics that accumulate risk factors or disadvantages against COVID-19. The first type are those headed by female single parents, which represent around three in every ten households at a national level (31%). Their vulnerability responds to the fact that women in the country have a lower economic participation with a gap of

-33.4 between men and women, to the fact that, on average, women receive 17% less than men; and that they are overrepresented in branches of commerce, hotels and restaurants, education, community services and households with domestic service (UN Women, 2020) which are subject to sanitary measures that more affect their labour income.

A second group of vulnerable households is identified based on the epidemiological risk in the profile of the affected population, which suggests a higher probability of requiring hospitalization and even the need for Intensive Care Units among people over 60 years of age. In this regard, households with members older than 60 years of age are identified as potentially vulnerable in this pandemic.

Due to all the aforementioned, a third group is that of multidimensional poor households, particularly those that have an incidence of deprivation that are presented below.

Finally, it should not be forgotten that El Salvador is an economy closely linked to that of the United States, since this is the main trading partner and also the place of residence of about 2.5 million Salvadorans. In 2018 alone, it is estimated that some 164 thousand households are highly dependent on remittances since more than a third of their income came from the flows of said transfers. Taking into account the economic contraction in the United States, these households become very vulnerable to a reduction in remittances due to the contraction of economic activity and employment in that country. Therefore, a fourth vulnerable group is family remittance-dependent households that represent a third or more of their income (see **Table 1**).

Table 1. Types of households with greater vulnerability to COVID-19

1. Households headed by women
2. Households with members older than 60 years of age
3. Multidimensional poor households
4. Households that are dependent on income from remittances

Considering the previous characteristics of a specific group of households, some critical multidimensional poverty measurement indicators can give us an idea of interconnected risks when dealing with the COVID-19 epidemic. Along these lines, six deprivations are identified that could account for this risk due to the effects they generate, namely:

Table 2. Deprivations in Salvadoran homes that aggravate people's situations before COVID-19

1. Overcrowding	Number of people sharing the same space.
2. Lack of access to social security	Potential risks of unemployment and recession.
3. Underemployment and job instability	Potential loss of income and/or livelihoods.
4. Lack of access to drinking water ⁴	Effects of prevention of contagion.
5. Lack of access to health services ⁵	Potential loss of income and/or livelihoods
6. Lack of access to sanitation ⁶	Effects of prevention of contagion.

⁴ The household is deprived if you do not have access to drinking water within the land of your home or if you have a home connection, but you do not receive the service for more than a month.

⁵ The household is deprived if at least one person who required medical attention did not have access to care in the public system; or if the household, not having required medical attention if needed, did not go to the public system because it considered that there was no access to the service (STPP and Minec-Digestyc, 2015).

⁶ According to the World Health Organization, people with suspected or confirmed COVID-19 should receive their own toilet or latrine with a door separate from the patient's room. Toilets must function properly and have working drain traps. When possible, the toilet should be flushed with the lid down to avoid drip splashes and spray clouds. If it is not possible to provide separate toilets, the toilet should be cleaned and disinfected at least twice a day with a proper cleaning product using personal protective equipment (gown, gloves, boots, mask, and a face shield or glasses) (WHO, 2020).

Based on these deprivations, 85.8% of national households suffer from at least one of the six mentioned. This percentage is equivalent to more than 1.6 million households (see **graph 5**). It should also be added that just over two out of every three households have between one and three deprivations linked to COVID-19 risks; 15% report a deprivation; 29.9%, two deprivations; and, 24.3%, three deprivations (see **table 3**). It should be noted that a relatively small percentage of households experience deprivation in all six indicators at the same time (only 0.8% of households).

I. Households headed by women

This first group represents 31.1% of all households nationwide, which is equivalent to some 580 thousand households, among which 74% of them have between one and three deprivations. This group also contains a subgroup consisting of almost 230 thousand households that, in addition to being headed by women, have members between 0 and 17 years old. It is important to bear in mind that a characteristic is added stating that women have higher unpaid household workloads and that confinement measures generate greater family burdens.

II. Households with members older than 60 years of age

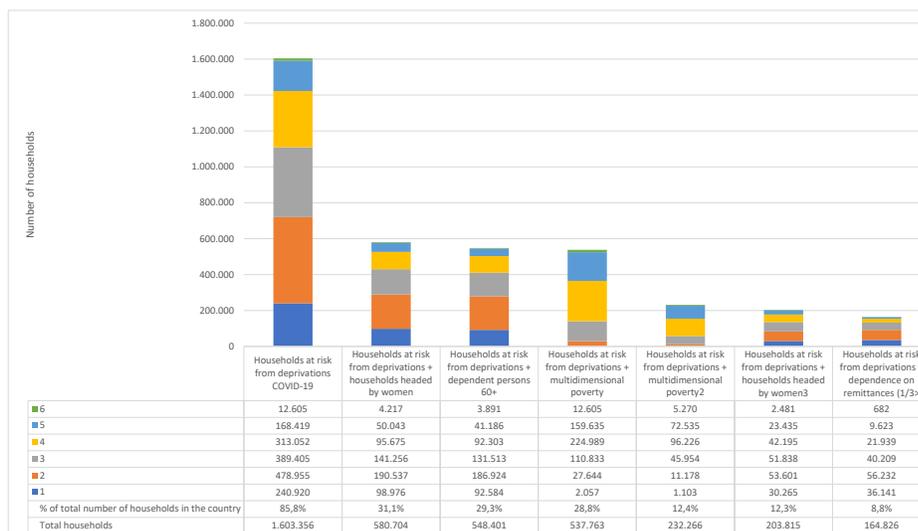
29.3% of households are identified in this profile, which is equivalent to more than half a million households in all. 75% of this group includes between one and three of the deprivations identified. This group is identified due to the epidemiological risk suffered by people over 60 years of age, while trends show that this age group is more likely to require hospitalisation and even the need for Intensive Care Units.

III. Multidimensional poor households

This third profile is equivalent to 28.8% of households, that is, 537,763 in El Salvador. This group has the particularity that it accumulates the greatest number of deprivations, since 71.5% of them present between four and five of those identified. This is consistent with the measurement of multidimensional poverty since a greater number of deprivations increases the level of poverty. Within this group, some 232,266 households, in addition to being multidimensional poor, are also monetary poor because they cannot cover the cost of the BFB, which means that they have a double condition of poverty.

IV. Households that are dependent on income from remittances

The fourth and last group are those households that depend to a large extent on money sent monthly from abroad. That is, they are those households in which a third of the monthly income is made up of said family remittances. Due to the magnitude of the pandemic in the United States, it is relevant to consider a potential economic recession and a consequent increase in Hispanic unemployment. This group is comprised of 164 thousand Salvadoran households. 80% of these households include between one and three deprivations.

Graph 5. Types of households with health and economic vulnerabilities that present up to six deprivations linked to risks posed by COVID-19

Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

Table 3. Percentage distribution of types of households with health and economic vulnerabilities that present up to 6 deprivations linked to risks posed by COVID-19

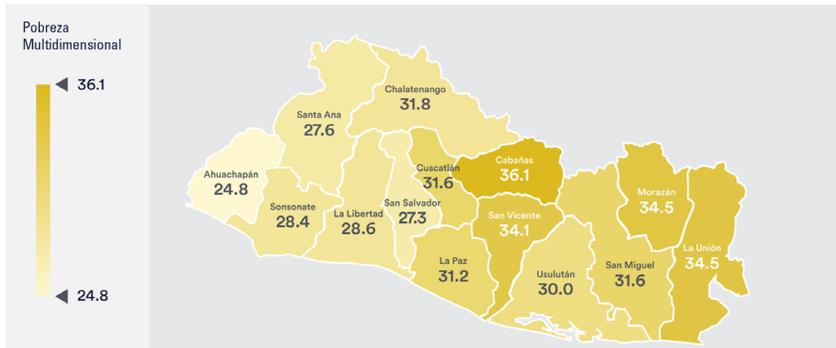
Number of deprivations	Households at risk from deprivations COVID-19	Households at risk from deprivations + households headed by women	Households at risk from deprivations + dependent persons 60+	Households at risk from deprivations + multidimensional poverty	Households at risk from deprivations + dependence on remittances (1/3>
1	15.0 %	17.0%	16.9 %	0.4 %	21.9 %
2	29.9 %	32.8%	34.1 %	5.1 %	34.1 %
3	24.3 %	24.3%	24.0 %	20.6 %	24.4 %
4	19.5 %	16.5%	16.8 %	41.8 %	13.3 %
5	10.5 %	8.6%	7.5 %	29.7 %	5.8 %
6	0.8 %	0.7%	0.7 %	2.3 %	0.4 %
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Source: own elaboration based on EHPM 2018 (Minec-Digestyc, 2019).

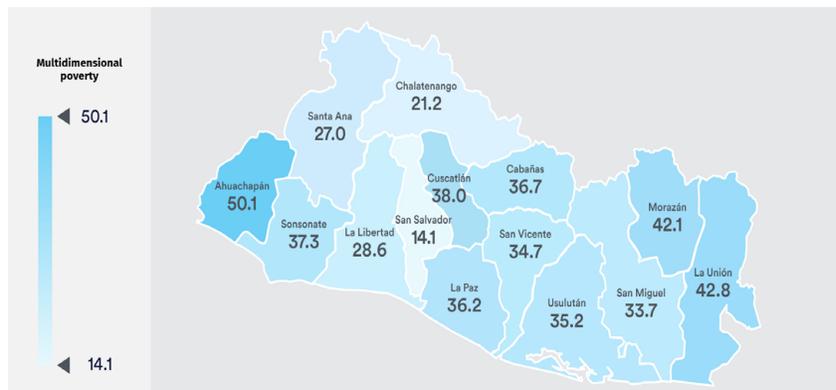
In all groups identified –with the exception of those dependent on remittances– there are several thousand households. It is acknowledged that the vulnerability characteristics indicated may overlap, but as they are combined, the potential number of households is reduced and a micro-focus is created that can be difficult to identify even in a country as small as El Salvador. For demonstration purposes, Annex 1 presents the results of these characteristics for those who wish to study it further.

Knowing this group of households, the question arises: How are these identified profiles achieved? Based on the characteristics indicated for the six groups, they are each identified and the percentage of households by department that meets these characteristics calculated. The results show that in some cases the differences by groups between departments are higher than in others. The most obvious differences are found in multidimensional poor and remittance-dependent households. The smallest differences are found in single-parent households headed by women; and, in those with members older than 60 years of age. The following maps present the departmental incidence for each group.

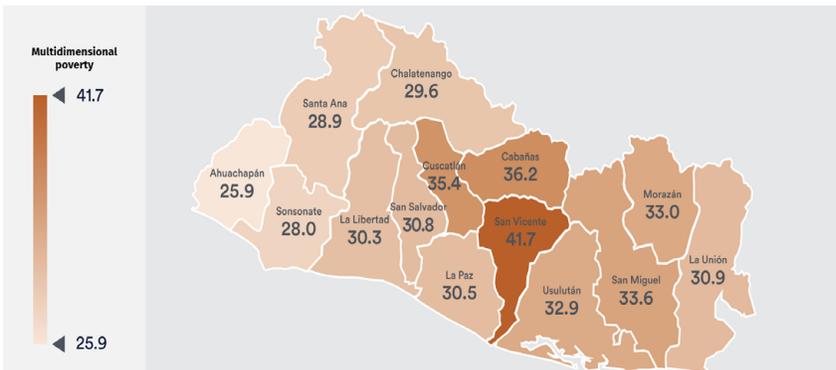
Map 2. Households at risk from deprivation plus dependent people aged 60 and over, at a departmental level for 2018



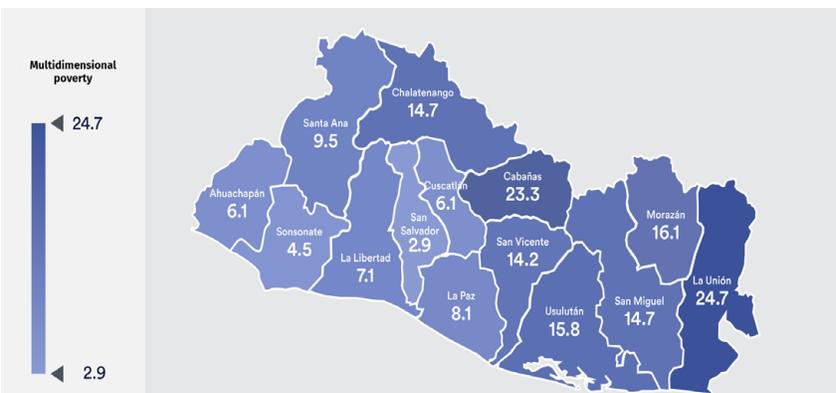
Map 3. Households at risk from deprivation plus multidimensional poverty, at a departmental level for 2018



Map 4. Households at risk from deprivation single-parent female household heads, at a departmental level for 2018



Map 5. Households at risk from deprivation plus dependence on remittances, at a departmental level for 2018



4. Recommendations

The priority when dealing with the COVID-19 pandemic must be to save lives by controlling the epidemiological curve in order to “flatten” the contagion curve. However, this decision carries the economic cost of paralysing productive activity, which generates a recession in the economy. Identification of households is intended to be a tool for identifying populations that are vulnerable to COVID-19; and, for the formulation of policy responses that especially address those points that make them vulnerable.

In order to address this vulnerability, it is important to bear in mind two relevant aspects for the development of public policy responses. The first is that the aforementioned deprivations have a structural nature, which implies that, despite the huge willingness to attend to and combat poverty, there are pre-existing conditions of infrastructure, resources, institutional capacity and/or technology that constrain the possibility of immediate responses. Although deprivations are intended to be resolved immediately, they involve intrinsic processes that delay immediate responses; a specific example occurs in access to sanitation that requires infrastructure.

The second relevant aspect is also a structural element, but more cyclical: the fiscal space available to offer policy responses, since this largely determines the type and scope that they may have. El Salvador faces the emergency of COVID-19 with pre-existing conditions of high public indebtedness and chronic fiscal deficits, since before the crisis, it already reported a level of public debt close to 70% of GDP and a global deficit noticeably affected by interest spending (IMF, 2019). At the end of 2019, the GDP debt level was 71.8% and depending on the magnitude and duration of the economic crisis, it is estimated that the percentage could increase between 10 and 15 percentage points.

To deal with the pandemic, the Legislature authorised the search for up to 3 billion US dollars in financing. Among those resources, the request for emergency assistance of 389 million US dollars has already been approved through a rapid financing instrument of the International Monetary Fund (IMF). It is clear then that the magnitude of the economic slowdown and the fiscal impacts will be a challenge to address the response and to economic recovery.

In this context, it is important to bear in mind that the deprivation thresholds for the risks interconnected to the COVID-19 epidemic allow us to understand the reference value that explains whether or not a person or household is facing the indicated deficiency (see **table 3**). Remembering the thresholds is relevant to reaffirm that structural measures are required, but the pandemic also requires immediate measures to be taken to respond to the crisis from the perspective of multidimensional poverty care. In this regard, this analysis will classify immediate and early policy responses, which include medium-term responses.

Table 3. Thresholds for calculating risk deprivations interconnected to the COVID-19 epidemic

Deprivation	Threshold
Drinking water	The household is deprived if you do not have access to drinking water within the land of your home or if you have a home connection, but you do not receive the service for more than a month.
Health services	The household is deprived if at least one person who required medical attention did not have access to care in the public system; or if the household, not having required medical attention if needed, did not go to the public system because it considered that there was no access to the service.
Overcrowding	The household is deprived if there are three or more people per bedroom.
Sanitation	The household is deprived if it does not have access to the sanitary service connected to the sewage network or septic tank, or if the sanitary service is shared and owned by another household.
Social security	The household is deprived if at least one actively employed person is not a beneficiary or contributor to health insurance.
Underemployment	The home is deprived if at least one person is underemployed by time or income, or has an unstable job, in which there are periods of forced inactivity of more than one month per year.

Source: STPP and Minec-Digestyc (2015).

Another relevant element for this analysis and frequently pointed out at this point is that the pandemic requires a containment policy to flatten the epidemic curve; as well as economic measures to reduce the recession curve (Baldwin and di Maduro, 2020). In other words, joint management of health and economic responses. Therefore the great challenge is to “flatten” the two curves: the epidemiological and the economic recession curves. Within this framework, there is debate as to whether or not there is a dilemma between saving lives or saving jobs and livelihoods. The control of the epidemiological curve is undoubtedly a necessary condition to “save the economy”; and it should not be seen as a dilemma.

The recommendations in this document combine the elements indicated with the deprivations interconnected to risks posed by the COVID-19 epidemic. Therefore, measures of a sanitary and economic nature are proposed, which must consider two types of temporality: some of an immediate nature and others of an early recovery, to be implemented after overcoming the sanitary confinement measures. This second group of measures has been called “resilience baskets”, referring to public policies focused on labour market response, social protection, provision of basic services, care systems, access to physical and financial assets to protect people in a vulnerable condition from COVID-19.

The combination of the nature of the responses and the temporality with the deprivations lead to the recommendations presented below. Sanitary measures include responses to address deprivations from access to drinking water, access to health services, overcrowding and sanitation. Sanitary responses must be considered a priority for the emergency, since access to drinking water is essential for the prevention of the contagion and should, therefore, be prioritised over the rest. The same can be said about access to health services that are essential in the event of potential contagion. Economic measures include those that address underemployment and social security (see **figure 1**).

Figure 1. Classification of responses and deprivations interconnected to COVID-19

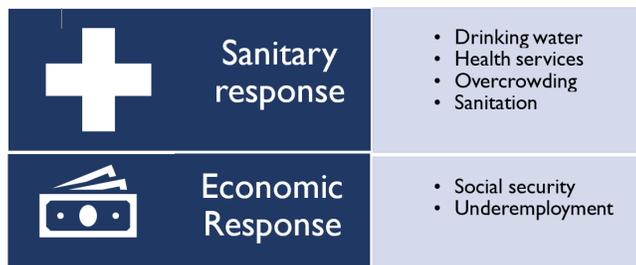


Table 4 shows the summary of immediate responses for each of the deprivations. Among the priorities related to drinking water are: mapping and identifying the communities most affected by irregular access to water; establish supply plans in vulnerable communities, which can be coordinated with local stakeholders; the installation of portable hand washing areas for small groups of families; and organisation of awareness-raising campaigns on joint responsibility for water transport.

In the deprivation of health services, a proposal was made to formulate logistics planning according to potential epidemiological scenarios for each region. This means anticipating the potential demand of the departmental and regional hospitals, to evaluate logistical elements for the transportation, mobility and planning of the supply of supplies; all of them critical elements to give an adequate response. There is also a proposal to cooperate with local governments in making a rapid identification of vulnerable populations by municipalities, especially those aged 60 and over. This could be based on the Community and Specialised Health Community Teams (ECOS) strategy. Finally, it is necessary to have information campaigns on points that offer health services, as the deprivation of this implies that there is no access to the service.

It is acknowledged that overcrowding and sanitary deprivations correspond to the dimensions of habitat quality and basic services, respectively; however, in this analysis, both are considered health risk factors. They are

therefore included as health responses. Overcrowding and lack of sanitation can lead to contagion as noted by the World Health Organization.

In anticipation of overcrowding being a risk factor as well as the possibility that suburban neighbourhoods are at risk of contagion, it is necessary that the planning and authorisation of temporary containment centres provide solutions for the population living in these conditions for the sake of stopping the contagion. This planning also involves rapid identification of vulnerable populations. Both proposals can be made through voluntary registrations, on electronic georeferenced platforms, in collaboration with local governments. With this registration, basic needs for food or other supplies can also be identified.

In the deprivation of social security two types of measures are contemplated, one for those without access to social security and others for those who have or have had access in the last 24 months. In the first group, consideration should be given to the implementation, in the short term, of social security benefits for sons and daughters of affiliated persons under 18 years of age, and guarantee basic care for a beneficiary (spouse, father, mother, etc.) of an active contributor. The second group involves guaranteeing care for those with contributions in the last 24 months, but who have suspended their contribution; and for those who lose their jobs due to the crisis, benefits must be guaranteed for at least the next twelve months.

Immediate economic responses include initiatives that are already being promoted, but that can be perfected. To address underemployment, and especially loss of income due to confinement, it is necessary to provide cash transfers and subsidies that allow the family to have a subsistence income. Other in-kind assistance, such as food, medicine or other basic products, should also be considered. In order to avoid crowds and increase the risk of exposure, a proposal has also been made to promote financial insertion measures through money orders at ATMs and other electronic payment methods.⁷

Table 4. Proposal for an immediate response to deprivations interconnected to COVID-19

Response	Deprivation	Immediate responses
Sanitary	Drinking water	Mapping and identification of communities most affected by irregular access to water Provisioning plans in vulnerable communities. Installation of portable hand washing areas for small groups of families. Awareness campaigns on co-responsibility for water transport.
	Health services	Logistics planning according to regional epidemiological scenarios. Rapid identification of vulnerable populations by municipalities (60 and over). Information campaigns on access to health services. Food baskets.
	Overcrowding	Identification of vulnerable populations. Planning and empowerment of voluntary containment centres.
	Sanitation	Distribution of palliative supplies such as chlorine, alcohol gel.
Económica	Social security	Implement benefits for under 18-year-olds. Guarantee basic care for relatives of contributors. Guarantee stability against job losses for six months. Provide benefits for the population with contributions in the last 24 months.
	Underemployment	Subsidy and cash transfers. Aid in kind (food, medicines, cleaning supplies). Financial insertion and bank withdrawal options without an account.

Source: UNDP, 2020.

Previous reports on human development have indicated that the extent to which adverse events reduce human development depends on the ability of people to deal with adversities. This ability has been called resilience capacity or human resilience (UNDP, 2014; UNDP 2018). Resilience depends largely on people's individual

⁷ See www.ar.undp.org/content/argentina/es/home/presscenter/articles/2020/platasincuenta.htm

characteristics, but also on their social and community context. This perspective that allows individual, family and community characteristics to be analysed is useful to develop a vulnerability analysis. Consequently, the second group of measures aimed at addressing an early recovery are the so-called resilience baskets, referring to multidimensional subsets of policy responses that help overcome the adversity or shock generated by the pandemic (UNDP, 2015).

In all, five types of resilience baskets are identified, which can be adapted from a minimum to be expanded or reduced depending on available resources and household needs. These baskets are:

Care basket: it includes adapting public and private community care services with those for households with an older adult population and minors; and, the promotion of co-responsibility for care where there are two-parent homes, in order to avoid overloading women.

Food basket: it includes the provision of food baskets or supermarket vouchers⁸ for the population. This should include particular dietary needs for children and the elderly. Food baskets can be delivered in a traditional or innovative way, such as via codes (QR codes or number chains) sent by cell phone that serve as food vouchers. This initiative can be accompanied by information campaigns for the protection of mental health and the prevention of domestic violence.

Income basket: it includes the purchase of small-scale crop or livestock production for small producers (rural); universal basic pension for households with older adults or in conditions of monetary poverty; employment-intensive investment programmes (ILO methodology) linking local demand and supply of services, especially in the early recovery stage; and strengthening capacities and resources directed at informal self-employed workers.

Temporary job basket: these are public employment and prompt training programmes (they include payment for days of care for the elderly, combined with basket 1, in the early recovery stage). In a second phase of the relaxation of the measures to contain the epidemic, they can include “green” employment, for example: reforestation of basins, cleaning of rivers, beaches, etc.

Non-contributory social security basket: temporary suspension of payment for basic services (access to basic services without contribution-payment); universal basic pension; strengthening timely non-contributory healthcare through community programmes (such as the FOCOS programme).

These five baskets could be distributed among the four groups of households establishing allocation mechanisms. Table 5 shows the distribution proposal.

Table 5. Resilience baskets according to household groups

Households headed by women	Households containing older adults	Households in multidimensional poverty	Households highly dependent on remittances
<ul style="list-style-type: none"> » Care basket. » Food basket. » Income basket. » Temporary job basket. 	<ul style="list-style-type: none"> » Care basket. » Food basket. » Income basket. » Non-contributory social security basket. 	<ul style="list-style-type: none"> » Food basket. » Income basket. » Temporary job basket. 	<ul style="list-style-type: none"> » Income basket. » Temporary job basket.

⁸ The World Food Program (WFP) is using this modality under the principle of respect for dignity, instead of uniform basic baskets.

In short, the multidimensional poverty tool shows the pre-existing conditions of poverty, which allows identification of the most vulnerable households against COVID-19. Thus, public policy is based on empirical evidence to design a targeted response, and adjusted to vulnerability conditions for different types of households. As such, it contributes to a more effective use of resources to save lives and protect livelihoods for the population in El Salvador.

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Annex 1. Disaggregation of households by vulnerabilities



Development Challenges in the Face of COVID-19 in Mexico. Socio-Economic Overview

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Abstract

The COVID-19 pandemic, in addition to health challenges, has imposed enormous socio-economic development challenges on Mexico. Throughout the document, it is argued that the weak economy and inequalities that prevailed before the arrival of COVID-19 in Mexico are exacerbating the effects of the lockdown implemented to contain the virus and reducing the response capacity of the Mexican government. It also analyzes the effects that the pandemic has had on (i) workers' income, both formal and informal; (ii) poverty levels; (iii) private consumption; (iv) industrial production; (v) oil prices; (vi) exports; and (vii) income from remittances. Finally, based on these analyses, a series of recommendations are issued, aimed first at protecting household incomes and sources of employment. Secondly, the recommendations focus on reducing risks that threaten the stability of the financial system, in order to promote a faster recovery. Thirdly, guidelines for strengthening the government's response capacity are proposed. Fourthly, the recommendation to favor policies that incorporate the gender perspective is made. Finally, evidence-based, gradual re-opening proposals are issued, which avoid contagion peaks and longer lockdown periods that would deepen the current recession.

Introduction

The emergence and rapid spread of the virus identified as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the associated infectious disease, COVID-19, has challenged the world's population and highlighted the vulnerabilities of health systems and national economies.

In order to present recommendations on health and socio-economic development in the face of COVID-19 to the Mexican authorities, UNDP Mexico has developed two analytical documents that address both issues individually, but in an interconnected manner. This document, "Development challenges in the face of COVID-19 in Mexico – Socioeconomic Overview" aims to analyze the current socioeconomic context so that, based on a consultation with experts, recommendations can be made on possible actions to be taken to address the economic recession facing the country due to the pandemic.

As detailed in the document entitled "Development challenges in the face of COVID-19 in Mexico – Overview from a health perspective", the absence, in the short term, of a vaccine or effective drug treatment has led the Mexican authorities and those of other countries to impose home isolation and non-essential work suspension measures, in order to reduce the rate of infection and, subsequently, the saturation of health services. The scenarios proposed by the UNDP Mexico report in the area of health were developed using a mathematical model that takes into account the behavior of the virus and the effectiveness of the government's response, measured by the reduction in the number of infections and in the transmissibility of the virus, in order to estimate the possible impact of the spread of the disease on the health sector. To prevent health services from collapsing, authorities could extend the duration of self-imposed activity-reduction policies, which will have a profound impact on the world's economies.

The economic crisis caused by COVID-19 is estimated to be the most severe since the end of World War II. However, the socio-economic effects depend largely on which of the possible health scenarios occurs in reality, as well as on the timeliness and appropriateness of the economic policy responses implemented by the authorities. On the continuum of potential scenarios, the more seasonal the disease, and the more effective the institutional response, the less negative the effects on the economy and the welfare of the population; conversely, the non-seasonality of the virus and an untimely and ineffective institutional response will deepen the recession and slow down recovery.

The impact of COVID-19 on Mexico's economy is manifold. Firstly, the reduction in people's typical activity leads to a fall in consumption, with significant effects on business income. Moreover, the forced closure of thousands of companies compromises their ability to survive which, in turn, translates into a significant deterioration of the labor market, with increases in the unemployment rate and the informal employment rate, as well as possible reductions in the economic participation rate. This, in turn, entails reduced household income, with effects on quality of life, consumption of basic goods, savings and access to credit.

COVID-19 has also impacted supply chains, generating disruptions that compromise the activity of certain companies. This situation is aggravated for economic units with a greater dependence on inputs from other countries, since the reactivation of the economy is not homogeneous, but varies according to the stage and evolution of the pandemic in each country.

Similarly, the tourism sector, which represents one of the main sources of employment in several states, has been severely affected by travel restrictions imposed in some countries and by the containment measures adopted in the country. It is estimated that the recovery of this sector will be complicated by the falls in demand caused by the interruption or decrease in the income of Mexican households and those of the rest of the world.

An additional aspect to consider is the US recession itself, for two reasons. Firstly, COVID-19 has had a negative impact on consumption levels in American households, with major effects on Mexico's exports, given the intense

trade relationship between the two countries. Second, a fall in Mexican household income is foreseeable as a result of a decrease in the flow of remittances. While March this year saw the highest ever quantity of remittances and an increase of 18.4% over the first quarter of 2019, April 2020 saw a drop of about 28.59% over the previous month and almost 3% over the same month in 2019.¹

Two additional effects of the pandemic on the national economy are, firstly, sharp falls in the price of oil and, second, a significant decrease in revenue. Both aspects are a threat to the income of the Mexican government, with all that this implies in terms of the response capacity to public issues.

The recession being experienced is of an unconventional nature, characterized by an abrupt decline in economic activities, similar to that resulting from a natural disaster. However, it differs from a crisis resulting from a natural disaster in four main ways: (i) the effects are not geographically determined, but extend to most of the world's economies; (ii) the duration of the phenomenon is unclear and, consequently, the associated social and economic costs are equally unclear; and (iii) the potential loss of human capital, with long-term effects; and (iv) there is no destruction of physical capital, unlike in the case of natural disasters.

Given the nature of the current crisis, it is advisable to implement counter-cyclical policies aimed at sustaining household consumption and protecting sources of employment for a more accelerated economic recovery.

Measures to mitigate and reduce the impact of the economic and social crisis should be structured as three stages. The first is the equivalent of an induced coma, in which the global economy is ground to a halt to allow infected areas to recover and prevent the entire economic system from becoming infected. The second stage is one of recovery; in the Mexican economy this will depend on: (i) the national economic policies implemented during the induced coma stage; (ii) the recovery of the United States, which in turn depends on the policies implemented by that country during the induced coma stage; (iii) the evolution of oil prices; and (iv) the national and international agreements (bi- and multilateral) that are achieved during the induced coma stage. It is worth mentioning that the recovery will not be homogeneous among economic sectors, among regions of the country, or among population groups. Finally, the third economic stage will be one of a new normal, involving changes in the way societies are organized and, consequently, changes in economic systems at all levels. This stage should focus on building resilience to events such as COVID-19. It is likely that, depending on whether or not the virus is seasonal, the stages set out above will form a non-linear process.

This method of categorizing the economic stages in the face of COVID-19 allows us to see that the degree of uncertainty varies depending on the stage. In the first stage, referred to as induced coma, high levels of uncertainty are identified, which are associated with a virus about which little is known and over which there is no control. However, since this is a self-induced paralysis, it is possible to identify mechanisms that could counteract a recession in the short term.

Therefore, during the induced coma stage, the implementation of policies combining counter-cyclical and post-disaster support schemes is recommended. The aim of these policies is to keep the Mexican economy as close as possible to the conditions that were respected before the arrival of COVID-19, and to eliminate the decreasing inertia that was experienced in the last quarters of 2019 and the first months of 2020. In other words, the aim should be to minimize the recessive effects of the induced coma stage.

To that end, the first section of this report presents a socio-economic overview based on a documentary analysis, which includes a review of official documents and statistics, institutional reports and press releases, among others. Subsequently, in another section, a series of recommendations aimed at mitigating and

¹ Bank of Mexico, "Income from remittances", Economic Information System, March 2020. Available at www.banxico.org.mx/SielInternet/consultarDirectorioInterne-tAction.do?sector=1&accion=consultarCuadro&idCuadro=CE81&locale=es (accessed 29 May 2020).

reducing the effects of a recession in Mexico are presented. One factor that was considered to determine these recommendations was an expert consultation that was implemented within the framework of this study as a measure to mitigate the uncertainty that characterizes the phenomenon of the pandemic. The public policy proposals were developed based on the analysis of the economic overview presented in the first section and interpretation of the opinion issued by the experts.

1. Analysis of the socio-economic situation in Mexico

Pre-COVID-19 conditions of fragility

Before the outbreak of COVID-19, the Mexican economy showed significant signs of weakness. During the first quarter of 2020, a decrease of -2.4% in the Gross Domestic Product (GDP) was observed with respect to the same quarter of 2019, and the real annual variation for the secondary and tertiary sectors was -3.8 and -1.4%². Likewise, during the third and fourth quarters of 2019, the GDP, in the seasonally adjusted series, registered decreases of -0.3 and -0.6%, respectively.³

Moreover, tax revenue in the country is low compared with other countries. Mexico is the country with the lowest revenue in the OECD and the fifth lowest in the Latin American and Caribbean region. In Mexico, the equivalent of 16.1% of GDP is collected, while, on average, OECD countries collect 34.3% of GDP⁴. Despite the 9.2% real increase in budgetary revenues reported by the SHCP between the first quarter of the year and the same period in 2019⁵, the desired level has not been reached. Before the arrival of COVID-19, this situation compromised the achievement of economic and social objectives, as well as the provision of quality public services to the population. Within the context of the current pandemic, the loss of revenue limits the authorities' response to the economic slowdown. In terms of public debt, in the last quarter of 2019, it was reported that this represented 44.6% of GDP. Globally, the average debt as a percentage of GDP is 55.70%⁶. In other words, Mexico is among the countries with intermediate debt, which may provide room for action to finance public spending in the face of the shock and avoid a greater fall in GDP, which would also translate into an increase in the debt/GDP ratio, even if no additional debt is contracted.

In the business ecosystem, according to the 2019 Economic Census, microenterprises are predominant; 70% of them have between one and two employees⁷ (see graph 1), which can mean a weakness in terms of financial capacity, as well as resilience to crises. The fragility of companies translates into vulnerabilities for the employed population, in the face of decreases in sales and income from the goods and services offered. Likewise, about 43% of the population is employed in companies with less than 50 employees, which represents more than 98% of the companies in the country (see graph 1).

It is important to mention that the Economic Census does not capture information on mobile establishments, resulting in underestimates of both the percentage of microenterprises in the business ecosystem and the percentage of the population employed in those economic units.

² The figures correspond to the seasonally adjusted series. The original figures are -1.6, -3.2 and -0.9%, respectively.

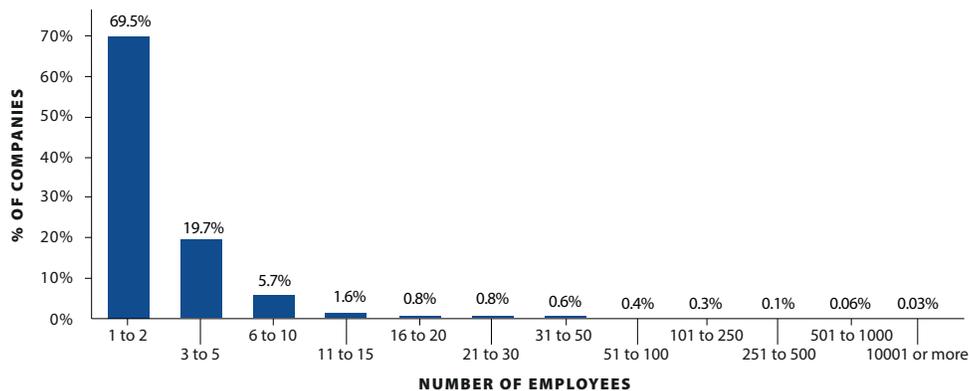
³ INEGI, "Timely Estimation", Mexican System of National Accounts, March 2020. Available at: www.inegi.org.mx/temas/pibo (accessed 15 April 2020).

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⁶ IMF, Central Government Debt. Percent of GDP, IMF DataMapper, 2020. Available at: https://www.imf.org/external/datamapper/CG_DEBT_GDP@GDD/CHN/FRA/DEU/ITA/JPN/GBR/USA (accessed 29 May 2020).

⁷ INEGI, "Total occupied establishments and personnel, by federative entity and year of start of operations", Economic Census 2019. Available at: <https://www.inegi.org.mx/programas/ce/2019/default.html#Tabulados> (accessed: 10 April 2020).

Graph 1. Percentage of companies by number of employees

Source: Own drafting based on INEGI data, "Establishments and total employed staff, by state and year of start of operations", Economic Censuses 2019. Available at: www.inegi.org.mx/programas/ce/2019/default.html#Tabulados (accessed: 10 April 2020).

Before the arrival of the pandemic in Mexico, according to 2018 figures from the National Council for the Evaluation of Social Development Policy (CONEVAL), almost 42% of the Mexican population was in poverty (34.5% in moderate poverty and 7.4% in extreme poverty)⁸. 69.5% of the indigenous population was in poverty⁹. Similarly, another group identified as vulnerable in socio-economic terms is people with disabilities, since it is reported that 48.6%¹⁰ of this group is in poverty. Children and adolescents suffer disproportionately from poverty (49.6% are in poverty).¹¹

The National Occupation and Employment Survey (ENOE) for the last quarter of 2019 reports an informal employment rate of 56.2%.¹² This situation places more than half of the population in a double situation of vulnerability. First, people in informal employment are excluded from social security institutions and their benefits, for example, from disability payments due to illness if they become unwell, or from payment of a pension to their family, if they die. Moreover, with the National Health Institute for Welfare (INSABI) in the consolidation phase, access to public health services is difficult for people in informal employment, combined with potential increases in out-of-pocket spending, as well as catastrophic expenditures for the household. Secondly, people in informal employment tend to have lower incomes, less stability and less savings and, in turn, find it more difficult to comply with social isolation measures and measures to suspend non-essential activities, such that the likelihood of transmission for the sector of the population with a lack of access to social security is greater.

Once again, the overlapping of informality with certain characteristics (ethnic identity, gender, age group and migrant status, among others) results in the worsening of the vulnerability of these population sectors in the face of the arrival of COVID-19 in Mexico. In this regard, 78.2% of the indigenous population does not benefit from some kind of social security scheme, a proportion considerably higher than the 55.1% of the non-indigenous¹³ population. Similarly, 65.5% of the young population between 12 and 29 years of age has no access to social security, which makes them a vulnerable group. The migrant population is another group that is identified as

⁸ CONEVAL, "2018 Statistical Appendix", 2008-2018 Poverty Measurement. Available at: www.coneval.org.mx/Medicion/MP/Paginas/AE_pobreza_2018.aspx (accessed 8 April 2020).

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² INEGI, "Informal employment IV Quarter 2019", National Occupation and Employment Survey. Available at: www.inegi.org.mx/programas/enoe/15ymas/default.html#Tabulados (accessed: 10 April 2020).

¹³ CONEVAL, "2018 Statistical Appendix (see section I, footnote 8).

being more vulnerable, with only 39 per cent having medical¹⁴ benefits. Finally, women present a higher rate of informality than men (57.6 and 55.3% respectively). If the population in the agricultural sector is not considered, the gap widens: the informality rate for women is 56.6% and for men 48.4%.¹⁵ This also has an impact on income from employment (see table 1).

Table 1. Measures of central tendency for hourly wage by sex and formal/informal status

	Mean	Median
General	35.92 pesos	29.55 pesos
Formality	41.33 pesos	33.33 pesos
Informality	29.23 pesos	25.00 pesos
Women	34.55 pesos	27.50 pesos
Formality	40.80 pesos	31.78 pesos
Informality	26.69 pesos	22.86 pesos
Men	36.81 pesos	31.01 pesos
Formality	41.68 pesos	33.91 pesos
Informality	30.85 pesos	26.79 pesos

Source: Own drafting based on INEGI data, "Informal employment IV Quarter 2019", National Occupation and Employment Survey. Available at: www.inegi.org.mx/programas/enoe/15ymas/default.html#Tabulados (accessed: 10 April 2020).

Moreover, people who do not have access to running water also face greater risks with the arrival of COVID-19, since it is vital to follow the recommendations of national and international authorities (Ministry of Health, World Health Organization, Pan American Health Organization), such as frequent handwashing, as well as cleaning and disinfecting surfaces. In 2015, according to the National Water Commission, 15.0% of the rural population and 2.8% of the urban population did not have access to running water in their home or property.¹⁶ Given the urban bias of the disease (because of the mechanisms of transmission), people in marginalized urban areas without access to running water in their homes are in a particularly vulnerable situation.

The migrant population is at risk due to the lack of basic services. In general, this population group does not have access to health services during their mobility, a condition that is maintained when people temporarily live in shelters with adverse conditions. Among the adverse situations, there have been reports of overcrowding, such as rooms with 40 or 50 people, and insufficient basic services, food products and hygiene in some migrant¹⁷ shelters.

The use of solid fuels (wood and charcoal) for food processing and heating is a component that increases people's vulnerability to COVID-19, as it has adverse health effects, being a risk factor for acute lower respiratory infections (pneumonia) and chronic obstructive pulmonary diseases (bronchitis and emphysema)¹⁸. Both conditions are risk factors associated with COVID-19. In this regard, the National Survey of Household Income and Expenditure (ENIGH) indicates that, until 2016, 42.5% of homes inhabited by indigenous people used firewood or coal for cooking.¹⁹

¹⁴ CONEVAL, Diagnostic study on the right to work 2018 (Mexico, 2018). Available at: www.coneval.org.mx/Evaluacion/IEPSM/Documents/Derechos_Sociales/Estudio_Diag_Trabajo_2018.pdf (accessed 9 April 2020).

¹⁵ INEGI, "Informal employment" (see section I, footnote 12).

¹⁶ CONAGUA, Water Statistics in Mexico 2018 (Mexico, 2019). Available at: sina.conagua.gob.mx/publicaciones/EAM_2018.pdf (accessed 24 April 2020).

¹⁷ Jorge Butrón, "Overcrowding in shelters unleashes tensions, irregular charges...", La Razón, 30 June 2019. Available at: www.razon.com.mx/mexico/sobrecupo-en-albergues-desata-tensiones-cobros-irregulares/ (accessed 24 April 2020).

¹⁸ Smith, K., "Domestic use of wood in developing countries and its impact on health", *Forests and Human Health*, vol. 57, No.2 (Roma, 2006). Available at: www.fao.org/3/a0789s/a0789s09.htm (accessed 12 April 2020).

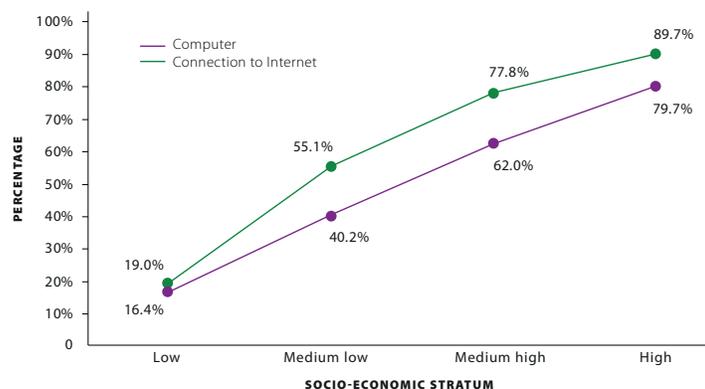
¹⁹ INEGI, "Households and Housing Module", National Household Income and Expenditure Survey 2016. Available at: www.inegi.org.mx/programas/enigh/nc/2016/default.html#Microdatos (accessed 7 April 2020).

Humanitarian emergencies, disasters and pandemics put women and girls in a more vulnerable position. There is evidence suggesting that where women are primarily responsible for obtaining and cooking food for the family, increased food insecurity as a result of any crisis situation may put them at greater risk. This is particularly worrying in the agricultural and fishing sectors in Mexico, where 69% of the 14,000 women employed in the Mexican fishing sector do not receive a fixed salary.²⁰

People with sexual orientations and gender identities associated with Lesbian, Gay, Bisexual, Trans and other (LGBT+T+) groups are particularly vulnerable when facing crises. The organization “It Gets Better” reported at least 15 cases of young people who were thrown out of their homes during the crisis, after revealing their sexual orientation or gender identity to their family, which places them in a situation of exposure to the virus as they do not have a stable space to shelter during this crisis.²¹

It should be mentioned that, as a result of the containment measures adopted in Mexico to contain the pandemic, students at all levels of education have had to study online. However, in Mexico, only 44.3% of households have computer equipment and only 56.4% have an Internet²² connection. In rural areas, these figures are considerably lower: 20.6% and 23.4% of households have a computer and an Internet connection, respectively. Similarly, differences in the possession of a computer and access to the Internet are very pronounced. While almost 9 out of every 10 households of a high socio-economic level have an Internet connection, only 2 out of every 10 households of a low socio-economic level have a connection (see graph 2). This has important implications for learning, human capital and income generation in the long term. Given the heterogeneity in access levels, the households that currently face the greatest disadvantages will, in turn, be the most affected by containment measures.

Graph 2. Households with a computer and Internet connection (%), by socio-economic stratum



Source: Own drafting based on INEGI data, “Homes with information technology and communications equipment, by type of equipment”, ENDUTIH 2019. Available at: www.inegi.org.mx/programas/dutih/2019/default.html#Tabulados (accessed: 29 May 2020).

In terms of the capacity of the Mexican healthcare system, it has been observed that there is room for improvement in terms of access, availability and quality of healthcare, which makes the population vulnerable in case of infection and serious symptoms. First, the number of hospital and intensive care beds per 1,000 population does not meet the standards set by the World Health Organization (WHO). Although the international organization recommends a ratio of one hospital bed per 1,000 inhabitants, the country falls significantly short in terms of hospital infrastructure, since only Mexico City comes close to meeting this international standard (see

²⁰ Inés López Ercilla, Raquel López-Sagástegui, “Women in the fishing sector in Mexico”, dataMare, 2018. Available at: doi.org/10.13022/M30K9N (accessed 7 April 2020).

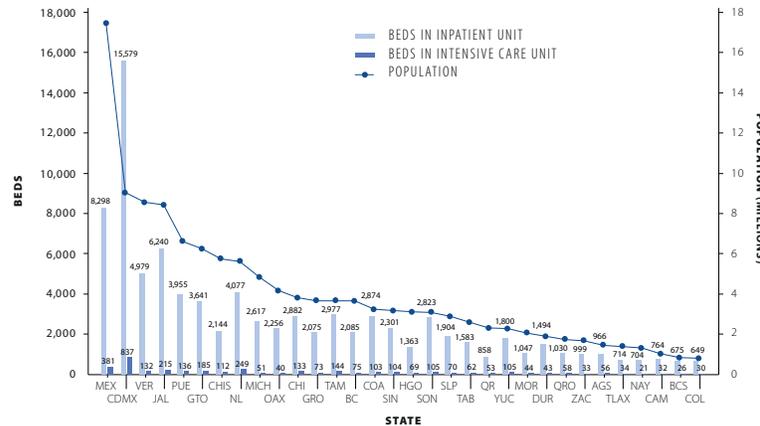
²¹ Gabriel Gutiérrez García, “COVID-19 and the LGBT community”, El Sol de México, 24 March 2020. Available at: www.elsoldemexico.com.mx/analisis/covid-19-y-el-colectivo-lgbt-5009405.html (accessed 24 April 2020).

²² INEGI, “Homes with information and communication technology equipment, according to type of equipment”, ENDUTIH 2019. Available at: www.inegi.org.mx/programas/dutih/2019/default.html#Tabulados (accessed: 29 May 2020).

graph 3). The number of hospitalization and intensive care beds per state, broadly speaking, is proportional to the number of inhabitants, except in the case of the State of Mexico, Chiapas, Michoacán, Oaxaca, Tamaulipas and Hidalgo, which fall far below. It is worth mentioning that the State of Mexico has the second highest number of cases of COVID-19, so the lack of material resources may affect the population of that state to a greater extent.

Although redevelopment measures have been announced, they will hardly be sufficient to cover the high demand for healthcare services.

Graph 3. Beds in intensive care inpatient units by state versus population (2018)



Source: Own drafting based on data from the General Directorate of Health Information, “Health Resources 2018 (SINERHIAS)”, Open data. Available at: datos.gob.mx/busca/dataset/recursos-en-salud-nivel-central/resource/b3949d5e-8438-4613-9b4a-8c4136c4a991 (accessed: 10 April 2020).

In 2018, in terms of human resources for health, the public sector in Mexico had 174,536 physicians and general practitioners and specialists, and 316,096 nurses in contact with patients. In the case of a total population of 127.2 million, this is equivalent to 1.4 physicians and 2.5 nurses in public institutions per 1,000 inhabitants.

In 2018, the General Directorate of Health Information (DGIS) reported 112,514 general practitioners and specialists working in the 1,370 hospital units, including 39,199 doctors in training, 18,499 general practitioners, and 94,015 specialists. This means that there is an average of 65.5 general practitioners and specialists per hospital unit, equivalent to 1.3 per hospital bed. As regards the specialties of greatest interest for COVID-19 care, it was identified that, in 2018, there were 8,009 general practitioners, 517 pulmonologists, 6,762 emergency physicians and 334 infectious disease specialists. In terms of nurses, there were a total of 237,431 in the 1,370 hospitals (173.3 nurses on average per unit), of which 32,970 were skilled nurses. The ratio of nurses per bed in the year in question was 2.7, which reflects the shortage of nurses in contact with the patient for each hospital bed, which amounts to less than one nurse per shift. The ratio of nurses to doctors is 1.6 on average (compared to about four in Canada and the United States).

The data presented above show that there are more people in the public system than there are beds. In hospitals, there is a shortage of healthcare personnel to cover the potential capacity, especially of specialized personnel for the care of respiratory problems associated with COVID-19. Moreover, there are not enough physical resources available to serve the population, even under normal circumstances.

All of the above gives an account of the situation prior to the arrival of COVID-19. Existing weaknesses and inequalities exacerbate the health and economic vulnerabilities caused by the pandemic. It is important to keep this data in mind when devising containment responses, in order to reach those who are most in need.

Economic and social impacts and prospects in Mexico within the context of the COVID-19 pandemic

1) Economic impacts

Although it is certain that the outbreak of COVID-19 will have a negative impact in social and economic terms, forecasts regarding the extent and duration of the impact are uncertain. However, the available data –generated with greater frequency– are essential elements for estimating the economic and social damage of the pandemic, and for designing and implementing measures that are timely and relevant.

To that end, this section offers important data, based on a documentary analysis, which provide an account of the issues faced. It is important to point out that, although the figures and estimates available so far do not allow for further breakdown to assess the differentiated impacts of the pandemic, they exacerbate the inequality and specific vulnerabilities described above, which may aggravate the outlook for certain sectors of the population. In other words, the inequalities and impacts of COVID-19, together exacerbate the already complicated situation.

As mentioned above, at the end of February 2020, before the arrival of COVID-19 in Mexico, the economic prospects shared by the Bank of Mexico, private financial institutions and international financial organizations reflected a weak economic situation, with average growth forecasts of between 0.5 and 1.5% of GDP.²³ However, since the pandemic has reached Mexico, there have been downward adjustments in forecasts. On 1 April 2020, the Bank of Mexico estimated that the GDP would decrease in 2020 at a rate of 3.99%.²⁴ This adjustment was based on the monthly survey of private sector specialists, and incorporated the weakness of the external market and the world economy as a result of the arrival of COVID-19 to Europe and the United States of America (USA).

Moreover, the International Monetary Fund (IMF) predicted a 6.6% decrease in Mexico's GDP²⁵. Private financial institutions such as Citibanamex²⁶ and Banco Bilbao Vizcaya Argentaria (BBVA)²⁷ have adjusted their projections for real GDP growth in Mexico to -9.0 and -7.0%, respectively. It is worth noting that, although BBVA's estimate is -7.0%, the forecast range for economic decline is between -6.0 and -12.0%.²⁸

Mexico, like other countries, implemented social distancing actions in order to contain the virus and not exceed the capacity of its healthcare system, which has halted economic activity. First, as a result of the pandemic's lockdown measures, there have been significant changes in mobility patterns. Based on the data collected by Google, through user location histories,²⁹ as of 7 May 2020, 56% less traffic is being reported in shops and recreational areas; 62% less traffic on public transportation; and 50% less attendance at workplaces; while

²³ For example, the World Bank suggested a range of 1.2 to 1.5%; Banorte, 0.8 to 1.4%; and Bank of America, 0.5% to 0.9%. See Bank of Mexico, "Quarterly report, October-December 2019", (Mexico, 2020). Available at: www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/%7B0DE-D33B2-FF70-345D-53BE-77EA35A0D743%7D.pdf (accessed 9 April 2020); and Yolanda Morales, "Banxico baja rango del PIB para el 2020 ante debilidad económica," *El Financiero*, 27 February 2020. Available at: www.eleconomista.com.mx/economia/Banxico-baja-rango-del-PIB-para-el-2020-ante-debilidad-economica-20200227-0031.html (accessed 9 April 2020).

²⁴ Bank of Mexico, "Survey on the Prospects of Private Sector Economics Specialists: March 2020", Bank of Mexico, 1 April 2020. Available at: www.banxico.org.mx/publicaciones-y-prensa/encuestas-sobre-las-expectativas-de-los-especialis/%7BBF8CA59D-FDBE-F2C5-7C1A-E9778A46A3F8%7D.pdf (accessed 9 April 2020).

²⁵ Leonor Flores, "IMF anticipates 6.6% drop for Mexico in 2020 due to COVID-19", *El Universal*, 14 April 2020. Available at: www.eluniversal.com.mx/cartera/covid-19-fondo-monetario-internacional-anticipa-caida-de-66-para-mexico (accessed 24 April 2020).

²⁶ Edgar Juárez, "Citibanamex anticipates a drop in Mexico's GDP of up to 9% in 2020", *El Economista*, 21 April 2020. Available at: www.eleconomista.com.mx/economia/Citibanamex-anticipa-una-caida-del-PIB-de-Mexico-de-hasta-9-en-2020--20200421-0069.html (accessed 4 May 2020).

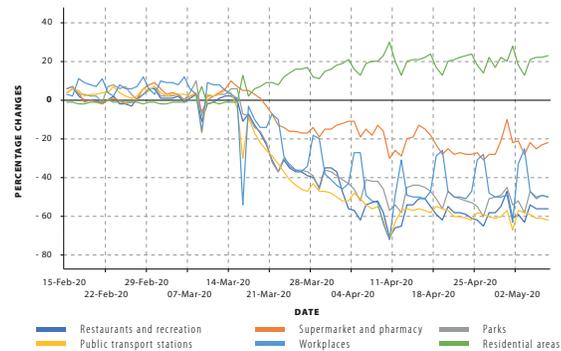
²⁷ Javier Amador et al., Mexico | GDP drop of between 6.0% and 12.0% (Mexico, 2020). Available at: www.bbva.com/publicaciones/mexico-caida-del- PIB-de-entre-6-0-y-12-0 (accessed 4 May 2020).

²⁸ BBVA research, Mexico situation. Second quarter 2020 (Mexico, 2020). Available at: www.bbva.com/publicaciones/situacion-mexico-segundo-trimestre-2020 (accessed 4 May 2020).

²⁹ Since the data is collected via mobile phones, it is likely that in marginalized areas, where there is less mobile phone ownership, the effects of quarantine measures on mobility will be overestimated and the actual reductions will be less than those observed through Google mobility reports.

traffic in residential areas has increased by 23%.³⁰ The changes in mobility have varied significantly over the quarantine period. On April 10th, the lowest number of visitors was recorded in practically all public spaces (see graph 4).

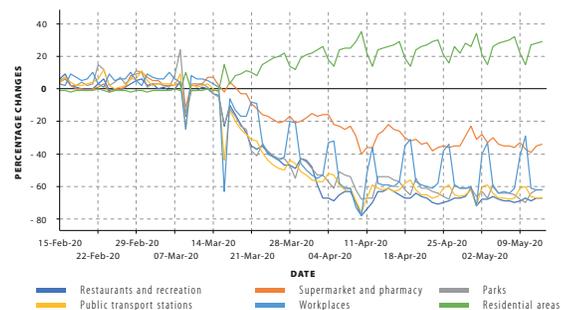
Graph 4. Percentage changes in mobility in Mexico, by public space



Source: Own drafting based on Google data, "COVID-19 Community Mobility Report", Google, 7 May 2020. Available at: www.gstatic.com/covid19/mobility/2020-05-07_MX_Mobility_Report_en.pdf (accessed: 11 May 2020).

These changes in mobility have important implications in terms of sales and service demand. In Mexico City, on the other hand, the paralysis of activities has been even greater (see graph 5).

Graph 5. Percentage changes in mobility in Mexico City, by public space



Source: Own drafting based on Google data, "COVID-19 Community Mobility Report", Google, 7 May 2020. Available at: www.gstatic.com/covid19/mobility/2020-05-07_MX_Mobility_Report_en.pdf (accessed: 11 May 2020).

It is worth mentioning that, as of 21 May, Mexico is third in the Latin American and Caribbean region in terms of reduction in population mobility (-43.37%), after Chile (-49.40%)³¹ and Argentina (-48.75%). This shows the effectiveness of the lockdown measures in preventing infection, with the corresponding effects in terms of economic activity. It should be mentioned that, since data is collected via mobile applications, there is a bias in the measurements, which overestimates the effect of lockdown measures in marginal areas with low mobile device ownership.

As a result of the lockdown measures, the Mexican Social Security Institute (IMSS) reports that, from February to April 2020, 685,840 formal jobs were lost³². That is, almost double the number of formal jobs generated in 2019.³³

³⁰ Google, "COVID-19 Community Mobility Report", Google, 7 May 2020. Available at: www.gstatic.com/covid19/mobility/2020-05-07_MX_Mobility_Report_en.pdf (accessed 11 May 2020).

³¹ PNUD, GRANDATA, 2020. Available at covid.grandata.com/distancing/ar (accessed 29 May 2020).

³² México, ¿cómo vamos?, "National traffic light", disponible en: mexicocomovamos.mx/?s=seccion&id=98

³³ Luis Pablo Beauregard, "Mexico loses the jobs created in 2019 in two weeks in an atmosphere of tension between the Government and business owners", El País, 8 April 2020. Available at: elpais.com/economia/2020-04-08/mexico-pierde-en-dos-semanas-el-empleo-creado-en-2019-en-un-ambiente-de-tension-entre-el-gobierno-y-los-empresarios.html (accessed 24 April 2020).

According to data from the IMSS and the National Workers' Housing Fund Institute (INFONAVIT), the greatest losses have been recorded in Mexico City, Quintana Roo and Nuevo León and in the construction and service sectors.³⁴

Given the high levels of informality, official data do not consider the total impact of COVID-19 on the unemployment rate. In this regard, CONEVAL estimates an increase of this indicator between 3.3 and 5.3% in the first two quarters of 2020,³⁵ from which a notable increase in the informality rate is predicted.

As a result of the health pandemic, INEGI has announced the suspension of the ENOE, corresponding to the second quarter of 2020. However, in its place, it announced the launching of the Occupation and Employment Telephone Survey (ETOE) and the Survey to Measure the Impact of COVID-19 on the Labor Market (ECOVID-ML), the aim of which is to obtain a more accurate picture of the impact that COVID-19 has had on the formal and informal employment market: from the loss of jobs and remote work to a decrease in income.³⁶ On 1 June, the results of the ETOE were published, showing that between March and April 2020, the economic participation rate plummeted by 12.3 percentage points, which means that around 12 million people were suspended from work due to the quarantine and with no certainty that they would remain in employment once the crisis was over. Additionally, an increase of 5.9 million underemployed people was observed. The unemployed population increased to 4.7% between March and April, which represented an increase of 1.7 percentage points. Finally, due to the suspension of activities, informality fell by 8 percentage points between March and April.³⁷

Moreover, as expected, private consumption has shown significant falls. In the month of February, when the pandemic had yet to affect Mexico directly, there was a slight drop of 0.5% compared with February 2019.³⁸ Using big data tools, BBVA reports significant declines in real time. For the last week of March, consumption fell by 3.9% compared to the same period in 2019; three weeks later, the drop was 34.8%.³⁹

BBVA⁴⁰ reports that, after a spike in retail sales due to the panic generated by the arrival of the pandemic in Mexico, these sales have fallen as people self-isolate in their homes. It points out that the services most impacted are "air transport, food and beverage preparation, accommodation, as well as leisure and entertainment services". It should be noted that these sectors account for 32% of the country's workforce. The National Chamber of the Restaurant and Food Industry (CANIRAC) reports that sales of establishments have fallen by between 40 and 50%, which compromises their viability over time.⁴¹

Worldwide, it is estimated that the number of international tourists fell 57% in March this year, compared to the same month last year.⁴² In the case of Mexico, in April of this year there was a drop of 98.7% in international tourist arrivals to national territory, compared to the same month in 2019.⁴³ It is estimated that the losses of the

³⁴ Luis Miguel González, "COVID-19: 707,000 jobs lost between 18 March and 28 April", *El Economista*, 10 May 2020. Available at: www.economista.com.mx/opinion/Covid-19-se-perdieron-707000-empleos-entre-el-18-de-marzo-y-el-28-de-abril-20200510-0078.html (accessed 11 May 2020).

³⁵ CONEVAL, "The health crisis generated by COVID-19 and its economic consequences jeopardize advances in social development and may affect vulnerable groups to a greater extent", CONEVAL, 2020. Available at: www.coneval.org.mx/Evaluacion/IEPSM/Documents/Politica_Social_COVID-19.pdf (accessed: 11 May 2020).

³⁶ INEGI, "In view of the impacts caused by the health emergency, INEGI is modifying the dissemination calendar for the first half of 2020", *Comunicado* No. 213/20, 8 May 2020. Available at www.inegi.org.mx/contenidos/saladeprensa/boletines/2020/OtrTemEcon/AjustesCalendario2020.pdf (accessed 29 May 2020).

³⁷ INEGI, "Occupation and Employment Telephone Survey (ETOE). Timely Figures April 2020", *Comunicado* No. 264/20, 1 June 2020. Available at www.inegi.org.mx/contenidos/saladeprensa/boletines/2020/enoe_ie/ETOE.pdf (accessed 1 June 2020).

³⁸ INEGI, "Private consumption on the internal market", National macroeconomic indicators. Available at: www.inegi.org.mx/temas/imcp (accessed 11 April 2020).

³⁹ Javier Amador, "Fall of GDP" (see section I, footnote 27).

⁴⁰ BBVA, "Situation Mexico" (see section I, footnote 28).

⁴¹ Zyanya López, "Restaurant sales drop 50% in Mexico City due to coronavirus," 20 March 2020. Available at: expansion.mx/empresas/2020/03/20/ventas-restaurantes-caen-en-ciudad-de-mexico-por-coronavirus (accessed 9 April 2020).

⁴² UNWTO, "UNWTO Global Tourism Dashboard", International tourism and COVID-19, Available at www.unwto.org/international-tourism-and-covid-19 (accessed 29 May 2020).

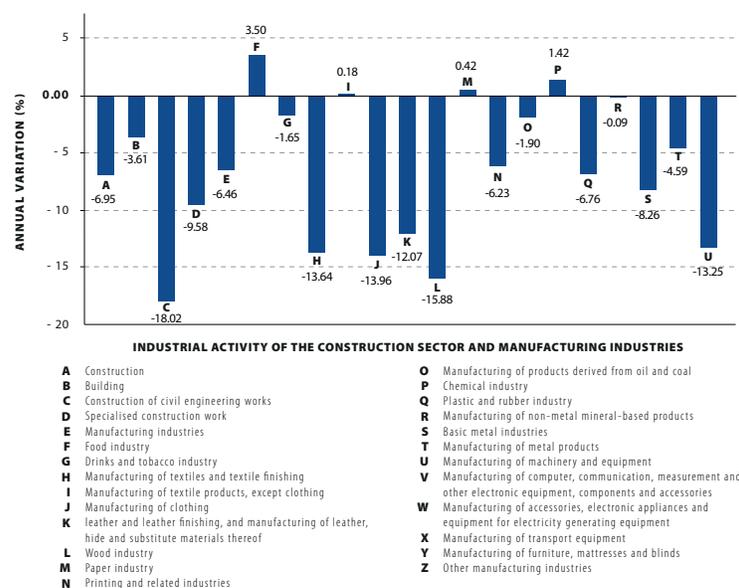
⁴³ Centre for Research and Competitiveness in Tourism in Anahuac (CICOTUR). Estimation of the effects on Mexican tourism in 2020 as a consequence of the COVID-19 pandemic, 18 May 2020. Disponible en: www.anahuac.mx/mexico/cicotur/sites/default/files/2020-05/Doc14_Cicotur_Estimacion_afectaciones_turismo_mexicano_Covid19.pdf

tourism sector alone in Mexico would result in national GDP falling by 3.7 points in 2020.⁴⁴

An additional indicator, reflecting the economic slowdown, is the one corresponding to the reference. In March, the National Banking and Securities Commission (CNBV) reported that financing to micro, small and medium enterprises registered an annual decrease of 7.8% in real terms.⁴⁵ This reflects the fall in companies' income and their ability to make financial commitments in an adverse climate. Moreover, consumer credit maintained similar levels, which is compatible with the expectation of consumer financing for the acquisition of basic goods in the current context. As of February, the credit card portfolio experienced a 1.4% growth, while the growth rate in 2019 was 0.7%. Finally, there was a slight increase in the default rate of 0.22 percentage points above the value registered in March 2019.⁴⁶

In terms of economic activity, the National Institute of Statistics and Geography (INEGI) reports significant declines. Between February and March of this year, industrial production fell 3.4%. If we compare the industrial production of March this year with respect to the same month of 2019, the decrease is 4.9%. The most affected sectors are the construction and manufacturing industries, with annual falls of -7.0 and -6.4%, respectively. Within these sectors, there are also subsectors that present higher levels of impact, up to -18.0% with respect to the previous year (see graph 6). Moreover, for the month of April, the monthly and annual variation observed in industrial activity was -25.1% and -29.6%,⁴⁷ respectively, which is the largest drop ever to be recorded. For the month of April, the most affected industries were tanning and finishing of leather and hide, and manufacturing of leather, hide and substitute materials thereof (-87.0%), manufacturing of transport equipment (-85.6%) and manufacturing of textiles and textile finishing (-77.7%).⁴⁸

Graph 6. Annual change (%) in the Monthly indicator of industrial activity in the construction sector and manufacturing industries



Source: Own drafting based on INEGI data, "Monthly Industrial Activity Indicator", Mexico System of National Accounts, Available at: www.inegi.org.mx/temas/imai (accessed: 15 April 2020).

⁴⁴ Ibid.

⁴⁵ CNBV, "Banca Múltiple sector information at the end of March 2020", CNBV, 5 May 2020. Available at: www.cnbv.gob.mx/SECTORES-SUPERVISADOS/BANCA-MULTIPLE/Prensa%20Sector%20Bancario/Comunicado%20de%20Prensa%20035%20Banca%20Multiple%20marzo%202020.pdf (accessed 8 May 2020).

⁴⁶ Ibid.

⁴⁷ INEGI, "Monthly Indicator of Industrial Activity," National Accounts System of Mexico, Available at: www.inegi.org.mx/temas/imai/ (accessed 15 April 2020 and 11 June 2020).

⁴⁸ The figures correspond to the annual percentage change with seasonally adjusted figures.

In the first quarter of this year, in which lockdown measures were only applied in the last week of March, a decrease in GDP of -2.4% was recorded compared with the same quarter in 2019, and the real annual variation for the secondary and tertiary sectors was -3.8 and -1.4%.⁴⁹

It is important to point out that, in the fourth quarter of 2019, exports of goods and services had an annual percentage variation of -3.4%. Moreover, in April 2020, there was an annual variation of -41.5% in the seasonally adjusted figure for exports. Oil exports fell 67.3%, while non-oil exports fell 39.8%.⁵⁰

As an additional factor, oil prices have plummeted in the face of reduced demand for hydrocarbons – the result of the lockdown measures and declining consumption by airlines in the face of border closures and declining travel. The International Energy Agency has predicted a drop of 29 million barrels in daily oil demand in April compared to 2019.⁵¹ Given this, as of 5 May 2020, the price of the Mexican oil blend has plummeted by more than 57% compared to the price in December 2019 (from \$51.57 to \$21.67 per barrel).⁵²

Although the Mexican economy has “depetrolized” to some extent, oil continues to represent an important source of financing for public spending in Mexico. In order to determine the Federation’s Expenditure Budget, it was estimated that the price per barrel would be \$49.⁵³ Considering the associated risks, the Ministry of Finance and Public Credit purchased insurance to hedge the price.⁵⁴ However, it is likely that not all production will benefit from this protection, which could represent a blow to the country’s public finances and would limit the programs for mitigating the effects of COVID-19 that the Federal Government could implement to boost domestic consumption and protect the most vulnerable populations.

Although oil exports in April this year decreased dramatically, oil imports amounted to \$2,063.1 million, representing an annual variation of -52.8%.⁵⁵ In other words, the drop in oil exports was partly offset by the drop in oil imports.

It is important to mention that the economic effects will be differentiated:

- » **By population.** As already mentioned, the effects of COVID-19 will worsen for populations currently in a vulnerable situation.
- » **By geographical location.** The impact is expected to be greater for the cities. For example, the Mexico Valley Metropolitan Area (ZMVM) will experience worse effects from the pandemic and the measures taken to contain it. First, because of the high population density, infection is more likely, so lockdown measures will become more extensive over time, increasingly impacting businesses and households. Moreover, given the sharp declines in the tourism sector, areas such as Cancun, Vallarta, Los Cabos and Acapulco will be most affected by the pandemic.
- » **By sector.** In the short term, it is expected that the greatest impact will be on the service sector. However, it is likely that, during the recovery phase, the manufacturing sector will be particularly affected by disruptions in supply chains, which will prevent them from operating, even after the lifting of the healthy distance measures. The recovery of service companies, those that survive the induced coma stage, may be relatively fast, compared to the manufacturing sector.

⁴⁹ INEGI, "Timely Estimate" (see section I, footnote 3).

⁵⁰ INEGI, "Trade balance", Foreign trade, Mexico, 2020. Available at www.inegi.org.mx/temas/balanza (accessed 29 May 2020).

⁵¹ AFP, "The IEA has predicted a historic fall in the demand for oil due to the effects of COVID-19", *El Economista*, 15 April 2020. Available at: www.eleconomista.com.mx/mercados/La-AIE-preve-una-caida-historica-de-la-demanda-de-petroleo-por-el-efecto-Covid-19.-20200415-0038.html (accessed 20 April 2020).

⁵² Bank of Mexico, "Price of the Mexican oil mix", Banxico, May 2020. Available at: www.banxico.org.mx/apps/gc/precios-spot-del-petroleo-gra.html (accessed 29 April 2020).

⁵³ Zenyazen Flores, "Hacienda announces oil cover contract for 2020 of 49 dollars per barrel", *El Financiero*, 3 January 2020. Available at: www.elfinanciero.com.mx/economia/hacienda-contrata-coberturas-petroleras-para-2020-con-un-precio-de-49-dolares-por-barril (accessed 11 May 2020).

⁵⁴ *Ibid.*

⁵⁵ INEGI, "Trade balance" (see section, footnote 48).

2) Relationship between the Mexican and US economies

As mentioned, both the depth of the crisis and the speed of recovery of the Mexican economy are largely indexed to the performance of the US economy.

The Mexican economy follows the economic cycles of the United States, which is not surprising when you consider that (i) 82% of national exports in 2019 went to this country,⁵⁶ and (ii) the remittances sent from the United States in 2019 represented about 5% of GDP, being higher than the currencies generated by Foreign Direct Investment or the tourism sector.⁵⁷

Graph 7. Association in the variation of the weekly economic Index (WEI) of the USA and the GDP in Mexico with respect to the same quarter of the previous year



Source: Own drafting based on data from the Federal Reserve Bank of New York, "Weekly Economic Index", Economic research. Available at: www.newyorkfed.org/research/policy/weekly-economic-index (accessed: 08 April 2020), and INEGI data, "Quarterly Global Supply and Demand", National macroeconomic indicators. Available at: www.inegi.org.mx/temas/ofyd (accessed: 10 April 2020).

Taking as a reference the Weekly Economic Index (WEI) of the United States –an indicator that provides timely information on real economic activity and that has shown to be a good proxy for the GDP of the United States– a significant fall is foreseen in the framework of COVID-19. It is also possible to observe the close relationship of this indicator with Mexico's GDP. According to the frequency with which the WEI data are updated to assess the impacts of the pandemic (and the measures put in place for its mitigation), a more than proportional fall in GDP is anticipated for the second quarter of 2020 (see graph 7).

Considering that the current situation responds to sui generis conditions, it is not possible to make an a priori projection on the behavior of the exchange rate. Therefore, in order to have an idea of the panorama that is possibly coming, it is worth reviewing the reported trends in the exchange rate in previous economic crises (see graph 8).⁵⁸ Although it is too early to make comparisons at the time of the study, it can be seen that between February and April 2020 the peso has depreciated by approximately 20% in relation to the dollar, similar to that which occurred between September and November 2008, following the bankruptcy of Lehman Brothers, but less than the 40% recorded between November 1994 and January 1995.⁵⁹ This analysis should be fed with subsequent historical information to anticipate possible impacts on the economy from exchange rate variations.

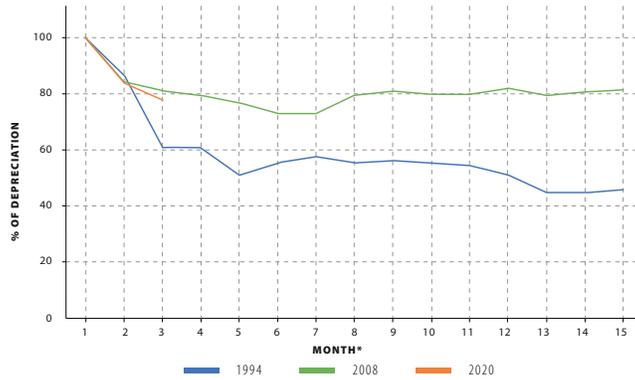
⁵⁶ INEGI, "Timely information on business balance in Mexico for November 2019", INEGI, 27 December 2019. Available at: www.inegi.org.mx/contenidos/salade-prensa/boletines/2019/balcom_o/balcom_o2019_12.pdf (accessed 24 April 2020).

⁵⁷ Bank of Mexico, "(CA11) - Remittances", Economic Information System. Available at: www.banxico.org.mx/SielInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadroAnalitico&idCuadro=CA11&locale=es (accessed 24 April 2020). Cristian Téllez, "Record income from remittances in 2019", El Financiero, 4 February 2020. Available at: www.elfinanciero.com.mx/nacional/remesas-familiares-crecen-7-04-y-alcanzan-cifra-record-durante-el-2019 (accessed 24 April 2020). Ángel Ortiz, "Alta dependencia de remesas en México, tema de preocupación", El Economista. Available at: www.eleconomista.com.mx/sectorfinanciero/Alta-dependencia-de-remesas-en-Mexico-tema-de-preocupacion-20190923-0029.html (accessed 24 April 2020).

⁵⁸ While it is possible to conduct this analysis, it is important to consider that the nature of the three crises under review is very different, so it is not realistic to expect the same behavior from the analysis variable.

⁵⁹ Federal Reserve Bank of St. Louis, "Mexico/U.S. Foreign Exchange Rate" (see section I, source graph 7).

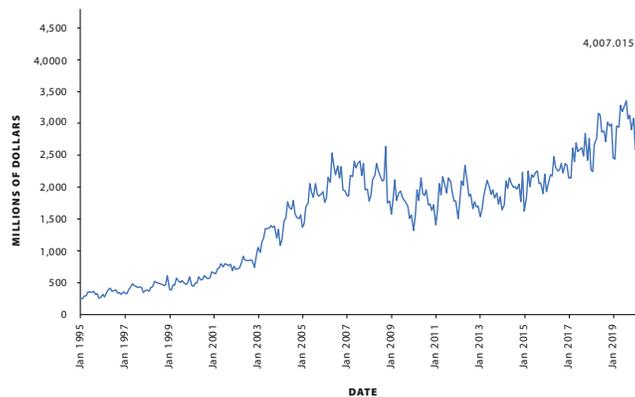
Graph 8. Percentage depreciation of the Mexican Peso in relation to the dollar, 1994, 2008 and 2020. Index Base 100



* The month count starts from the month in which the crisis period begins. In the case of the 1994 crisis, the first month is November 1994; in the case of the 2008 crisis, the first month is September; in the case of 2020, the first month counted is February. Source: Own drafting based on data from the Federal Reserve Bank of St. Louis, "Mexico/U.S. Foreign Exchange Rate", Monthly Rates. Available at: fred.stlouisfed.org/series/EXMXUS (accessed: 07 May 2020).

It is important to mention that, in 2018, Mexico was third out of all the countries in terms of income received from remittances (35.7 billion dollars).⁶⁰ This figure represented 2.93% of GDP.⁶¹ To that end, in addition to the recession in Mexico, the recession in the U.S. will have a significant impact on household incomes. Although in March this year the historical maximum of remittances was registered (4,016.12 million dollars) and an increase of 18.4% with respect to the first quarter of 2019, in April 2020 a fall of 28.59% was observed with respect to March 2020 and 2.58% with respect to April 2019.⁶²

Graph 9. Remittance flows (millions of dollars)



Source: Own drafting using data from the Bank of Mexico, "Income from remittances", Economic Information System. Available at: www.banxico.org.mx/SielInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE81&locale=es (accessed: 29 May 2020).

3) Social Impacts

In social terms, the effects of the crisis will manifest themselves in the short, medium and long term. It is expected that, given the suspension of face-to-face classes, inequalities in terms of learning will increase. It is

⁶⁰ Donna Barne and Florina Pirlea, "Remittances: the largest source of external financing for low- and middle-income countries (excluding China)," World Bank Blogs, 2 July 2019. Available at blogs.worldbank.org/es/opedata/la-mayor-fuente-de-financiamiento-externo-de-los-paises-de-ingreso-bajo-y-mediano (accessed 29 May 2020).

⁶¹ The Global Economy, Mexico, "Remittances, percentage of GDP", Economies. Available at es.theglobaleconomy.com/Mexico/remittances_percent_GDP (accessed 29 May 2020).

⁶² Bank of Mexico, "Income from remittances" (see introduction, footnote 1).

likely that certain sectors of the child population - with less access to technology and less accompaniment in the process – will be particularly affected. The learning crisis can lead, in the long term, to inequalities in access to stable and well-paid jobs.

In the short term, the economic crisis will impact on poverty rates. The CONEVAL, based on data from the ENIGH and the ENOE, estimates that a 5% generalized drop in income will increase income poverty between 7.2 and 7.9 percentage points, which means that between 8.9 and 9.8 million people would fall into said category.⁶³ Likewise, the drop in income would translate into an increase of between 4.9 and 8.5 percentage points in extreme income poverty; that is, between 6.1 and 10.7 million more people in extreme poverty in the country.⁶⁴ The Espinosa Yglesias Study Centre (CEEY), for its part, estimates that the pandemic will add 21 million more people to the ranks of poverty.⁶⁵

Likewise, CONEVAL warns about the differentiated effects COVID-19 is expected to have on women, who represent 72.8% of the people employed in the health system,⁶⁶ which increases the risk of contagion and the precariousness of labor conditions. In addition, women are more involved in domestic and care work, which increases the burden of responsibilities and unpaid work.

Finally, in Mexico, but particularly in the ZMVM, confinement has put women at risk of domestic violence. According to the National Survey on the Dynamics of Household Relationships (ENDIREH) 2016, almost 80% of women have suffered some form of violence, and 52% have suffered violence from their partners. Almost 79% of these women do not seek the support of institutions or do not file a complaint through a formal process.⁶⁷ During this period of social isolation, the level of overcrowding in the ZMVM is one of the factors in the increase in domestic violence. The Mexico City Attorney General's Office reports that arrests for domestic violence have increased by 7.2% and the Citizens' Council for Security and Justice in the capital has recorded a 24% increase in reports of domestic violence.⁶⁸

2. Public policy recommendations for the mitigation and reduction of the socio-economic effects of COVID-19

As discussed in the first part of this document, COVID-19 has jeopardized the world's economies. However, the socio-economic conditions prior to the outbreak of the virus largely determine the size of the challenge. In the case of Mexico, the impact is estimated to be great, reflected in major challenges that require proportional and timely measures. A late response may increase the damage to assets and, consequently, lengthen the recovery process. The following is a series of short-term and medium-term recommendations for Mexico, as a result of the analysis presented. The recommendations are classified by topic or by target population.

⁶³ CONEVAL, "The Health Crisis" (see section I, footnote 34).

⁶⁴ Ibid.

⁶⁵ Dora Villanueva, "COVID-19 would leave another 21 million Mexicans in poverty: CEEY", *La Jornada*, 31 March 2020. Available at: www.jornada.com.mx/ultimas/economia/2020/03/31/covid-19-dejaría-en-la-pobreza-a-otros-21-millones-de-mexicanos-ceey-7250.html (accessed 24 April 2020).

⁶⁶ Ibid.

⁶⁷ INEGI, "Prevalence of violence", National Survey on the Dynamics of Household Relationships 2016. Available at: www.inegi.org.mx/programas/endireh/2016/default.html#Tabulados (accessed: 6 May 2020).

⁶⁸ Georgina Olson, "Isolation Increases Domestic Violence; Women Make More Calls for Help," *Excelsior*, 3 March 2020. Available at: www.excelsior.com.mx/comunidad/aislamiento-aumenta-violencia-domestica-mujeres-hacen-mas-llamadas-de-auxilio/1372925 (accessed: 24 April 2020).

A. Support for households and populations in vulnerable situations

1. Protection of workers in the formal sector

For many people, the current situation has meant losing their jobs in the formal sector of the economy; in the short term, this implies problems of monetary liquidity to finance their basic needs and, consequently, entering the informal market.⁶⁹ Although a public policy priority is to recover employment rates to a level similar to that prior to the COVID-19 crisis, it is necessary to generate instruments to compensate for the loss of employment income of unemployed people and to finance their return to the formal market.

It should be noted that Mexico is one of the countries that, at the federal level, lacks an income protection policy in cases of dismissal (unemployment insurance), one of the fundamental elements of a comprehensive social security scheme. Therefore, it is recommended to stage an intervention to that effect. In addition, in operational terms, this strategy is considered easy to implement as there are channels for identifying the people affected.⁷⁰

It should be mentioned that, although at the state level, Mexico City has a subsidy program called “Unemployment Insurance”, which consists of providing economic support equivalent to the monthly value of the Unit of Measurement and Update (UMA)⁷¹ for up to two months, it is important to note that the amount of support provided is less than the value of the Income Poverty Line (IPL),⁷² therefore access to basic goods and services would not be guaranteed. To that end, it is suggested that the operational scheme of this program be replicated nationally, adjusting the amount to a value higher than the IPL. A subsidy program of this nature, in the current circumstances, implies that the income support for dismissed persons is financed through the public budget.

In this regard, the IMSS reports that, from February to April 2020, 685,840 formal jobs were lost.⁷³ Considering a minimum support of, for example, \$3,500.00 Mexican pesos, which would guarantee an income higher than the IPL, a monthly expenditure of approximately 0.003% of GDP would have to be allocated to an initiative of this nature, without considering the operating cost.⁷⁴ It is recommended that this suggestion be thought of as a temporary policy, which would support the workers who are laid off during the period of reactivation and recovery from the crisis.

Likewise, although the IMSS considers medical care for a period following the termination, it is recommended to review good international practices, where there are cases where unemployment insurance transcends the issue of income and incorporates, for example, coverage of medical services.⁷⁵

It is worth mentioning that this measure should be accompanied by support for companies (in the form of subsidies or credits) to avoid further layoffs. However, the advanced state of the crisis and the high number of unemployed people resulting from it is recognized; therefore, in addition to support for companies, it is considered essential to have protection schemes for this population, preventing them from being placed in vulnerable situations due to lack of income.

⁶⁹ Given the current context of confinement, this situation presents its own challenges.

⁷⁰ First, whereas the Mexican Social Security Institute has information on the losses reported by companies.

⁷¹ For 2020, the monthly value of the UMA is \$2,641.15 Mexican pesos.

⁷² For April 2020, CONEVAL reports a value of \$3,208.36 Mexican pesos for the urban line, and \$2,086.67 for the rural line. Consult CONEVAL, “Income poverty lines”, InfoPobreza. Available at: sistemas.coneval.org.mx/InfoPobreza/Pages/wfrLineaBienestar?pAnioInicio=2016&pTipoIndicador=0 (accessed: 13 May 2020).

⁷³ Mexico, ¿cómo vamos? “National traffic light”, available at: mexicocomovamos.mx/?s=seccion&id=98

⁷⁴ INEGI, “Seasonally adjusted series. Millions of pesos at 2013 prices”, GDP and national accounts. Available at: www.inegi.org.mx/temas/pib/default.html#Tabuladatos (accessed: 13 May 2020).

⁷⁵ ECLAC, “The social challenge in times of COVID-19”, COVID-19 Special Report, No. 3 (12 May 2020). Available at: repositorio.cepal.org/bitstream/handle/11362/45527/S2000325_es.pdf?sequence=5&isAllowed=y (accessed: 12 May 2020).

2. Support for workers in the informal sector

INEGI reports for the last quarter of 2019 that 56.2% of the total population employed in the country was in the informal sector.⁷⁶ As mentioned in other sections of this document, these are populations that are particularly vulnerable to the ravages of both crises (economic and health).

According to CONEVAL,⁷⁷ within the priority programs of the current administration, there are six programs that benefit the population working in the informal sector.⁷⁸ However, there is no evidence of direct monetary transfers aimed at guaranteeing a stable income above the income poverty line⁷⁹, which is particularly important in view of the policy of confinement, which has led to a reduction in income. In this regard, the Economic Commission for Latin America and the Caribbean (ECLAC) reports that one of the policies that has been implemented in the region to address the crisis is monetary transfers to workers in the informal sector, in order to mitigate the drop in their income.

The recommendation in the case of Mexico is to have an intervention that guarantees them, at least, access to the basic basket of goods and services (income higher than the IPL) during the duration of the crisis. To this end, a monthly public expenditure of approximately 0.15% of GDP is calculated, without counting operating expenses;⁸⁰ under a three-month scheme, total expenditure would be 0.45% of GDP. According to ECLAC, the expenditure foreseen for the care of these populations in 22 countries of the Latin American and Caribbean region would represent around 0.7% of GDP in 2020; furthermore, the cases of Brazil, Colombia, Argentina and Peru stand out as they present the greatest support coverage.⁸¹

In addition, given that it involves more than 50% of the country's working population, the magnitude of the challenge of operating an intervention of this type is recognized. Therefore, if it is implemented, mechanisms must be designed to target and prioritize those people who are most disadvantaged within this vulnerable group. It is also recommended to seek synergies with state and municipal governments for the design and implementation of this strategy.

3. Assistance for the population in poverty

Recognizing that there are several population groups whose socio-economic and sociodemographic characteristics make them more vulnerable to COVID-19, there is a consensus on the importance of having mechanisms to assist these populations, such as people in poverty. Although some of those living in poverty are included in the population subject to assistance through the support schemes aimed at formal workers and, to a greater extent, at informal workers, there are still sub-groups, such as the population dependent on remittances, the population doing work considered to be non-economic or the migrant population, whose deficiencies may be aggravated.

Although social programs are currently being implemented at all levels of government to assist people living in poverty, it is necessary to assess whether the amounts of support are sufficient to compensate for the loss of income of these populations as a result of the crisis so that they have access to basic goods and services. On this point, other countries in the region⁸² have increased the amount of poverty relief programs.

⁷⁶ INEGI, "Informal employment" (see section I, footnote 12).

⁷⁷ CONEVAL, "Social policy in the context of the SARS-CoV-2 (COVID-19) pandemic in Mexico", (Mexico, 2020). Available at: www.coneval.org.mx/Evaluacion/IEPSM/Documents/Politica_Social_COVID-19.pdf (accessed: 12 May 2020).

⁷⁸ Program for the Promotion of Agriculture, Livestock, Fisheries and Aquaculture; Guarantee Prices for Basic Food Products; Production for Welfare; Microcredit Program for Welfare; Financial Support Program for Family Microenterprises; Support Program for the Welfare of Girls and Boys, Children of Working Mothers.

⁷⁹ In general, these are supports that promote productivity and, in the case of the Support Program for the Welfare of Girls and Boys, Children of Working Mothers, to generate conditions that allow them to remain in the labor market.

⁸⁰ INEGI, "Seasonally adjusted series" (see section III, footnote 72).

⁸¹ ECLAC, "The social challenge in times of COVID-19" (see section III, footnote 73).

⁸² Ibid.

According to CONEVAL, although there are programs aimed at addressing the different dimensions of poverty, none of the priority programs of the current federal administration has the criteria to address the population in multidimensional poverty in a priority and explicit manner.⁸³ To that end, and taking into consideration the need to make public spending more efficient in a context of limited resources, it is advisable to implement targeting actions that allow preferential assistance to be given to those populations that have socio-economic and sociodemographic characteristics that make them more vulnerable to the crisis, i.e., people living in poverty or extreme poverty.

This could be done by using the lists of beneficiaries of social programs that have targeting mechanisms. In this regard, it is worth highlighting the case of the previous program “PROSPERA Social Inclusion Program”,⁸⁴ which had a targeting mechanism that considered four levels: geographical, based on the CONEVAL social lag index and the National Population Council (CONAPO) marginalization index; indirect means verification, which refers to those families living in poverty identified through the application form and statistical information; community, based on the identification of localities that have citizen demand for the program; and categorical, that is, depending on the selection criteria of each of the program’s components.^{85 86}

In addition, it had a fairly consolidated list of beneficiaries, although with some areas of opportunity,⁸⁷ based on the Single Socio-economic Information Questionnaire (CUIS, which is the form for requesting support) and information from the Socio-economic Characteristics of Households Survey. One could also use the Single Registry of Beneficiaries which, according to CONEVAL, has information from 33 programs from 11 federal agencies, and 40 programs from seven states.⁸⁸ To that end, there are already integrated databases with disaggregated information specifically relating to the poverty conditions of a large part of the population in Mexico, which can be used to target support for populations at risk of COVID-19 and the economic crisis that accompanies it. The relevance of the amounts of support they are receiving should also be assessed, so as to ensure minimum access to the basket of basic goods and services (food and non-food).

CONEVAL calculates 9,310,153 people living in extreme poverty, which implies that, among other deficiencies, even if all their income is allocated to buying food, they cannot buy what is essential to have adequate nutrition.⁸⁹ Again, considering a monthly support of, for example, \$3,500.00 Mexican pesos to people in extreme poverty, which would guarantee an income higher than the IPL, a monthly expenditure corresponding to approximately 0.04% of GDP⁹⁰ would have to be allocated during the period in which the crisis is taking place.

4. Assistance for the elderly

In Mexico, it is estimated that there are about 15.2 million people aged 60 and over, 20.7% of whom receive a contributory pension,⁹¹ potentially placing the rest of the elderly population in a situation of income

⁸³ CONEVAL, “Social policy in the context of the pandemic” (see section III, footnote 75).

⁸⁴ The program underwent substantial modifications in its design in 2019, leaving aside three of the four components it had (it currently only maintains the education component), as well as the co-responsibility scheme (support is now provided only on the condition that beneficiaries are enrolled in school, without verifying whether they attend regularly). DOF, “Operating Rules for the PROSPERA Social Inclusion Program for Fiscal Year 2019”, 28 February 2019. Available at: www.dof.gob.mx/nota_detalle.php?codigo=5551581&fecha=28/02/2019 (accessed: 28 May 2020).

⁸⁵ ECLAC, “Database for Non-contributory Social Protection Programs: Latin America and the Caribbean: PROSPERA. Social Inclusion Program 2014-2019”, Conditional transfer programs. Available at dds.cepal.org/bpsnc/programa?id=92 (accessed: 28 May 2020).

⁸⁶ Until 2019, the program had four components: education, health, food and productive inclusion. DOF, “Operating Rules of the PROSPERA Social Inclusion Program for Fiscal Year 2018”, 29 December 2017. Available at: dof.gob.mx/nota_detalle.php?codigo=5509738&fecha=29/12/2017 (accessed: 29 May 2020).

⁸⁷ CONEVAL, Progresión-Oportunidades-Prospera, 20 years after its creation (Mexico, 2019). Available at www.coneval.org.mx/Evaluacion/IEPSM/Documents/Libro_POP_20.pdf (accessed: 28 March 2020).

⁸⁸ CONEVAL, “Social policy in the context of the pandemic” (see section III, footnote 73).

⁸⁹ CONEVAL, “Methodology for the multidimensional measurement of poverty in Mexico”, Third edition (Mexico, 2019). Available at: www.coneval.org.mx/InformesPublicaciones/InformesPublicaciones/Documents/Metodologia-medicion-multidimensional-3er-edicion.pdf (accessed: 13 May 2020).

⁹⁰ INEGI, “Seasonally adjusted series” (see section III, footnote 72).

⁹¹ Own calculations with ENIGH 2018 data. The variables considered to define whether a person has access to a contributory pension, from the income source categories, are: “Retirements and/or pensions originating within the country” and “Retirements and/or pensions originating in (an)other country/countries”. The age group considered, as defined by the World Health Organization (WHO), as well as by the Law on the Rights of the Elderly (LDPAM), are those persons who are 60 years of age or older.

vulnerability.⁹² To compensate for this situation, at the federal level, there is a universal program that grants direct monetary transfers to people aged 65 years and older, in the case of the indigenous population, and 68 years and older for the rest of the population; in 2019, the program assisted 7,480,998 people, of whom 8.5% were indigenous.⁹³

In this regard, it is worth highlighting a few points; first, the age groups to benefit from the program do not coincide with the definition given by the Law on the Rights of the Elderly (LDPAM) (60 years and over). Secondly, the amount of the support is \$1,275.00 Mexican pesos, a value below the IPL, which, as has been pointed out, in itself prevents access to basic goods and services. As a result, a large sector of the elderly population must compensate their income from various sources, such as transfers, remittances and/or formal and informal employment. Given their high health risk, confinement measures had an early effect, and are likely to be more prolonged among the elderly than for other population groups. This further undermines their sources of occupation and employment outside the home, while the general conditions expressed in this document compromise their alternative sources of income.

Although the universal pension for the elderly in contexts of abundance could be considered adequate, in the current context it is suggested to identify those that are most vulnerable within the population assisted (generate targeting mechanisms), in order to increase the amount of support these people receive to a value above the IPL and guarantee that, in the absence of additional income as a result of confinement policies, they can access the basic basket of goods and services.

Under this scheme,⁹⁴ based on an estimate of 12,026,735 elderly people who do not receive contributory pensions,⁹⁵ it is calculated that their total coverage would require a monthly expenditure equivalent to approximately 0.06% of GDP.⁹⁶

On the other hand, according to reports from the federal government, support equivalent to four months of pensions was provided to eight million beneficiaries,⁹⁷ in order to provide this population with the tools to face the crisis. These actions are considered adequate; however, recognizing that it is highly probable that the beneficiaries will lack the capacity to save and, therefore, will use these resources in a period of less than four months, it is necessary to assess and generate mechanisms that guarantee that these people have an income that will allow them to satisfy their basic needs in the months in which they will stop receiving the support due to the advance payments.⁹⁸ It is also advisable to devise alternatives to the payment mechanisms or the dates on which support is provided to the population, in order to avoid situations of crowding at ATMs or subsidy payment points.⁹⁹

It should be noted that the populations referred to in the recommendations in points 2, 3 and 4 may overlap, for example, an elderly person working in the informal sector of the economy. In this regard, it should be noted that the proposal to assist these populations can provide the basis for the definition of a basic income for all vulnerable populations. However, in the specific context of the crisis resulting from COVID-19, it is suggested

⁹² As long as they do not have a stable income.

⁹³ ECLAC, "Database for Non-contributory Social Protection Programs: Latin America and the Caribbean: Pension for the Welfare of the Elderly", Social pensions. Available at: dds.cepal.org/bpsnc/programa?id=173#:~:text=El%20programa%20Pensi%C3%B3n%20para%20el%20Bienestar%20de%20las%20Personas%20Adultas,no%20contributiva%20y%20a%20trav%C3%A9s%20de (accessed: 28 May 2020).

⁹⁴ Considering a monthly support of \$3,500.00 Mexican pesos.

⁹⁵ Own calculations with ENIGH 2018 data. The variables considered to define whether a person has access to a contributory pension, from the income source categories, are: "Retirements and/or pensions originating within the country" and "Retirements and/or pensions originating in (an)other country/countries". The age group considered, as defined by the WHO, as well as by the LDPAM, are those persons who are 60 years of age or older.

⁹⁶ INEGI, "Seasonally adjusted series" (see section III, footnote 72).

⁹⁷ ECLAC, "The social challenge in times of COVID-19" (see section III, footnote 73).

⁹⁸ This also applies to the other programs whose payments were advanced, such as the Welfare Pension for the Permanently Disabled.

⁹⁹ Maribel Martínez, "Healthy distance in banks disobeyed; long lines to collect support reported", Rio Oaxaca, 22 April 2020. Available at: www.rioaxaca.com/2020/04/22/desacatan-sana-distancia-en-bancos-reportan-largas-filas-para-cobrar-apoyos (accessed: 10 June 2020).

to focus on support targeting informal workers, whose income is affected, and therefore cover populations that belong to various categories.

B. Support for companies

1. Support for financing

As differentiated impacts are expected between sectors of the economy and between rural and urban environments, it is recommended that support measures adopted in favor of companies be tailored and proportional to the challenge faced. Last April, the Government of Mexico announced two million credits of \$25,000 pesos for MSMEs in the formal sector, under the condition that they had not reduced their staff in the first quarter of the year, and in the informal sector, if they had been identified by the Ministry of Welfare, through the IMSS, in addition to the support provided through the Ministry of Economy's Microcredits Program for Welfare (with amounts of \$6,000 to \$20,000 pesos), a program that has been in operation since 2019. This support will be essential to promote the survival of economic units in the short term. The fact that the support has been targeted at MSMEs is timely, given that, in general terms, they have less financial capacity. However, it is recommended that both the number and amount of available credits be increased, and that support be focused in stages and by sectors of the economy, according to the degree to which they are affected.

It is important to note that credit support to informal businesses can be complex for three reasons. First, informal businesses do not have a legal personality; therefore, the identification process for access to credit is not obvious and may even lack transparency. Secondly, given that these are informal businesses, the government does not have a register of the people employed there, which would allow the authorities to make the provision of support conditional on the maintenance of the staff employed there. Finally, given that these are businesses with low financial capacity, short-term debt, in an environment of deep and long-term crisis, can result in the inability of businesses to meet their commitments.

On the other hand, as mentioned previously, the federal government's credit support is targeted mainly at microenterprises, or family businesses, both in the definition of their target populations and in the amounts offered, which leaves small and medium-sized enterprises, which are also part of the group that will be most affected by the crisis, virtually unprotected. In this regard, it is important to generate or strengthen¹⁰⁰ larger financing schemes to assist small and medium-size enterprises in this context.

On the second point, during the induced coma stage, service and commercial businesses in Mexico's big cities, particularly in the ZMVM, and those located in tourist areas, will be most affected, since the containment measures are more rigorous and will be more extensive. To that end, it is considered appropriate that the aforementioned credit be directed mainly to such businesses, in order to avoid further cuts in personnel that would affect household income. It is also recommended that the provision of financial support be made conditional on the beneficiary companies not laying off staff. In other words, that the credit is used to finance the salaries of the employees. Minimizing job loss should be the priority during the induced coma stage.

However, as noted previously, companies in the construction sector and manufacturing industries have also been hard hit by the arrival of COVID-19 in Mexico. Their recovery is likely to be slower in a context of recession; therefore, at this stage, it is recommended that support be directed at manufacturing production businesses, both in terms of credit financing and in terms of technical and managerial assistance (inside and outside the country) that mitigate the disruption of supply chains that compromise the operation of industrial economic units. Even within the sector, there are differentiated impacts that will require heterogeneous policies. As mentioned below, financing and technical support must be accompanied by subsidies that allow businesses to overcome both the liquidity problems associated with the interruption of income and the impossibility of meeting previously adopted financial commitments. Additionally, it is important to insist on the need to extend

¹⁰⁰ It is known that Nacional Financiera has a series of support measures for financing MSMEs, with amounts of up to five million pesos, for example.

the amounts of credit available, in order to allow businesses that do not lay off personnel to pay salaries, as well as other fixed costs, for at least three months.

2. Subsidies and monetary support for businesses affected by the crisis

It is important to mention that, given the interruption in the income of economic units, their ability to meet financial commitments is reduced, including those made through government support, but especially those made to commercial banks. To this end, although credit support is considered adequate and necessary, mechanisms must be created so that the businesses most affected by the crisis can access monetary support (subsidies) to help them survive the induced coma stage, in order to avoid loss of assets, maintain sources of employment and promote a faster recovery. This is particularly relevant in order to avoid further redundancies.

According to ECLAC, several countries in the region are implementing payroll subsidies. For example, in Argentina, the Productive Recovery Program provides monthly support equivalent to the minimum wage for up to 12 months, to help pay the wages of workers of businesses whose income is affected by the crisis; in Peru, there is support of up to 35% of the gross monthly salary of workers.¹⁰¹

In the same vein, several countries (such as Chile, Colombia, Argentina, Denmark and France, among others) have implemented tax and social security contribution deferral measures as a business support measure. In addition, measures have been taken to increase the liquidity of businesses, through monetary support. On the other hand, countries such as Argentina have boosted demand through public spending.¹⁰²

Measures of this nature are highly recommended. As mentioned, the induced economic paralysis compromises the ability of businesses and companies in different sectors to meet debt commitments acquired under less risky conditions. A large increase in the overdue portfolio of financial institutions, such as commercial banks, can compromise the stability of the financial system, with negative effects on real economic activity. In the short term, a jump in default rates would result in an increase in interest rates, which in turn would constitute a barrier for economic units to access new credit to recover and cover fixed costs.

It is worth mentioning that the Bank of Mexico has announced a series of measures aimed at guaranteeing credit to individuals and micro, small and medium economic units affected by the pandemic. This is done by injecting resources into the banking institutions responsible for channeling credit and increasing liquidity during operating hours, among others.¹⁰³ In addition, it reduced the monetary policy benchmark rate to 6% to boost aggregate demand. Although these measures contribute to the stability of the financial system in the short term, it is necessary that fiscal policy contributes to this same objective.

In other countries in the region, such as Peru, a public guarantee policy (equivalent to 8% of GDP) has been implemented to promote the granting of commercial bank loans to companies and to give continuity to payment chains.¹⁰⁴ A similar measure could be adopted in Mexico to guarantee the liquidity of commercial banks, through Nacional Financiera and the Banco Nacional de Comercio Exterior. This measure would have a tax cost deferred over time.

Therefore, supporting economic units to overcome liquidity constraints is essential to prevent further economic and financial implications that would deepen the crisis and reduce the resilience of the national economy.

¹⁰¹ ECLAC, "The social challenge in times of COVID-19" 2020. Available at: repositorio.cepal.org/bitstream/handle/11362/45527/5/S2000325_es.pdf (accessed: 29 May 2020).

¹⁰² International Monetary Fund, "Policy responses to COVID-19", Policy tracker, 2020. Available at: www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19 (accessed: 29 May 2020).

¹⁰³ Edgar Juárez, "Bank of Mexico announces new measures for the financial system to face Covid-19", *El Economista*, 21 April 2020. Available at: www.eleconomista.com.mx/sectorfinanciero/Banco-de-Mexico-anuncia-nuevas-medidas-para-que-el-sistema-financiero-haga-frente-al-Covid-19-20200421-0160.html (accessed: 29 May 2020).

¹⁰⁴ International Monetary Fund, "Policy responses to COVID-19", Policy tracker, 2020. Available at: www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19 (accessed: 10 June 2020).

3. Strengthening the tourism sector in Mexico

Tourism will be one of the global sectors most affected by the pandemic, one of the main sources of foreign exchange for Mexico and the main sector of job creation in many states. It is therefore recommended that a plan be developed to reactivate this sector, in conjunction with the states. The measures should provide for a new health standard to generate certainty, from controls at airports to the certification of COVID-19-free hotels.

It is worth mentioning that several countries have implemented support measures for the sector ranging from (i) tax exemptions for tourism and lodging –exemptions range from three months to the remaining months of 2020–; (ii) income tax deferrals to 2021 for companies in the tourism sector; (iii) preferential interest rates on loans to the tourism sector; (iv) marketing strategies to promote domestic tourism; (v) waivers on paying rent and other charges by companies in the tourism sector for the use of government property; and (vi) exemption from the payment of fees to enter public tourism facilities¹⁰⁵. With this background, it is proposed to resume some of these practices that allow for the protection and strengthening of this sector, which is one of the priorities in Mexico.

C. Public debt and fiscal policy

1. Acquisition of public debt

The current federal administration has based its fiscal policy on an austerity program that seeks to set a precedent. However, given the volatility of oil prices, the expected declines in tax revenue and forecasts that the US will continue to be in decline for at least six months, available fiscal resources are scarce now and will be even scarcer at the end of 2020, as a result of reduced economic activity in Mexico. While recognizing that austerity is a legitimate priority of the current federal administration, it is stressed that, considering the fact that emergencies involve unexpected changes and new certainties, adaptations to planning are necessary.

In this regard, it should be noted that the federal government announced cuts in public spending, among the measures against the economic crisis generated by COVID-19. Therefore, the Ministry of Civil Service instructed the rest of the federal public administration to reduce its operating costs by at least half, after announcing the reduction of salaries for senior officials and the elimination of bonuses from the deputy director position.¹⁰⁶ In addition, the Mexico City government also reduced its operating costs by 50%, not including salary cuts.¹⁰⁷ It should be noted that this type of action contradicts the measures taken by most countries and is considered to be procyclical, i.e., it intensifies the effects of the recession by reducing demand.

In view of this situation, it is recommended that measures be taken to increase public spending to sustain domestic consumption levels and thus strengthen the demand for goods and services. To that end, the acquisition of debt could prevent the impact on public spending as a result of the reduced availability of fiscal and oil resources. This stance, as is to be expected given the extraordinary circumstances, departs from the 33.1% debt/GDP ratio recommended by the Ministry of Finance and Public Credit in 2019 in the context of republican austerity.¹⁰⁸ However, this figure will also be affected if the fall in GDP is not minimized.

It should be noted that, although Mexico has access to international markets and that, in fact, at the end of April 2020 it issued debt bonds for six billion dollars, this operation was carried out in an unfavorable context because days before Mexico suffered a series of downgrades in its credit rating.¹⁰⁹ This, together with the volatility of

¹⁰⁵ Ibid.

¹⁰⁶ Infobae, "AMLO's Government ordered to cut its own expenses in half to face the coronavirus epidemic", Infobae, 09 April 2020. Available at: www.infobae.com/america/mexico/2020/04/09/gobierno-de-amlo-ordeno-recortar-a-la-mitad-sus-propios-gastos-para-enfrentar-epidemia-de-coronavirus (accessed: 29 May 2020).

¹⁰⁷ El Economista, "Due to pandemic, CDMX Government will reduce current spending by 50%". 25 May 2020. Available at: www.eleconomista.com.mx/estados/Por-pandemia-gobierno-de-la-CDMX-reducira-50-el-gasto-corriente-20200525-0134.html (accessed: 29 May 2020).

¹⁰⁸ SHCP, Report on the economic situation, public finances and public debt. Second quarter of 2019 (Mexico, 2019). Available at: www.gob.mx/cms/uploads/attachment/file/483440/Informes-sobre-la-Situacion-Economica-las-Finanzas-Publicas-y-la-Deuda-Publica_2o-Trimestre-2019.pdf (accessed: 29 April 2020).

¹⁰⁹ EFE, "Moody's lowers credit ratings for Mexico and Pemex", Agencia EFE, 18 April 2020. Available at: www.efe.com/efe/america/mexico/moody-s-rebaja-la-ca

oil prices and the COVID-19 crisis, resulted in higher rates of return than those of bonds issued by the Mexican government in January of the same year (for example, the rate of five-year bonds issued in April is 4.125%, and that of ten-year bonds issued in January is 3.133%).¹¹⁰ To that end, it is important to recognize that, for Mexico, acquiring debt in the private market is complicated, given that, in the current context, financial markets will lean towards more favored economies with higher levels of social and economic stability. Therefore, conditions must be generated to make Mexican debt “attractive”.

Some authors have pointed out that the acquisition of debt should be leveraged with the implementation of fiscal policies, which allow credit markets to offer better conditions. In this respect, Levy¹¹¹ makes a specific proposal on how to ensure the sustainability of this debt, which goes hand in hand with the austerity policy and implies clearly defining that the stimuli provided to address the emergency are temporary and targeted at vulnerable populations. Likewise, and following the same proposal,¹¹² a compromise should be considered at the national level between the executive, legislative and private powers so that the deficit potentially incurred is covered by a gradual and progressive restructuring of income and capital gains taxes. It should be noted that this is only one option; therefore, it is suggested that an analysis be made with tax policy experts to define a strategy that is consistent with Mexico’s characteristics in this area.

2. Investment in public infrastructure

In an adaptive context, it is recommended that the division in opinion of the experts consulted be taken into account as a way of prioritizing public policies; from this it seems reasonable to decide to implement measures that generated consensus among the experts, and to postpone those measures that generate division in opinions for future discussions. In this regard, it is recommended that some investment projects in publicly owned companies be postponed until it is possible to re-evaluate their profitability and social and environmental desirability. In this way, public resources would be freed up for the implementation of actions to contain the crisis, reducing the amount of resources financed through debt, which would make it possible to remain as close as possible to the objective of austerity.

D. Cross-cutting recommendations

1. Mainstreaming the gender approach in government responses to the COVID-19 crisis

Gender inequalities are the most widespread cross-cutting gap in the world, which is why women are generally at a greater disadvantage along the social scale. The crisis caused by COVID-19 and the associated containment measures have triggered a series of different effects; it is therefore recommended that the gender perspective be incorporated across the board in the design and implementation of policies and programs to support the population affected by the health emergency. In other words, when analyzing the problems, it is necessary to identify their particular manifestations for women, in order to incorporate alternative elements of assistance into the design that make it possible to correct the different effects on women and men.

Likewise, when assessing the elements that make the population vulnerable to COVID-19 and its economic effects, it is essential to superimpose layers of analysis and identify the heterogeneity of effects. To that end, the health crisis has mainly affected sources of employment and, consequently, labor income. This situation is more acute for women, since the informality rate among women is higher than among men (57.6% and 55.3% respectively). If the agricultural sector is not considered, the gap widens: the informality rate for women is 56.6% and for men is 48.4%.¹¹³ This not only means lower benefits in the event of contracting COVID-19, but also

[lificacion-credicia-de-mexico-y-pemex/50000545-4224520](#) (accessed: 29 May 2020).

¹¹⁰ Justin Villamil, “Mexico places \$6-billion dollar debt after a series of rating cuts”, *El Financiero*, 22 April 2020. Available at: www.elfinanciero.com.mx/economia/gobierno-busca-colocar-bonos-de-deuda-despues-de-ola-de-recortes-a-calificacion-de-mexico (accessed: 29 May 2020).

¹¹¹ Santiago Levy, “Let’s overcome the emergency together”, *Nexos*, 25 March 2020. Available at: www.nexos.com.mx/?p=47405 (accessed: 24 April 2020).

¹¹² *Ibid.*

¹¹³ INEGI, “Informal employment” (see section I, footnote 12).

lower income and savings with which to face the economic crisis.¹¹⁴ To that end, it is recommended that support for households be built with a gender perspective and, as a matter of priority, seek to reach all households with female heads of family who have lost their sources of employment.

In addition, it is important to mention that women make up 72.8% of people employed in the health system, which places them at greater risk of infection and of suffering from precarious working conditions.¹¹⁵ Given this scenario, it is necessary to strengthen the protection, support and benefit schemes for women in the health sector.

In the home environment, an increase in unpaid domestic and care burden (intensified by school closures and reduced safety nets) has been documented. In view of this situation, it is recommended that additional monetary support be considered for mothers and fathers in the informal sector who, in health crises such as this one, have to take time off work to care for their children.¹¹⁶ In the formal sector, the support could be given as a contribution to the company, so that it keeps employees, mothers and fathers who, due to the suspension of classes, have to take time off, on the payroll.

With regard to communication strategies, it should be recognized that there are already actions to that end (awareness campaigns and information on the actions to be taken in cases of domestic violence);¹¹⁷ likewise, with regard to telephone assistance for women suffering from domestic violence, operators and supervisors of the national 911 telephone service have been trained and made aware of the situation.¹¹⁸ Telephone lines have also been set up at the state level to deal with these complaints. However, it is considered important to strengthen both actions in order to ensure that all women, regardless of their socio-economic and sociodemographic characteristics can, if necessary, access the protection mechanisms provided by the government. First, it is recommended that lines for reporting cases of violence and information on the shelters available to victims be more widely advertised,¹¹⁹ on both radio and television. In this regard, it is recommended that advertisement and awareness campaigns be translated into as many indigenous languages as possible, and that they be broadcast using all the government's advertising spaces; in the case of indigenous women, radio is one of the most effective advertising mechanisms.

In the same vein, it is considered necessary to generate additional reporting mechanisms other than telephone lines so that victims can request help in a more discreet way; for example, in Spain, the mobile app "Alertcops" was reinforced, which sends alerts to the police through mobile devices.¹²⁰ It should be noted that in Mexico, at the state level, there are already such mechanisms for reporting cases of gender violence in public spaces (in the case of Mexico City, for example, through the mobile app called "Alameda Central", the user has access to a help button¹²¹), which could be adapted to facilitate the reporting of domestic violence. Another example is the Canary Islands government initiative; this is that women suffering from violence can go to the pharmacy and request a "Mask-19", therefore alerting pharmacy staff to support them.¹²²

¹¹⁴ Wages and salaries are, on average, lower in the informal sector.

¹¹⁵ CONEVAL, "The Health Crisis" (see section I, footnote 34).

¹¹⁶ Sol Sánchez, "Women, at the forefront of inequality in the face of COVID-19", UNDP, 7 April 2020. Available at: www.mx.undp.org/content/mexico/es/home/blog/2020/04/mujeres-en-primera-linea-de-la-desigualdad-ante-covid-19.html (accessed: 05 May 2020).

¹¹⁷ INMUJERES, "Do you suffer from violence? Are you afraid that your situation will be made worse by the Covid-19 lockdown? You are not alone", Mexico, 07 April 2020. Available at: www.gob.mx/inmujeres/articulos/servicios-de-atencion-a-mujeres-en-situacion-de-violencia-de-losestados (accessed: 12 May 2020)

¹¹⁸ Jorge Monroy, "Faced with an increase in domestic violence during lockdown due to the Covid-19 pandemic, 608 911 operators are trained", El Economista, 7 May 2020. Available at: www.eleconomista.com.mx/politica/Ante-incremento-de-violencia-intrafamiliar-duranteconfinamiento-por-pandemia-de-Covid-19-capacidad-a-608-operadores-del-911-20200507-0080.html (accessed: 12 May 2020).

¹¹⁹ For example, the Locatel Women's Line: the Mexico City Domestic Violence Victim Assistance Hotline, the National Shelter Network; the Citizens' Council for Security and Justice; and Life Without Violence, among others.

¹²⁰ EFE, "More than four thousand detained in Spain for gender violence during quarantine", El Universal, 23 April 2020. Available at: www.eluniversal.com.mx/mundo/coronavirus-mas-de-4-mil-detenidos-en-espana-por-violencia-de-genero-durante-cuarentena (accessed: 29 May 2020).

¹²¹ Head of Government, "Capital's government enables virtual panic button to report emergencies via cell phone", Government of Mexico City, 14 November 2019. Available at: www.jefaturadegobierno.cdmx.gob.mx/comunicacion/nota/habilita-gobierno-capitalino-boton-de-panico-virtual-para-reportar-emergencias-traves-del-celular (accessed: 29 May 2020).

¹²² BBC Mundo, "Coronavirus: concern for victims of gender-based violence who have to live in quarantine with their abuser (and where to seek help)", BBC Mundo, 24 March 2020. Available at: www.bbc.com/mundo/noticias-52009140 (accessed: 29 May 2020).

Finally, it is recommended that support be guaranteed to both local social protection systems and civil society organizations, so that shelters continue to operate, while complying with health measures, and that the supply of family planning supplies be guaranteed.

2. Strengthen coordination and transparency mechanisms

One of the challenges during this pandemic is to find rapid methods of collaboration between all economic and governmental actors. There is ample room for (i) improving the collaboration and coordination of the three levels of government, and (ii) making the decisions of the authorities transparent to the public. The 2030 Agenda for Sustainable Development recognizes that the challenges are multidimensional and complex in nature. To that end, the need to involve all sectors of society (public sector, private initiative, civil society and academia) in constructing diagnoses and solutions is recognized. In the current context, the sum of efforts is more important than ever. The generation of responses must be the result of collaborative processes, where each of the parties contributes its knowledge, experience and tools. The National Health Council is a space for dialogue that can be strengthened and coordinated with different levels of government and with the agencies responsible for economic decision-making, such as the Ministry of Finance and Public Credit, the STPS and the Ministry of Economy, in order to comprehensively address the problem.

Additionally, in economic decision-making, it is recommended that spaces be opened for coordination between the federal government, sub-national governments, private initiative and civil society. It is important to be aware of the specific challenges experienced from all battlegrounds in order to design and implement measures that address the heterogeneity of effects and the timing thereof, and that make it possible to prioritize the protection of household income. It is recommended that professional and business chambers and associations, as well as banking institutions, participate in these spaces. The latter have real-time information relevant to the assessment of the policies implemented and their effects on private consumption and credit demand, for example. This is essential to correct, strengthen and replicate the measures to contain the economic crisis. All of the above will favor a more efficient and effective response, with economies of scale; it will allow for better targeting of support, as well as the identification of gaps in government assistance and duplication in transfer and subsidy programs.

E. De-escalation of lockdown measures and reactivation of economic activity

The phenomenon that is faced is complex, as has been analyzed in this document, as well as in the report “Development challenges in the face of COVID-19 in Mexico – Overview from a health perspective”; therefore, the strategy for the progressive lifting of lockdown measures to combat COVID-19 must be practically surgical and based on sufficient evidence, in order to simultaneously minimize loss of life, social and economic costs. As noted in the diagnostic section, lockdown measures have resulted in economic decline, job loss and income disruption in hundreds of thousands of households. To that end, it is important to allow a gradual reactivation of the economy, which minimizes infections and protects populations at risk. The report “Development challenges in the face of COVID-19 in Mexico – Overview from a health perspective”¹²³ presents scenarios on the duration of the pandemic and the relevance of implementing effective COVID-19 lockdown measures.

It is important to mention that, in Mexico, the National Healthy Distance Period ended on June 1, giving rise to the economic reopening. However, this process takes place in the middle of an upward infection curve and with little use of evidence, unlike what has happened in other countries such as China, South Korea, Spain and Italy, where reopening began once infections were going down. To that end, the lockdown stage may not have been as effective as expected, which may generate risks of new outbreaks, with the associated economic effects in the event that new lockdown measures are applied.

123 UNDP Mexico, Development challenges in the face of COVID-19 in Mexico – Overview from a health perspective (Mexico, 2020). Available at: bit.ly/PanoramaSalud

1. Trial and error and real-time data generation

In line with the above, it is recommended that the relaxation of measures be approached from a trial and error perspective. Since there is a great deal of uncertainty regarding the number of people infected, the lifting of lockdown may lead to outbreaks that require a U-turn to be made. The generation of accurate, real-time, disaggregated data will be essential for decision-making and for the protection of vulnerable populations with regard to health and income, among others. One of the main aspects to consider is the need to perform more tests to get a more accurate idea of the number of cases. Mexico is one of the countries with the lowest number of tests performed per thousand inhabitants. With the information available as of June 5, a total of 2.3 tests per thousand inhabitants had been performed in Mexico, while the global average is 33.85 per thousand inhabitants; in other words, almost 15 times fewer tests are performed in Mexico than the global average.¹²⁴

2. Analysis of flows of people and goods for risk mitigation

Furthermore, during de-escalation, it is recommended that flows of people and goods between municipalities be taken into consideration, particularly in metropolitan areas. Some people may work and live in different municipalities, which makes the process more complex. To this end, the use of information technology and big data to track movements and anticipate risks will be essential. Of particular importance will be an increase in the number of COVID-19 infection tests, in order to have greater certainty about the spread of the virus and to map the risks of infection with greater geographical precision. Without more tests, decisions to reopen economic activity will not be supported by evidence. This information is developed in detail in the document “Scenario from a health perspective”.

3. Consensus on de-escalation measures based on sector risks

It is recommended that the lifting of lockdown measures be agreed with the different economic sectors and with state governments, in order to generate certain conditions for economic agents, and to consider the risks and capacities of each sector and entity. Consensus on lockdown de-escalation should allow for heterogeneity and asymmetry in strategies and the implementation of restrictions when the data reveal infection outbreaks. To this end, it is recommended that general and specific criteria be developed, and jointly constructed, in order to transmit unity in diagnoses and in responses.

Where possible, it is desirable to promote working from home, from a subsidiarity approach and by strengthening universal internet coverage. In the medium and long term, the new normal may represent an opportunity to improve social housing conditions, reduce overcrowding and expand the coverage of basic services.

4. Gradual reopening

Additionally, it is recommended that the reactivation be gradual. Once the economy has reopened, companies should not operate at 100% capacity, but limit the number of employees and customers in the same space.

¹²⁴ Our World in Data, Coronavirus (COVID-19) Testing, 9 June 2020. Available at: ourworldindata.org/coronavirus-testing (accessed: 10 June 2020).

Social and Economic Impacts of the COVID-19 and Policy Option in the Dominican Republic

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Abstract

The COVID-19 pandemic poses significant challenges for the Dominican Republic, including the loss of foreign exchange earnings due to the reduction of key activities such as tourism, the shutdown of a large part of economic activities with direct and indirect effects on employment and household income, and fiscal challenges, as the government is implementing crisis relief measures at the same time as it sees the tax revenue falls. This document presents a description of the current situation of the economy and the policies that the government has implemented since mid-March, analyzing their relevance, evaluating their fiscal balance, and proposing additional measures. Finally, a simulation exercise of the impact of the implemented programs on the poverty rate is carried out. The results show that the government's policy package, by focusing part of the subsidies on poor and vulnerable households, can play an important role in containing the increase in poverty, but targeting employment subsidies on formal workers would especially benefit wealthier households.

1. Introduction

The Dominican Republic has declared a state of emergency on March 19 due to COVID-19. By July 4, the country registered around 30 thousand confirmed COVID-19 cases and 786 fatalities. The government has implemented a set of policies aimed at reinforcing the health sector and protecting families who suffered income losses because of the crisis.

This crisis puts at risk the improvements the country has made in the last years in terms of the human development index and the poverty rate (PNUD, 2019; ONE, 2020). Since 2016, the poverty rate has declined by 8 percentage points, reaching 21% in 2019. Additionally, the situation poses several challenges. The country projects a high balance of payments deficit for this year due to the fall in income from tourism, one of the main economic activities, from remittances, which represent an important source of income for poor and vulnerable households, and from exports. This deficit projection appears even when considering that the country will benefit from the fall in the world price of oil of which it is a net importer, and from the increase in the price of gold, a product the country exports. At the same time, the Dominican Republic's labor market is characterized by a high informality rate. Informal workers, in addition to not being protected by social security mechanisms, have lower incomes than formal workers and are more likely to live in poor or vulnerable households. This represents a major public policy challenge in terms of jobs to be protected and income losses to be compensated. These urgent needs translate into pressures on fiscal accounts that have been in deficit in recent years and will be affected by the loss of tax revenues.

This policy note describes and analyzes this complex scenario. First, it details the macroeconomic and labor market situations, highlighting the points that represent a challenge in the present crisis. Second, it describes the health and economic measures the government has implemented, presenting a discussion on their relevance and viability. Then, it assesses the potential impact of government policies on the poverty rate. Finally, it presents the fiscal balance of the measures and discusses possible financing options.

2. What are the challenges?

The COVID-19 pandemic raises major challenges for the country, such as the loss of foreign exchange earnings due to the decline of activities such as tourism, the shutdown of a large part of economic activities with direct and indirect effects on employment and household income, and major fiscal challenges, since the government must implement crisis relief measures, especially for the most vulnerable households, at the same time as it sees its tax revenue falls.

The current situation has led to an adjustment of the economic projections for 2020. After years of economic growth rates averaging 6% since 2010 (World Bank, 2020), the projected growth of 5.1% for 2020 has been adjusted to -1%. The projection indicates that the central government's deficit that was expected to be 2.3% of GDP will worsen to 4.4% of GDP, of which 1.4 points correspond to the primary deficit and 3 points to the financial deficit. Due to the financing needs of the economic relief measures, it is estimated that the debt of the Non-Financial Public Sector, which was estimated at 53.4% of the GDP in 2020, will become 60.9% of the GDP in the post-COVID situation (IMF, 2020).¹

The following subsections describe the country's macroeconomic situation, the links between economic activity sectors, and the labor market situation, highlighting the challenges that each area entails in the government's objective of containing the economic crisis and supporting the most vulnerable households.

¹ The post-COVID projections assume, compared to 2019, a 50% decline in tourism, a fall in remittances and net re-exports from the free zone of 20% and 10%, respectively, and a drop in net portfolio investment and foreign direct investment of 50% and 20%, respectively.

2.1. Macroeconomic situation

The COVID-19 finds the country in a good macroeconomic situation, with an expanding economic activity, low external deficit, high international reserves, and a low inflation rate. However, the direct effects of the epidemic, as well as policies to deal with it, may have significant macroeconomic consequences.

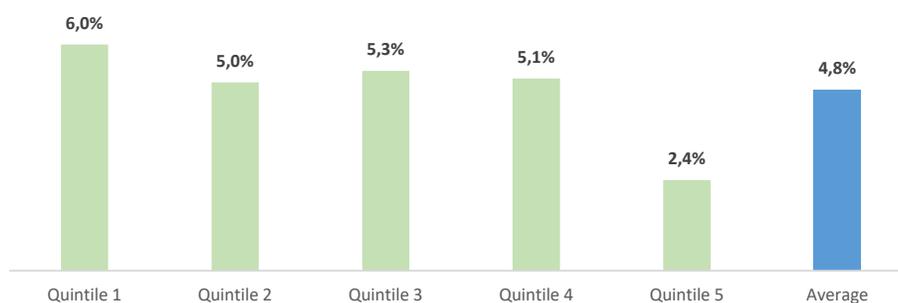
The Dominican Republic is a small and open economy. Its openness index (exports and imports of goods and services as a percentage of GDP) is around 50%, exports are equivalent to about 24% of GDP, and incomes from the current account of the balance of payment are about one third of GDP. This makes the country vulnerable to external shocks.

The health crisis will impact both incomes and expenditures of the current account of the balance of payments. The clearest and strongest partial effect will be negative and will come from the decline of tourism, an activity that represents a third of current account incomes. In addition, incomes from exports and remittances are also at risk.

Tourism. Tourism is one of the main economic activities due to its contribution to GDP, employment and because of its important linkages with other sectors. Tourism demands 18% of services, 9.3% of industrial products, 7.3% of energy and water, and 2.1% of agricultural inputs (Central Bank of the Dominican Republic, 2020a). Tourism income losses could reach USD 4.3 billion (4.8% of GDP approximately), about 50% of the expected pre-COVID tourism income (IMF, 2020).

Remittances. On the other hand, as the COVID-19 contagion continues to expand in the United States, the risk of a decline in foreign remittances increases. Remittances represent the third largest source of foreign exchange earnings, and 75% of them come from the United States. In the Dominican Republic, the percentage of households receiving remittances is around 10% in the first four quintiles of the income distribution, while in the richest quintile the fraction is only 2.4%. On average, remittances account for 4.8% of household income, with a largest share for the poorest quintile (Figure 1). The behavior of foreign remittances during the 2008-09 crisis may give an indication of what could happen in the current situation. In that crisis, the value of remittances fell in 2008 and 2009, but began to recover rapidly in 2010 (Cruces et al., 2015). A decline in foreign remittances, which generally help to mitigate low wage levels and social protection mechanisms with low coverage, would mainly impact lower-income households and could increase the poverty rate. According to information from the Central Bank of the Dominican Republic (2020b), the value of foreign remittances received during 2020 fell by 33% between January and April, although by May they had already exceeded the value of January. This recovery could be explained by the improvement of the United States labor market during May, the country where most of the remittances come from.

Figure 1. Share of foreign remittances in total household income | By income quintile



Source: ECLAC (2019).

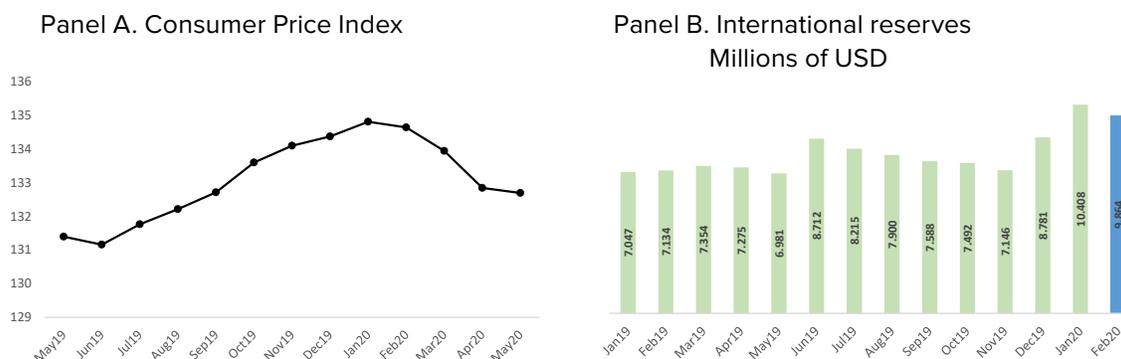
Foreign trade. Of the export activities, the most important are the manufacturing of the import substitution industry, mining, and agricultural industries. The free trade zones employ 3.8% of the labor force and demand relatively low skill labor, which is mainly provided by the poor segment of the population. The impact on the performance of free trade zones will depend on the final demand of the destination markets, and on the possible disruptions in the value chain, i.e., in the productive processes of involved countries and in trade flows.

The value of imports could decline due to disruptions in supply chains and reductions in the domestic demand. The main risk is that the fall in imports that supply the domestic market with consumer goods, inputs (including for the food industry and agriculture), oil and refined fuels, and capital goods could affect the productive linkages, especially of MSMEs (Micro, Small and Medium-sized Enterprises). In 2019, more than a third of national imports were consumption goods (including 7% of food), a quarter were raw materials (including food inputs for an amount equivalent to 6.9% of all imports) and a fifth were crude or refined fuels. Food and food inputs together accounted for about 15% of total imports.

But it is not all bad news. The fall in the world price of oil and the increase in the world price of gold have a positive impact on the current account as the country is a net importer and exporter, respectively. The net effect will depend on the magnitude of the losses due to the reduction of remittances, exports, and the fall in tourism, and on the gains due to the lower price of oil and the higher price of gold. IMF projections indicate that COVID-19 could mean a negative impact on the balance of payments of 5.7% of GDP in 2020 even considering the gain from reduced world oil prices and increased gold prices (IMF, 2020). The greatest impact would come from the current account, which would go from a deficit of USD 1.4 billion (1.6% of GDP) to USD 4.4 billion (4.9% of GDP) between the pre- and post-COVID situations.

Although low, the country faces some inflationary and devaluation risks in its inflation targeting with flexible exchange rate regime. In the current situation, the Central Bank has adopted an expansive position which could generate monetary pressure on prices. However, the fall in demand would be a counteracting force. On the other hand, assuming the global recession will continue to keep low prices of oil, raw materials, and other commodities, the risks of imported inflation are considered small. Until May 2020, inflationary pressures have not materialized. On the contrary, the Consumer Price Index has shown a decline during all months (Panel A of Figure 2). Additionally, the health crisis finds the country with relatively high levels of international reserves (Panel B of Figure 2). This implies that the country would have the capacity to counteract devaluation pressures linked to the external account situation or to an increase in the demand for foreign currency.

Figure 2. Inflationary and devaluation risks



Source: Central Bank of the Dominican Republic (2020c; 2020d).

In contrast to other macroeconomic aspects, the epidemic surprises the country with a stressed public finance situation. Since 2008, the central government has recorded a total annual deficit that has generally oscillated between 2% and 3% of GDP (Ministry of Finance of the Dominican Republic, 2020a). It is expected that as

a result of the economic impact of the epidemic, the deficit will increase significantly (Figure 3). Projections adjusted for the current situation indicate that the total deficit in 2020 could reach 4.4% of GDP (IMF, 2020). This is explained by a reduction in tax revenues due the fall in the economic activity level and the tax measures that have been taken and which are detailed in the following section. In addition, the government is implementing a strong stimulus package that includes subsidies to households and workers' wages. The challenge will be to identify sustainable sources of financing.

In this situation of fiscal stress, it is important to mention the public debt situation. Pre-COVID it was expected that the Non-Financial Public Sector debt, which was 52.4% in 2019 (Blackman et al., 2020), would represent 53.4% of the GDP in 2020. When the calculation is adjusted taking into account the current situation, the projections indicate that the debt would reach 60.9% of the GDP (IMF, 2020). In addition, the country faces important obligations this year since debt amortization for 2020 will reach 2.3% of GDP.

Figure 3. Central government total deficit 2016–2020 | Percentage of GDP



Source: Ministry of Finance of the Dominican Republic (2020a) and IMF projections (2020).

2.2. Productive linkages

The government order to stop non-essential activities has led to a total or near-total shutdown of production in free zones manufacturing, construction, hotel, bar and restaurant activities, and other services. Other activities such as communications, health, energy and water, agriculture and local manufacturing are operating at relatively high capacity, in the latter case because of the weight of food processing and packaging in total manufacturing. Other sectors, such as commerce, finance, transportation, and storage, operate at medium and low levels.

The impact of the shutdown of production in different economic sectors may depend on their linkages to other activities through inputs, and their relative weight in the total value of output and in employment. At this context, tourism, free zones, and construction activities deserve particular attention.

Tourism. The activity of hotels, bars and restaurants has a high weight in national production and employment. In 2019 it represented 7.6% of GDP and 7.4% of total employment. Tourism has important backward linkages so that the closing of operations of hotels has indirect effects that must be considered. Data from the input-output matrix shows that inputs of various services such as commerce, transport, telecommunications, finance and real estate services were equivalent to 18.2% of the gross value of production, while demand from the industrial sector was 9.3% of production, energy and water represented 7.3%, inputs from the agricultural sector 2.1%, and imports 4.0% (Central Bank of the Dominican Republic, 2020a).

Free zones. Between 2017 and 2019, free zones manufacturing represented 3.3% of GDP, 3.8% of national employment, and 35% of employment in industrial activities. Although the connection with the rest of the economy is restricted because inputs are generally imported, free zones have important links through labor

remuneration, including social security contributions and payment for services. As for the activities linked to the free zones, the input-output matrix indicates that they have strong backward domestic linkages with food processing, rubber and plastic products, food processing, agriculture, energy, and services.

Construction. Construction has been one of the most dynamic sectors in recent years thanks to the strong push from public and private investment. On average between 2017 and 2019, this activity accounted for 11.3% of GDP and 7.7% of total employment. Data from the input-output matrix indicate that it is one of the activities with strongest and most diversified backward linkages. Domestic inputs, such as metals, transport, finance, telecommunications, and chemicals, are equivalent to 40% of the construction sector gross production value (Central Bank of the Dominican Republic, 2020a).

Other services. Other services comprise a very heterogeneous set of activities, including low-productivity, low-wage personal services. Between 2017 and 2019 they accounted for 7.3% of GDP and 19.3% of total employment. Their purchase of inputs, such as other services, energy, water, telecommunications, transportation, is concentrated in the domestic market (87.0%) (Central Bank of the Dominican Republic, 2020a).

2.3. Labor market situation

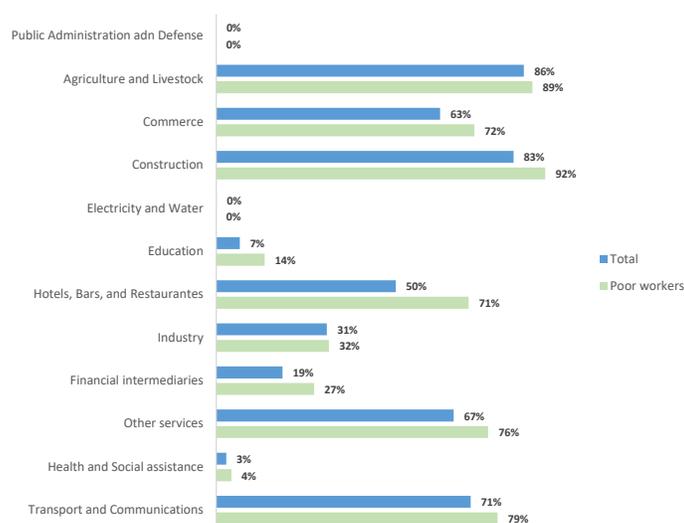
The quarantine and shut down of most non-essential economic activities raise major challenges in the labor market, ranging from job losses, suspensions, wage reductions to changes in the way of work. These adjustments imply reductions in the level of household income and, therefore, potential increases in the poverty rate. In addition, the labor market in the Dominican Republic is characterized by a high informality rate. In 2019, the employment rate was 61% and the unemployment rate was 6.2%. The rate of informality, workers without contributions to the social security system through their job, was 55.2% (Central Bank of the Dominican Republic, 2020e). Informal workers are in a particularly vulnerable situation in the context of the current pandemic. They are unprotected, receive lower wages than formal workers, their jobs are unstable and their chances of teleworking during the ‘stay-at-home’ orders are lower than those of formal workers (Hatayama et al., 2020).

Where are informal workers employed? Data on the informality rate by economic sector shows significant heterogeneity. In those sectors linked to the public sector, the informality rate is very low (public administration and defense, education, electricity and water, health and social assistance). In other sectors, more than half of the workers are informal (agriculture and livestock, commerce, construction, hotels, bars and restaurants, other services, and transport and communications) (Figure 4).

The analysis of the informality rate of the sectors most affected by the pandemic and sectors with which they are linked through productive chains, reveals that these are the sectors with the highest rates of informality. Workers in these sectors are at a clear disadvantage, not only because of the greater chances of losing their jobs and income, but also because of the lack of protection that limits their access to social security mechanisms, which adds to the difficulty of maintaining confinement for a long period of time, increasing their chances of contagion. This opens a clear space for public policy action.

If we add the poverty dimension to the analysis, we see that the incidence of informality is higher among poor workers. In other words, the disadvantage in which informal workers usually find themselves, and which is accentuated in the current context of the pandemic, is especially strong among workers who are initially more vulnerable due to their poverty situation. In all sectors of the economy, the rate of informality is higher in the sub-group of the working poor. The difference between the total informality rate and that of poor workers is, in turn, more pronounced in the sectors most impacted by the COVID-19 crisis.

Figure 4. Informality rate among all employed workers and among poor workers | By economic sectors



Fuente: Central Bank of the Dominican Republic (2020e).

Notes: The sectors most affected in their economic activity are construction, hotels, bars and restaurants, other services, commerce, financial intermediaries, and transport and communications.

The interaction between informality and the demographic characteristics of workers and their places of employment is worth analyzing. This is important in order to identify which workers are most unprotected in the current situation. They are the ones who will not be able to access severance pay if they lose their job or will face greater difficulty in accessing formal credit.² Table 1 shows that, according to the 2018 national labor force survey (Encuesta Nacional Continua de Fuerza de Trabajo or ENCFT), the percentage of workers who did not contribute to the social security system through their job, and who were then considered informal, was higher among men than women; informality was higher for workers with a low educational level who, in turn, represented 40% of total employment that year. The fraction of self-employed workers without social security contributions reached practically one, while among wage employees the fraction was close to one third. The rate of informality was substantially higher in microenterprises than in small or large firms, and this type of firms accounted for close to two thirds of total employment.

Table 1. Percentage of workers not contributing to the social security system through their jobs and distribution of employment. By demographic characteristics and place of work. 2018

	Without social security contributions	Employment distribution
By gender		
Women	52.7%	39%
Men	62.9%	61%
By educational level		
Up to primary level	77.6%	39%
Secondary level	58.0%	36%
Tertiary level	30.6%	25%
By occupational category		
Employer	81.5%	3%
Wage employee	30.0%	58%

² There is no unemployment insurance in the Dominican Republic, which means that neither informal nor formal workers have access to such insurance in case they lose their job.

Independent	99.8%	39%
By firm size		
Micro (up to 10 employees)	89%	73%
Small (between 11 and 50 employees)	12%	22%
Large (51 or more employees)	5%	4%

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018.

The poverty and vulnerability rates and average labor income of formal and informal workers are shown below (Table 2). The fraction of informal workers who are poor is twice as large as the fraction of formal workers, while the percentage of informal workers living in a poor or vulnerable household is 13 percentage points higher than the percentage among formal workers. Finally, formal workers have a monthly labor income 67% higher than that of informal workers. These figures make it clear that more than half of the workers in the Dominican Republic --the informality rate was 55% in 2019-- are in a vulnerable situation, not only because they do not have social security protection, but also because their income level is far below the remaining 46% of workers and their chances of belonging to a poor or vulnerable household are higher.

Table 2. Poverty rate, vulnerability, and average labor income by formality status

	Informal workers	Formal workers
Poor	16%	8%
Poor or vulnerable	39%	26%
Monthly labor income (\$RD)	16,741	27,903

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018.

Notes: Informal workers are those who do not make social security contributions through their job.

2.4. Summary

The COVID-19 finds the country in a good macroeconomic situation, with high economic growth rates, low external deficit, high international reserves, and low inflation. However, this crisis raises several challenges.

First, the crisis will have a strong negative impact on the balance of payments due to the loss of foreign currency income associated with tourism, remittances, and exports. On the other hand, the fall in the world price of oil and the increase in the world price of gold favor the country. Even considering these gains, projections indicate that the country will face a significant balance of payments deficit.

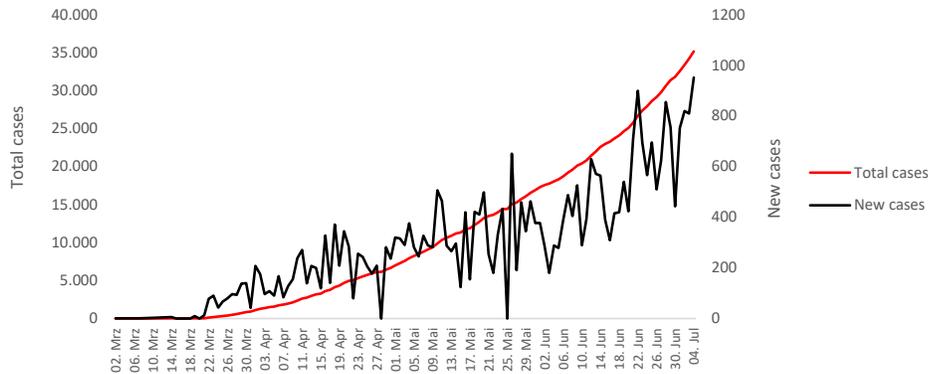
Second, the public finance situation brings a major challenge in terms of being able to provide an effective response to the population to sustain consumption levels and demand in general, while at the same time trying to strengthen the capacity of the health system. The central government has recorded a total annual deficit of between 2% and 3% of GDP since 2008. The reduction in tax revenues due to lower economic activity will have a strong impact on the deficit this year which adds to the need to finance the package of measures that the government is implementing to address the crisis.

Finally, the characteristics of the Dominican Republic's labor market implies a major public policy challenge. More than half of the workforce is informal. These workers are in a very vulnerable situation. Not only do they lack access to social security mechanisms, but they have a greater participation in the sectors most impacted by the fall in economic activity, they earn a lower labor income than formal workers, and are more likely to live in poor or vulnerable households.

3. National responses

As of July 4, 36,184 confirmed cases of COVID-19 and 786 deaths have been reported in the Dominican Republic (Ministry of Public Health and Social Assistance, 2020a). The provinces of Santo Domingo, the National District and Santiago account for more than 60% of confirmed cases and more than half of the fatalities. Since the appearance of the first positive case on March 2, the cumulative case curve does not appear to have reached its maximum and on July 4, the last day with available data, the maximum number of positive COVID-19 tests in one day was recorded (Figure 5).

Figure 5. Positive COVID-19 new and accumulated



Source: Roser et al. (2020).

In response to the expansion of COVID-19, since mid-March the country has implemented preventive health measures, and policies to compensate families for their income losses and stimulate the economic activity. The measures are detailed below.

3.1. Preventive health measures

These measures meant the total closure of borders (19 March) and the establishment of a curfew (27 March). The measures have been renewed on several occasions and at the time of writing this note, they remain in force until June 27 with a curfew schedule from 8pm to 5am.

Classes at schools and universities were suspended, as well as non-essential business events and activities, while public employees began to attend their jobs on a rotational basis, except for those over 60 or with special health conditions (March 17). The circulation of means of transport was also limited, including intercity and metropolitan buses and minibuses, the metro, and the cable car (March 21).

Towards the middle of May, some activities began to be resumed with the monitoring of general and specific health safety protocols for each sector. MSMEs and the public sector began to operate with no more than 50% of their employees, while large firms resumed activities with no more than 25% of their staff (17 May). State public transport was resumed (20 May), differentiated operating hours were established for shops, the construction sector, industry, mining, and agricultural activity (20 May) and the opening of shops in malls was authorized (25 May).

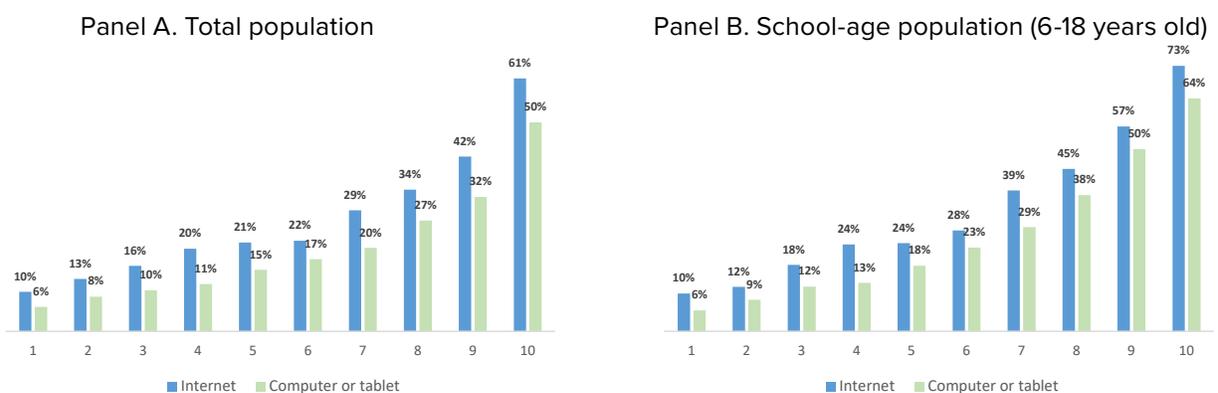
In the health sector, the growth in the number of infections forced the authorities to strengthen diagnostic and care capacities and to increase efforts to inform and educate the population in prevention issues. Various isolation centers and hospitals were exclusively set up for the treatment of COVID-19 patients. To improve detection capacity, the number of test kits available was increased with support of the private sector and the

number of laboratories certified to perform the tests was also enlarged. It was established that all citizens with COVID-19 symptoms or who have been in contact with persons who tested positive could be tested for free at certified private laboratories and at the National Laboratory. It was also established that the Administradoras de Riesgo de Salud should cover COVID-19 tests for all persons, whether or not they are affiliated with the social security system (Ministry of Public Health and Social Assistance, 2020b).

Two health interventions were carried out in the most affected provinces in May and June. The interventions included disinfection, rapid testing in key areas previously identified by the regional health authorities, active search for suspicious cases, and registration, control, and follow-up of positive cases (Ministry of Public Health and Social Assistance, 2020b). These types of interventions have been implemented at specific times and locations but are not planned to be carried out in a continuous manner.

In the education sector, lessons started to be taught online after the suspension of face-to-face classes. The public sector has the advantage that since last year the ‘Digital Republic’ program has been delivering computers to students and 25,000 teachers, which could facilitate the continuation of at least part of the education in an online manner. However, a major constraint to be considered in assessing the potential success of a virtual education strategy is the availability of an internet connection at home. In the Dominican Republic, the percentage of the population with access to the internet is among the lowest in Latin America and the Caribbean region. In 2017, 52.2% of the region’s population had access to an internet connection at home while the figure for the Dominican Republic was only 28.3% (ECLAC, 2020). The low rate of access for the entire population is combined by great inequality in access. Figure 6 shows the variation in internet access and in the availability of a computer or tablet in the household by decile of the per capita household income for the entire population (Panel A) and for the school-age population (Panel B). This information is for 2018 and shows that access of the richest decile is between 6 (internet) and 8 (computer or tablet) times larger than access of the poorest decile in the whole population. These differences are more intense in the school-age population. In that case the ratio between the 10th and 1st decile is between 7 (internet) and 11 (computer or tablet).

Figure 6. Internet access and in the availability of a computer or tablet in the household by decile of the per capita household income



Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018.

A somewhat different picture is obtained when analyzing mobile internet access. In 2019, 82% of the country’s population had access to a mobile phone line; of these mobile lines, 87% have access to the internet (Dominican Institute of Telecommunications, 2020). The available information does not allow disaggregating the figures by income deciles, but it is expected that access to mobile phones and mobile internet will be lower in the lower deciles of the distribution, both due to the cost of access to devices and due to the cost of internet services.

The reported differences in access to digital devices and internet services according to household income level show that any effort to move education to the digital sphere will not be sufficient, since not all students and teachers have access to the resources needed to do so and, moreover, the change is potentially unequalizing. In the current context, it is necessary to implement measures aimed at generating greater access, ensuring that it reaches households of all income levels. Time constraints do not allow this to be achieved through, for example, the development or expansion of internet access infrastructure. It will be necessary to implement actions that reduce the cost of access. On the one hand, it will be important to ensure that households where at least one member is attending school or university have access to at least one digital device. On the other hand, it will be important that those households have access to the internet and that the extra cost for the hours of use for educational purposes does not fall on them. Subsidizing the cost of the service is one option in this regard. According to the Dominican Institute of Telecommunications, during the state of national emergency caused by COVID-19, telephone companies cannot suspend telephone service. It will be important that these services include the internet as well.³

In public education, the suspension of in-person classes and the movement to online teaching should not have major economic consequences because most contracts are fixed. However, the order to continue providing food to students through the Jornada Escolar Extendida implies an increase in public spending. The measures adopted to keep school breakfast rations include a reinforcement of health care for the prevention of contagion through the mandatory application of protocols, a complex process due to the fact that 80% of students in the public sector (out of a total of 2 million) are covered.

3.2. Income compensation and economic support measures

In response to the economic contraction due to the demand and supply shocks associated with the restrictions, the government has announced measures for income compensation through cash and in-kind transfers to households, individuals and firms, and temporary tax and financial relief and economic stimulus measures.

‘Quédate en casa’ cash transfer program

Cash transfers to households and individuals are made through the ‘Quédate en casa’ temporary subsidy. The subsidy seeks to ensure the food security of the most vulnerable households. It has been implemented using the existing infrastructure of the conditional transfer program ‘Progresando con Solidaridad’ (PROSOLI) in force since 2005. The transfer was initially planned for the months of April and May and then extended to June.

The ‘Quédate en casa’ temporary subsidy, however, aims to reach a greater percentage of the population than PROSOLI, implying an expansion of the latter. The number of beneficiary households has increased from 850,000 to 1.5 million (46% of the country’s households according to information from 2018), trying to cover those above the poverty line but who are vulnerable or belong to the informal sector. The 650,000 households included in the subsidy that are not beneficiaries of PROSOLI are those classified as poor 1, 2 and 3 in the database of the Sistema Único de Beneficiarios (SIUBEN), the main instrument for targeting social policies in the country. The subsidy provides a transfer of RD\$ 5 thousand (equivalent to US\$ 93) for all beneficiary households and an additional RD\$ 2 thousand (US\$ 37) for households where the head is over 60 years of age. The amount of the transfer represents approximately 24% to 33% of the total income of beneficiary households according to information from the 2018 ENCFT. The money can be used to purchase basic food items in shops that are members of the Red de Abastecimiento Social, the network of shops linked to public programs.

³ Similarly, the Superintendencia de Electricidad issued a resolution prohibiting all energy distribution companies from cutting off power service for non-payment during the state of national emergency.

Using information from the 2018 ENCFT, it is possible to approximate the number of households benefiting from the program (poor or vulnerable households) and to analyze the informality of their members. Table 3 shows that, among the poor or vulnerable households that would benefit from the program (41% of the total in 2018),^{4 5} 9% have at least one informal worker and 39% of all those who work do so in informal conditions. Among those households that would not qualify for the program because they are above the vulnerability line (59% of the total in 2018), 54% have at least one informal worker and 35% have all their working members in an informal situation. Although these households have an income level high enough not to qualify for a food subsidy, the high incidence of informality among their members makes them ‘vulnerable’ to possible loss or suspension of employment due to COVID-19. The following sections discuss the measures implemented to support suspended and self-employed workers and as will be discussed below, these measures have formality as one of the requirement for eligibility.

Table 3. Distribution of households by poverty or vulnerability status and informality condition of their members

Total households	3,284,332	100%
Poor or vulnerable household	1,338,599	41%
At least one informal worker	658,142	49%
All employed members are informal	525,644	39%
Non poor or vulnerable household	1,945,733	59%
At least one informal worker	1,043,720	54%
All employed members are informal	676,317	35%

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018.

‘Fondo de Asistencia Solidaria al Empleado (FASE)’ cash transfer program

The support measures for firms were implemented through a program of monetary transfers to private companies that are contributing to the Tesorería de la Seguridad Social, the social security administration. The ‘Fondo de Asistencia Solidaria al Empleado (FASE)’ initially provided support during April and May, which was later extended to June, and comprises firms with suspended employees who have closed their operations due to reduced economic activity (FASE 1) and manufacturing firms and MSMEs that continue to operate and keep their staff unchanged (FASE 2). The benefits involve a cash transfer support of between RD\$ 5,000 and RD\$ 8,500 (US\$ 93 and US\$ 157) that covers 70% of monthly wages while the employer pays the remaining amount (FASE 1) or a fixed contribution of RD\$ 5,000 per worker (FASE 2). In June, the program was modified to include the possibility that the same firm can have suspended workers under FASE 1 and workers with ongoing contracts under FASE 2. In order to receive the transfer, firms need to keep their workforce unchanged and make the contribution to the social security system.

The monetary transfer cannot be used for the payment of the 13th month or social security contributions.⁶ In this way, the subsidy received by a firm to pay wages is reduced by the amount of the contributions. For example, for a worker whose monthly wage is RD\$8,000, the subsidy in the FASE 1 modality covers RD\$5,600 (70% of the monthly wage) and the remaining RD\$2,400 are paid by the firm. If we consider the cost of employer contributions to the social security (7.09% for health insurance and 7.10% for old-age pension), the net subsidy is RD\$4,465 (56% of the monthly wage) and the employer’s share is RD\$3,535 (44% of the monthly wage).

⁴ The difference from the percentage of beneficiary households previously reported (46%) is that here the number of beneficiary households with information for 2018 is an approximation, while, according to official information, the number is 1.5 million households.

⁵ The vulnerability line is USD 10 at purchasing power parity.

⁶ During the months of April and May, the Tesorería de la Seguridad Social did not apply any surcharge or interest to employers who had not made the corresponding contributions to their employees.

An interesting point to highlight about the FASE program is that companies belonging to several sectors cannot access this benefit. The excluded sectors initially comprised those considered essential, such as food and drug stores, the food industry, agriculture, livestock and fishing, mining and quarrying, private security, energy generation, education, health, telecommunications and the financial sector. In June, this restriction was removed for certain essential sectors including the media, ice-cream restaurants, dentistry and beauty centers, private security, veterinarians and universities, which were allowed to participate in the program in any of its modalities or in the FASE 2 modality for universities. Firms excluded from the FASE program are supported by temporary tax relief and economic stimulus measures described below and, like FASE beneficiaries, continue to pay social security contributions.

The condition of contribution to the Tesorería de Seguridad Social leaves a large percentage of firms without access to the FASE program. This value can be approximated using information from the 2018 ENCFT. That year, 50% of the workers indicated being employed in a company not registered in the Registro Nacional de Contribuyentes, the national taxpayer registry. Workers in these companies (informal workers) receive the subsidy 'Quédate en casa' if they are poor or vulnerable, but do not have the job protection that the FASE program provides to formal workers.

If the duration of the quarantine period is extended, it would have to be assessed whether the formal firms benefiting from FASE 1 (companies that suspended workers due to closure of activities) continue as active companies (despite temporary closure of activities) and if so, whether they keep their workforce unchanged or reduce it.⁷ The figures show that 98.2% of the contracts are for an indefinite period of time and would therefore be protected by the labor code which requires the payment of notice and severance pay for dismissal. If the quarantine is extended, this could be a course of action taken by firms that cannot restart their activities and face the risk of bankruptcy. For formal MSMEs in particular, access to credit could be an option through the guarantee and financing fund that has been set up to keep them active. The details of this measure are described in the following paragraphs.

'Pa'Ti' cash transfer program

The Pa'Ti program was implemented in May. It provides RD\$5,000 per month to independent workers who have not been able to work due to social distancing measures and who are not receiving assistance from any of the other programs. The benefit is expected to be delivered during May and June. Potential beneficiaries are independent workers who qualify as such based on the classification prepared by the Superintendencia de Bancos and the regulations for evaluating assets. The Ministry of Finance identified 202,000 independent workers from these databases. It is important to note that this mechanism for identifying potential beneficiaries only considers independent workers with links to the formal credit system. According to information from the ENCFT for 2018, of the total of 1,741,133 independent workers, practically all indicated that they were not registered in the Registro Nacional del Contribuyente. Also, of the total number of independent workers in 2018, 15% were in poverty (260,727 workers) and 37% were poor or vulnerable (650,980 workers). The 202,000 workers identified by the Superintendencia de Bancos seem to substantially underestimate the total number of vulnerable independent workers, although it should be mentioned that part of them may be being captured by the 'Quédate en casa' program.

In-kind transfers

In-kind transfers consist of targeted provision of basic food through three mechanisms: (i) The Programa de Alimentación Escolar has maintained the deliveries of compensatory food rations for the school breakfast and the Jornada Escolar Extendida; (ii) The Plan Social de la Presidencia de la República delivers food rations to

⁷ At the time of writing, the FASE program was subsidizing the payment of salaries of these companies during the month of June, although there is no news regarding what measures will be maintained from July onwards.

400,000 families weekly in the sectors with the highest incidence of poverty nationwide; (iii) The Comedores Económicos del Estado are providing 140,000 daily food rations in selected urban territories.

It is important to mention the possible overlap between the in-kind transfers and the ‘Quédate en casa’ subsidy that is intended for the purchase of food. In that situation, it would seem more reasonable to save distribution costs and implementation of health protocols by pooling all transfers under the ‘Quédate en casa’ program and making money transfers. In addition, a cash transfer would reduce the risk of contagion by not carrying out distribution operations or having collection points for the withdrawal of food by the beneficiaries.

Temporary tax and financial relief measures

The tax provisions have postponed payments of the most immediate tax obligations. Towards mid-March, the postponement of the payment of the ITBIS (Impuesto sobre Transferencias de Bienes Industrializados y Servicios) for February was announced, to be made in 4 installments without penalties, at the same time that the value of the installments for the payment of the same tax in force at the time of the announcement was reduced by half. The presentation of the affidavit and the payment of the 2019 ISR (Impuesto Sobre la Renta or income tax) obligations for companies and individuals was postponed until July 29. For that same tax, the payment of the 3 advance payments was made more flexible, a measure that can significantly alleviate the immediate tax burden, especially for MSMEs. For the hotel sector, the Acuerdo de Precios por Anticipado (APA) were temporarily suspended.

On the financial side, banks have granted extensions of terms of between 60 and 90 days to pay mortgage, consumer, motor vehicle and MSMEs loans without affecting customers’ credit history and have extended the term to pay credit cards.

Production incentives

With the aim of promoting MSMEs, a guarantee and financing fund was set up to help these companies. Those that qualify as portfolio A or B (clients with high compliance with their bank obligations) may receive a 50% guarantee from the government and the other 50% will be guaranteed by financial intermediaries. The benefit of this scheme are the improvement of the risk profile of the system and the reduction of the interest rate due to the guarantee that the companies will be receiving. However, only certain companies will be able to benefit from these ‘guaranteed’ loans and, especially, the benefit does not reach those companies that are trying to access the credit system for the first time.

The Monetary Board has also adopted mitigation measures to support the sustainability of economic activities, with a rather medium-term impact. First, in March, the monetary policy rate (MPR) was reduced from 4.5% to 3.5%. This is the lowest rate in at least the last two decades. The repos rate was also reduced from 6.0% to 4.5% and the overnight rate from 3.0% to 2.5%. Although this should help to reduce rates in the market, the final effect is uncertain as interest rates are determined by various factors, including other monetary policy factors. Table 4 shows the evolution of lending rates during 2020. Retail and consumer lending rates fell between March and April, following the reduction in the MPR. Although both rates started to grow since then, they continue to be below the March values. Mortgage lending rates, on the other hand, have shown little change during 2020.

Table 4. Bank lending rates in local currency. 2020

	Comercio	Consumo y/o Personales	Hipotecarios y/o Desarrollo
Enero	11.3	18.7	11.1
Febrero	11.3	17.7	11.0
Marzo	12.5	18.8	12.1

Abril	10.2	13.1	11.6
Mayo	10.3	14.6	11.6
Junio	10.4	16.2	11.4

Source: Central Bank of the Dominican Republic (2020f).

Liquidity facilities were expanded by 52 billion pesos (just under US\$ 1 billion) through the relaxation of legal reserve requirements. This is equivalent to 21% of the restricted monetary base and 13% of the expanded monetary base and the circulating money (M1). The equivalent of 43% of these facilities will be directed to loans to households, MSMEs, trade, tourism and exports, some of them at an interest rate of no more than 8% and would be automatically classified in the lowest risk category and with no requirement for provisions. Subsequently, these facilities were expanded by 20 billion (US\$370 million). This measure is intended to make credit cheaper and broaden access to it. However, it is difficult to achieve the desired effect before the lifting of the quarantine and without a recovery in aggregate demand. The immediate positive effect could be limited to those businesses with clear expectations of recovery which would choose to apply for credit to survive the crisis.

Liquidity in foreign currency was also increased by USD 622 million through the relaxation of legal reserve requirements for dollar deposits. This is intended to reduce pressure on the foreign exchange market to prevent currency depreciation, as well as to counteract the reduction in foreign exchange earnings from tourism. Finally, the application of prudential rules was relaxed for the duration of the crisis by freezing ratings and provisions to debtors, authorizing credit restructuring and waivers of capital payments that reduce immediate obligations without deteriorating the risk rating for the next two months. The cost, however, is a deterioration in the quality of the credit portfolio, which is inevitable in a crisis context.

The expansionary stance of monetary policy is unquestionable and will be an indispensable component of the recovery efforts. Having surpassed the health crisis phase, it is likely that monetary stimulus will need to be further strengthened, particularly if inflationary risk is low.

3.3. Discussion

The analysis of the measures implemented by the Dominican Republic to address the health and economic crisis resulting from the COVID-19 pandemic shows that the government has focused its efforts on the most vulnerable population (poor and vulnerable households) and on sustaining some firms that have had to suspend their activities due to social distancing and confinement measures. At the same time, the measures announced are of a temporary nature, that is, they are expected to be suspended as long as the confinement situation allows for the resumption of economic activities. There are several points to note regarding the coverage and possible overlap of these measures:

- » The movement from the face-to-face to the virtual education raises the challenge of access to digital devices and internet services. The information presented here indicated that the percentage of households having access to internet and to computers or electronic tablets is low in the country and there are substantial differences according to the level of household income. This means that the change in education modality is potentially unequalizing. A somewhat different reality was found when analyzing access to mobile phones with internet service since this is much higher than internet connection in the dwelling. However, this may not be the best option for carrying out educational tasks and raises the issue of unequal access as well and the need to pay for the cost of internet services. It is important to ensure that households with school- or university-age persons have at least one electronic device and internet access. Among the measures adopted by the government is the impossibility for telephone companies to suspend service during the state of national emergency. It will be important that these services include the internet and that the monetary cost of the service owed is subsidized for lower-income households.

- » The order to continue providing food to students from the Jornada Escolar Extendida and other in-kind subsidies in the form of food deliveries overlaps with the 'Quédate en casa' program which aims to ensure household food security. The costs of logistics and monitoring of health protocols could be avoided if all the aid aimed at providing food (in cash or in kind) is concentrated in one instrument.
- » The 'Quédate en casa' cash transfer program for poor and vulnerable households builds on the infrastructure of an existing program (PROSOLI) that has been operating successfully since 2005. This is an advantage of the announced package of measures as it means taking advantage of information records, saving money and time. One possible criticism, however, is that the 'Quédate en casa' component of the PROSOLI program is restricted to the purchase of basic food items. While the aim of PROSOLI's expansion is to ensure household food security, there are other consumer goods of vital importance in this context, such as cleaning and hygiene products and expenses such as housing rent that must be paid. On the other hand, analysis of the 2018 ENCFT data showed that, among households above the vulnerability line, a high percentage have informal workers. While these households have an income level high enough not to need a food subsidy, their informal workers will not be able to access wage subsidy programs to protect their jobs, since all have formality as a requirement.
- » The FASE program, designed to subsidize up to 70% of the monthly wages of workers who have been suspended or workers in manufacturing companies and MSMEs that continue operating without reducing their workforce, has some restrictions that mean that many firms cannot access it. On the one hand, only registered firms that are up to date with their social security contributions can apply for the program. According to the 2018 ENCFT, only 50% of workers indicated that they were employed by a firm registered in the Registro Nacional de Contribuyentes. On the other hand, although the program is very generous in the subsidy provided for the payment of wages, it does not include the cost of social security contributions and their payment is a requirement for receiving the subsidy. For a worker with a monthly wage of RD\$8,000, the 70% subsidy is reduced to 56% when the cost of employer contributions is considered. Additionally, the benefits of the FASE program only apply to non-essential firms. Essential firms, while continuing to operate, are also facing lower demand for their products and services and may lay off workers as a way of surviving the crisis. Finally, since large firms have more financing options to continue operating and paying wages, the FASE program could focus on those firms that do not exceed a certain number of workers. This could be especially relevant if the measures restricting the activities of certain companies continue and the program remains active.
- » The Pa'Ti program appeared after the implementation of 'Quédate en casa' and FASE subsidies and tried to capture a group of workers not covered by these programs (independent workers). However, it only considers independent workers with links to the formal credit system. According to information from the 2018 ENCFT, practically all the independent workers surveyed indicated that they were not registered in the Registro Nacional del Contribuyente.

4. Expected changes in the poverty rate

To characterize the effects of COVID-19 on household income and the poverty rate, a simulation exercise is carried out using data from the 2018 ENCFT. For this purpose, different scenarios are proposed depending on whether the government implements transfer programs or not and for different values of labor income losses of workers not reached by the measures.

The different scenarios are described below and compared with the initial situation that is the one observed in the ENCFT microdata. In all cases, it is assumed that labor income losses and government transfers are transitory and only occur for three months. For the remaining months of the year, the value of labor income that is observed in the survey is assigned.

Scenario A is one that simulates what would have happened if the government had not implemented any

package of measures and the loss of labor income for workers was drastic. This scenario assumes that informal workers lose their labor income as well as independent workers. Formal workers in essential sectors receive 75% of their monthly wages; this is to capture the fact that while these sectors may have been able to continue their activities, they may have faced a reduction in demand that may have resulted in layoffs or wage reductions. Finally, formal workers in non-essential sectors lose their monthly wage.⁸

Scenario B also assumes a situation without government transfers but the reduction in labor income is moderate. In this case, informal workers keep 25% of their monthly labor income as do independent workers. Formal workers in essential sectors receive 75% of their monthly wage and formal workers in non-essential sectors receive 50%.

Scenario C incorporates the measures announced by the government and involves a drastic reduction in labor income for those workers not covered by the measures. Independent workers receive an income of RD\$5,000 through the Pa'Ti program. This income is allocated to only one third of independent workers since, as discussed above, the program identifies potential beneficiaries through formal credit records, leaving out a large number of workers in this occupational category. The remaining independent workers lose their income as do the informal workers. This is intended to represent the effect caused by the fall in demand for products and services and the inability to work due to the pandemic together with the fact that none of these labor categories are protected by labor legislation. Formal workers in essential sectors receive 75% of their monthly wage, while those in non-essential sectors receive the full amount through the FASE program.

Finally, scenario D assumes that one third of the independent workers receive the RD\$5,000 transfer through the Pa'Ti program, another third receives 50% of their previous labor income, and the rest lose their labor income. Informal workers receive 25% of their previous labor income, formal workers in essential sectors receive 75% of their salary, while those in non-essential sectors receive the full amount through the FASE program.

The scenarios with government transfers (C and D) also include the annualized amount of the 'Quédate en casa' subsidy for poor or vulnerable households. That is, the subsidy is assumed to be received by all households that are the focus of the program.

It is important to note that these are partial equilibrium exercises which include various assumptions about how workers' labor incomes will change depending on whether they keep their jobs or not. It is also assumed that the situation of loss of income and government transfers only lasts for three months. However, it is possible that quarantine or restriction on certain economic activities may continue for a longer time. Added to this is the fact that many workers who lost their jobs will not necessarily recover them, and if they do, the recovery of both employment and the pre-COVID income level may not be immediate.

Results show that, in the absence of government transfers, the initial poverty rate of 23.1% could have increased by 6–10 percentage points depending on the scenario of income loss considered (Table 5). The increase in the poverty rate is lower when these transfers are included. In scenario C, which assumes a drastic loss of labor income for workers not covered by government programs (informal wage employees and some independent workers who receive the 'Quédate en casa' compensation if they belong to a poor or vulnerable household), the poverty rate would increase by 5 percentage points. In scenario D, with moderate labor income reductions for workers not covered by government programs, the increase in the poverty rate would be of 4 percentage points.

⁸ Essential sectors were identified following the description of the FASE program.

Table 5. Simulation of changes in the poverty rate by scenarios of labor income losses and government transfers

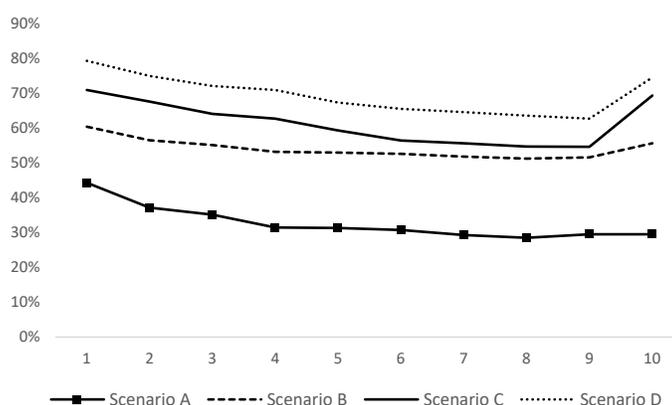
	Initial Situation	Without transfers		With transfers	
		Scenario A	Scenario B	Scenario C	Scenario D
Poverty rate	23.1%	33.2%	29.6%	28.3%	27.0%
Monthly labor income of informal wage employees	11,290	8,467	9,173	8,467	9,173
Monthly labor income of independent workers	21,962	17,810	19,452	20,672	20,883
Monthly labor income of formal non-essential workers	28,770	21,578	25,174	28,770	28,770
Monthly labor income of formal essential workers	26,560	24,900	24,900	24,900	24,900

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018 and SEDLAC (2020).

Notes: The poverty rates were obtained comparing the per capita household income observed (initial situation) or simulated (scenarios A to D) with the official poverty line.

The average labor income value of the different labor categories shows that, in any of the scenarios considered, those who face the greatest income losses are informal wage employees. At the other extreme, formal workers are in a better situation. This analysis is suggestive of possible increases in inequality.

Figure 7 presents the simulated household per capita income under each scenario as a proportion of initial per capita income and by deciles of initial income. It is important to note that the results come from a simulation exercise with 2018 data where assumptions were made to allocate government transfers and to simulate workers' labor income losses. Even so, the graph can provide useful information about possible distributional impacts of the programs. In all scenarios, the proportion of initial income kept by households decreases with the income decile up to decile 9. In other words, initially poorer households suffer fewer losses than richer households. This behavior changes in the highest decile of the distribution. In scenario A (without transfers and with drastic reductions in labor incomes), decile 10 keeps about 30% of its initial household income as do deciles 4 to 9. In scenario B (without transfers and with moderate reductions in labor incomes), decile 10 is slightly better off than deciles 3 to 9; while decile 10 receives 56% of its initial household income, deciles 3 to 9 receive approximately 53%. In scenarios C and D, which include government transfers, the curve takes a U-shape. In both cases, the richest decile in the distribution is in a better position than deciles 3 to 9. This is due to the targeting of the employment subsidies. Both the FASE and Pa'Ti programs include formality as a requirement for participation. At the other extreme, the focus of the 'Quédate en casa' transfer on poor and vulnerable households helps to ensure that the loss of the lowest deciles of the distribution is not too severe. This opens up a margin of adjustment in case the emergency situation is prolonged, and the benefits are delivered for a longer period of time.

Figure 7. Relationship between simulated and initial per capita household income by deciles of initial per capita income

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018 and SEDLAC (2020).

This analysis reveals that the government's package can have a significant impact on containing the increase in poverty. Some of the subsidies protect poorest households especially, but the targeting of the employment programs on formal workers also generates lower income losses in the households of the richest decile of the distribution.

The table below shows the fiscal cost of each of the programs according to the allocation of benefits made in the simulations and the average amount received by formal and informal workers. A formal worker receives an average of R\$1,270 from the 'Quédate en casa' program, while an informal worker receives a slightly higher per capita amount of R\$1,445. The FASE program, which is only available to formal workers in non-essential sectors, is the most expensive and provides the highest transfer per beneficiary. The average value of \$RD 8,086 indicates that most workers who receive this benefit have a monthly wage greater than the maximum value of the transfer, which is \$RD 8,500. In fact, the average monthly labor income of formal workers in non-essential sectors reaches \$RD 28,770. Finally, the Pa'Ti program, available for formal independent workers, provides R\$5,000 to each of the beneficiaries.

Table 6. Monthly cost of programs and average transfer per beneficiary

	Millions of \$RD	Average monthly transfer to programs' beneficiaries (\$RD)	
		Formal worker	Informal worker
Quédate en casa	6,693	1,270	1,445
FASE	8,990	8,086	-
Pa'Ti	2,915	5,000	-

Source: Encuesta Nacional Continua de Fuerza de Trabajo 2018 and SEDLAC (2020).

Notes: For the 'Quédate en casa' program, the monthly transfer was calculated as the value of the benefit received by the recipient household divided by the number of household members. For the FASE program, 70% of the monthly labor income was allocated if that value is between R\$5,000 and R\$8,500; R\$5,000 if 70% is below that value, and R\$8,500 when 70% is above that amount.

5. How to face the challenges?

The analysis of the previous sections has detailed the package of measures implemented by the government to contain the advance of the pandemic and support households and firms. It has also shown that, although wage subsidies are directed to formal workers, these measures would help keep the poverty rate from skyrocketing, damaging the progress the Dominican Republic has made in recent years. The next step is to analyze the costs of the measures and the possible sources of financing available to the country.

Table 7 details the cost of each of the programs and indicates the source of information used. According to the 2020 budget reformulation reported by the Ministry of Finance on June 26, the budget increased by USD 1,258 million as a result of the pandemic. Of the expenditure components described in the table, the largest is for health and other measures, such as in-kind subsidies and other expenditures different from the three programs implemented by the government. Of the programs implemented, the one with the highest cost is 'Quédate en casa', followed by FASE.

The revenues the government will be receiving include two loans from the World Bank agreed in April and May. The Pan American Health Organization granted a loan to finance activities aimed at preventing and reducing the transmission of the virus. The Inter-American Development Bank has also made available to the countries of Central America and the Dominican Republic nearly US\$1.7 billion in addition to those initially programmed for 2020 to address the pandemic. Of that total, the agency has already made disbursements in Panama, Honduras, El Salvador, and Belize, but the amount the Dominican Republic will receive has not yet been agreed upon. In addition, the Instituto Dominicano de Prevención y Protección de Riesgos Laborales (Dominican Institute for the Prevention and Protection of Occupational Risks or IDOPRIL by its Spanish acronym) transferred US\$240.5 million to finance the FASE program, while the Central Bank provided financing of US\$206.2 million.

Considering these sources of funding and the increase in the government's budget due to the package of measures implemented, there is still USD 558.8 million to be financed. It is also important to consider that this need for financing occurs in a context of falling tax revenues and loss of income from abroad due to less tourism activity, fewer exports and remittances, and less foreign direct investment. In other words, the government will also face a negative change in the balance of payments in relation to the 2020 pre-COVID projection (IMF, 2020).⁹ To cover this deficit, the country received a loan of USD 650 million from the International Monetary Fund.

What options does the country have? Reallocating budget items or transferring funds from other government agencies is an attractive option since it does not require assuming the cost of a foreign debt. In fact, it has already begun to be implemented with the transfer made by IDOPRIL.

On the foreign debt side, the country has an intermediate level of public debt in relation to GDP (52.4% of GDP in 2019). But the cost of financing, as for the rest of the countries in the region, is increasing. Between January and June of this year the EMBI of the Dominican Republic went from 309 to 573 (Central Bank of the Dominican Republic, 2020g), meaning an increase in the cost of external financing. However, the country's sovereign debt rating has shown successive improvements and today it is close to moving into the investment grade category. Given this and taking into account that the ratio of public debt to GDP is in a moderate range, financing in the capital market is an option.

The country is also expected to receive a disbursement from the Inter-American Development Bank to cover the costs of the pandemic. At the time of writing, the value of this disbursement had not yet been announced.

Table 7. Cost of the programs and financing sources

	Millions of USD	Comments
Costs of the programs		
Quédate en casa	438.1	\$RD5,000 x 1.5 million beneficiary households + \$RD2,000 x 500 thousand beneficiaries x 3 months
FASE	270.6	Cost of the program by the end of June according to the Ministry of Finance
Pa'Ti	34.7	\$RD5,000 x 202 thousand beneficiaries x 2 months
Preventive health measures and other costs	514.1	Difference between the budget reformulation informed on June 24 by the Ministry of Finance and the cost of the programs
Financing sources		
World Bank	100.0	Loans to accompany the country's efforts to limit the adverse effects of COVID-19 by addressing health risks and socio-economic impacts on poor and vulnerable households
World Bank	150.0	Contingent line of credit for disasters and health-related events
Pan American Health Organization	2.1	Loans for the prevention, reduction and detection of virus transmission
IDOPRIL	240.5	Transfer to finance the FASE program
Central Bank	206.2	
Balance	-558.8	

Source: Ministry of Finance of the Dominican Republic (2020b).

Notes: The cost of the 'Quédate en casa' program assumes that one-third of households have a head of household vulnerable to COVID-19. These households receive an extra transfer of RD\$2,000. The values were expressed in USD using the exchange rate as of June 26 reported by the Central Bank of the Dominican Republic (58.2 \$RD/USD).

How can the balance change in the next few months? The costs of the different measures implemented by the government were computed assuming that the benefits of the programs will be paid until June. At the time

⁹ The projected balance of payments deficit includes the gains from the fall in the international price of oil and the increase in the international price of gold.

of writing, the government had not announced whether the containment and suspension of activities would continue during the month of July and, if so, whether the payment of subsidies would be extended. Even in a situation of resumption of activities, it must be considered that workers who lost their jobs will not necessarily find one immediately. Similarly, even among those who manage to recover their employment, their labor income may be affected and be lower than in the pre-COVID situation. In that case, government assistance through one of the transfer programs can be expected to continue.

As discussed above, the informal independent workers and informal wage employees are most likely to have lost their jobs or had to close their businesses. These workers were not covered by the FASE and Pa'Ti wage subsidy programs. Formal workers in key sectors may also have been affected since, although they are employed in sectors that continued to operate, the reduction in demand may have meant reductions in the number of employees in those firms that were not part of the FASE program. In all these cases, if these workers lived in a poor or vulnerable household, they would receive the 'Quédate en casa' subsidy, but the loss of employment would mean a fall in household income that will not necessarily recover quickly. These households will still require government assistance.

Here, health measures, prevention and case detection are of particular importance. To date, the virus continues to spread in the Dominican Republic, with the maximum number of positive cases of COVID-19 in one day recorded on July 4. As reviewed in the document, the country has implemented mass testing health interventions on only two occasions. If the virus is not contained, government programs that were conceived as temporary transfers should be extended, increasing the fiscal cost of the measures. This is happening in a context of uncertainty due to the presidential elections of 5 July. It will be up to the new government to decide on the course of action to address the crisis caused by COVID-19.

6. Conclusions

The COVID-19 crisis has created multiple challenges for the Dominican Republic. The government has reacted quickly to strengthen the health sector and compensate poor and vulnerable households for the loss of income. To this end, it has relied on the infrastructure of an extensive existing transfer program and created additional ones on a temporary basis.

This note analyzed in detail each of the measures implemented by the government and highlighted some possible adjustments. For example, although poor and vulnerable households receive a cash transfer, it can only be used to purchase basic food. In a context where cleanliness and hygiene are key to containing the spread of the virus, this restriction may not be appropriate. On the other hand, employment protection programs are focused on formal workers, leaving out most of the country's workers. While informal workers can access food subsidies if they are poor, vulnerable or fall into that situation, they are not receiving any support to protect their jobs, as formal workers do.

The difficult situation will continue after the state of national emergency is lifted. Many workers will have lost their jobs and income will not be immediately recovered even once economic activity resumes. This will require the government to adapt to the changing reality by monitoring the evolution of economic activity, the labor market, and household income so that those in poverty and vulnerability continue to be supported.

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The Bahamas Country Note: Impact of COVID-19 and policy Options

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Abstract

As the rest of the world, The Bahamas is confronting the challenges derived from the Covid-19 pandemic. The country will face a very difficult year economically and socially. The abrupt halt in tourism, the islands' main industry, is causing unemployment to rise and GDP to fall by historic levels. Unlike other countries in the region, The Bahamas has a more robust fiscal and macroeconomic situation, which allows it to develop a strong emergency response. The Government has established a series of stimuli for activity and employment support totaling 2.37% of GDP, which is low compared to countries with similar per-capita income. The strategy also places great emphasis on formal activities and registered employees, so the most vulnerable population is reached only through sub-optimal policies. This paper reviews the economic and social situation in The Bahamas and describes the policies implemented for the containment of the crisis. It also proposes moving from food assistance for sectors without contributory benefits to broader unemployment insurance that can help maintain consumption and reduce the number of programs the Government is implementing. This last point is particularly important due to the lack of up-to-date records and statistics for coordinating social assistance.

1. Introduction

The world is facing a global crisis of unprecedented scale. The COVID-19 is both a health and an economic problem that is affecting every country worldwide. The variety of curfews, lockdowns and social distancing policies, while helping prevent the spread of the virus, will cause a dramatic economic recession. Developing countries will face a rise in unemployment and poverty, which should be addressed quickly and decisively. In this context, the UNDP COVID-19 Policy Documents Series is an attempt to promote a collective reflection on the response to the health crisis and its economic and social effects on our societies. This document reviews the social, fiscal and economic context of The Bahamas, identifying strengths and weaknesses, and presenting ideas to improve the policy toolkit needed to deal with this international crisis.

The government reacted fast to the pandemic, and the health numbers show only 119 COVID-19 cases and 11 deaths up until July 17th. However, the economic front is worrisome with a projected 12% shrink in the country's economy. Tourism, the main activity of the islands, has been deeply affected and its future is dependent on the evolution of the global pandemic. The Government has boosted spending to maintain consumption, protect businesses, sustain employment and protect unemployed workers. The policies tend to benefit formal workers, making informal workers less likely to obtain enough protection. Food assistance, among other noncontributory supports, may fall short in the face of rising unemployment and poverty among poor households.

The pandemic comes as the country is rebuilding from the devastation caused by Hurricane Dorian in September 2019. Nonetheless, The Bahamas is in a better position to develop an emergency response to the crisis and reduce its impact on poverty and unemployment than most of the countries in the region. The country has shown sustained growth over the last years and the government has improved fiscal compliance. However, poverty is still prominent, especially among scattered islands, and unemployment is around 10% and rising.

In the face of a long-term recession, the Government needs to reevaluate the social spending strategy, shifting help from food assistance to a wider unemployment coverage that can reach those households most in need. The country should invest in improving social statistics and registration plus avoid the risk of duplicating efforts to deliver help to the population. In the long term, efforts should be made to diversify the economy and reduce the high dependency on tourism.

2. General Overview

The Bahamas is a chain of over 700 islands and keys in the North Atlantic Ocean, southeast of the United States, and northeast of Cuba. It has a population of 377,000, most of it urban and with two-thirds living on New Providence Island where Nassau, the capital, is located.¹ It's a high-income service economy, heavily dependent on Tourism and Financial Services. The Bahamas has one of the highest GDP per capita, comparable with those of developed countries like South Korea, Spain, and Portugal. Nevertheless, poverty is around 13% and unemployment was almost 10% before the COVID-19 crises started.²

After several years, with an average growth below 1%, the GDP has shown promising numbers over the last two years, increasing to 1.6% in 2018 and 1.8% in 2019.³ Economic activity was supported by tourism and foreign investment projects fueling activity in the construction sector. This was obtained even with the crises generated by the Hurricane Dorian in September 2019 that left significant loses in Abaco and Grand Bahama, affecting the tourism industry. The country also presents a strong financial offshore sector that has been under

¹ Government of The Bahamas. Department of Statistics.

² Ibid.

³ Central Bank Of The Bahamas (2020) Annual Report & Statement of Accounts for the Year Ended December 31, 2019.

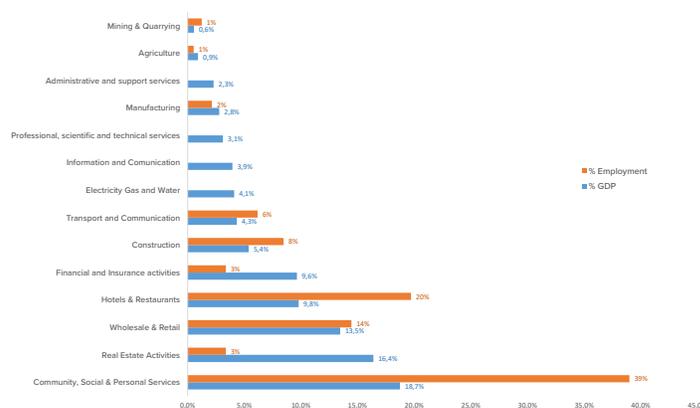
the scrutiny of the Government and international observers to comply with Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) and tax transparency standards.⁴ Foreign investment and tourism were expected to continue to expand in the short term, but a need for diversification is necessary for the long term. The impact of Hurricane Dorian and the COVID-19 pandemic have placed the problem on the table for discussion.

The financial sector showed resilience in previous years, with a reform-oriented government tackling structural issues in the fiscal area. The current account was positive in 2019 (0.6%) following a 16.4% deficit in 2018. The balance of payments is highly affected by tourism receipts and prices of oil imports, the two main components.⁵ Oil represents 17% of imports and the drop in prices can reduce this deficit by 5%, however, the losses in tourism will work against this gain and deepen the balance of payments. Inflation is under control, increasing by 2.2% on average in 2018 and with an annualized 1.8% by September 2019. Most of the inflation is explained by an increase in the Value Added Tax (VAT) statutory rate from 7.5 to 12% in 2018, which help increase revenues.⁶

2.1. GDP and Employment

The Bahamas has a highly concentrated economy, with agriculture and industry representing less than 10%. The GDP reflects the importance of tourism-related areas, such as Hotels and restaurants (9.8%) and Real Estate Activities (16.4%). The estimates of the total incidence of Tourism on the GDP varies from 30% by the World Tourism Organization⁷ to 50% by the Ministry of Tourism.⁸ In 2019, the country had a record 7.2 million visitors, leading the growth for the second year. But this lack of diversification makes The Bahamas vulnerable to crises such as the COVID-19.⁹

Figure 1. Employment and GDP by Industry (percentage)



Source: Dept of Statistics. GoB. Employment reflects data from New Providence.

By May 2019, the labor force in The Bahamas was composed of 215,000 employed, with 9.8% unemployment and 6.9% informal employment.¹⁰ In September the country was hit by the Hurricane Dorian and surveys have been unable to capture the impact beyond the Island of New Providence that concentrates 70% of employment.

⁴ IMF(2019) The Bahamas, 2019 Article IV Consultation–Press Release; and Staff Report. Country Report No. 19/198

⁵ Central Bank Of The Bahamas (2020) Op.cit.

⁶ Ibidem.

⁷ The World Travel & Tourism Council (WTTTC) wttc.org

⁸ Ministry of Tourism (2020), Tourism Readiness and Recovery Core Committee. Tourism Readiness & Recovery Plan 2020.

⁹ University of The Bahamas (2020), Research Forum Examines Long-Term Strategies to Make Economy More Resilient 21st April 2020. Accessed June 15 2020 www.ub.edu.bs/research-forum-examines-long-term-strategies-make-economy-resilient

¹⁰ Department of Statistics (2019a) Labour Force Survey. May 2019.

The majority of the population works directly or indirectly in tourism, and it's reported by the Ministry of Tourism that the total related employment is 70%.¹¹ In 2019, the Hotel and restaurant sector experienced the greatest increase since May 2018 and represented almost 20% of the total workforce. Nevertheless, the Government stands as the second largest employer with almost 20% as well. Community, Social and Personal Service industry, which includes the civil service, police service, and domestic service accounted for 35% of the workforce. The public sector showed a 9% increase in the second semester of 2019 in New Providence, which may reflect a strategy to compensate for the impact of Hurricane Dorian on tourism. Also, Construction and Wholesale represent 8.5% and 14.4% of employment respectively.¹²

The number of informal workers remained constant from 2018 to 2019, with a rate of 6.9%, and is composed of a disproportionate number of males (76%).¹³ Information on the scale of the informal economy in The Bahamas is scarce. A recent study by the IDB suggests that the size of the informal sector is 20–30% of the economy and it's primarily linked to tourism related activities.¹⁴ This scenario is important to evaluate the targeting of stimulus policies. The number of informal workers and the size of the informal economy points to the fact that there's a relevant proportion of the population that is in a highly vulnerable position and might not be reached by policies based on formal registration.

The Bahamas has a large percentage of foreign population. Net migration (immigrants minus emigrants) is around 5,000 people over the last 5 years. Migrants in the country represent 16.2% of the population, which is high compared to the average worldwide (3.5%) and in Latin America (1.8%). These immigrants, equally divided among sexes, come from countries within the region and generally seek to work and send remittances back home.¹⁵ The Bahamas has a negative flow of remittances of around 0.87% of GDP, in a region characterized by primarily remittance receiving countries. The main destinations are Haiti with almost 60% of the remittances, followed by Jamaica 11% and the United States 9%.¹⁶ Poverty rates are much higher among Haitians, which places this population amongst those most vulnerable.

2.2. Balance of Payments

The Bahamas has a negative trade balance, as imports exceed exports more than six times. The last available data from the 2nd quarter of 2019, shows the deficit at B\$ 746 million. Imports are dominated by manufactured goods and machinery (50%), followed by oil (17%) and food and beverage products (16%). Bahamas goods exports are expanded polystyrene in primary forms (28.9%), exported Mineral Fuels, Lubricants and Related Materials (19.8%), frozen rock lobster and other sea crawfish (13.8%), and machinery and transport equipment (22.8%).¹⁷ Bahama's main commercial partner is naturally the United States, which represents over 80% of the country's main imports and exports. The rest of the trade is divided into a wide variety of countries and regions.¹⁸

The price of polystyrene dropped slightly since the beginning of the year close, to 0.6%.¹⁹ The recovery of the US economy will determine the recovery of the demand. On the one hand, the demand for polystyrene food packaging is likely to grow as sanitation concerns lead to ease restrictions on single-use plastics. On the other hand, demand for electronics and appliances will be dependent on the size and length of the US

¹¹ Ministry of Tourism (2020), Op.cit.

¹² Department of Statistics (2019b) Labour Force Survey. December 2019.

¹³ Department of Statistics (2019a) Op.cit.

¹⁴ Peters, Amos (2017) Estimating the Size of the Informal Economy in Caribbean States. Country Department Caribbean Group. Technical Note N IDB-TN-1248.

¹⁵ United Nations (2020). International migrant stock 2019: Country Profiles. Department of Economic and Social Affairs.

¹⁶ Country Economy. Accessed June 15th 2020 countryeconomy.com

¹⁷ Government of The Bahamas (2019). Foreign Trade Statistics Quarterly Report Second Quarter. Department of Statistics.

¹⁸ World Bank – World Integrated Trade Solution. Accessed June 16th 2020 <https://wits.worldbank.org/>

¹⁹ Federal Reserve Bank of St. Luis. Producer Price Index by Industry: Polystyrene Foam Product Manufacturing: Building and Construction Polystyrene Foam Products. Accessed April 20th 2020. <https://www.stlouisfed.org/>

recession. Other products such as Lobsters and petroleum oils have also fallen in price. Lobster dropped 20% since January and Oil close to 60% as part of the global oil price crises.²⁰ The fall in oil prices will benefit the trade balance. Given the 30% fall in oil prices since the beginning of the year, it could imply roughly a 5% decrease in import values, which could probably be larger given the additional reduction in transportation and consumption.²¹ *Ceteris paribus*, such a fall in oil prices could increase the balance of payments in 150 million. However, the loss of revenues in Tourism exports will offset these gains and derive in a negative balance.

The 2019 balance of payments showed a surplus of B\$ 69.4 million, reverting the negative numbers of 2017 and 2018. This is explained by an increase in travel services and net current transfers. Exported services were five times larger than the amount of merchandise traded in 2019. The services account showed in 2019 an estimated surplus of \$2,095.5 million, explained by a 7.3% growth in net tourism receipts. The net income outflows were reduced to \$547.4 million, in large part due to a 25.8% decrease in investment-related outflows. Finally, due to hurricane-related re-insurance inflows, net current transfers reversed to \$833.0 million.²²

Table 1. 2019 Balance of Payments (B\$ Million)

Current Account	69.40
i. Merchandise trade (net)	(2,311.70)
Exports	654.60
Imports	2,966.30
ii. Services (net)	2,095.50
Travel	3,244.30
Other	(1,148.70)
iii. Income (net)	(547.40)
iv. Current Transfers (net)	833.00

Source: Central Bank of The Bahamas

The National Debt to GDP ratio increased during 2019 by 0.4% age points to an estimated 66.8%. The Bahamian dollar-denominated debt –at 66.2% of the total– advanced 4.3%, while foreign currency claims grew by 0.9%. The majority of the foreign debt is held by private capital markets (47.5%), followed by external financial institutions (31.6%), domestic banks (10.1%), multilateral institutions (8.7%), and bilateral financial institutions (2.1%).²³ As the Government is not planning on increasing taxes for the 2020/2021 fiscal year, debt is expected to grow. The IMF and the IDB have already approved loans for the Hurricane Dorian reconstruction efforts of approximately US\$352 million (3% of GDP).

2.3. The stock market

The BISX All-Share Index is a market capitalization weighted index comprised of all primary market listings excluding debt securities. The number of publicly traded securities on BISX is 37, and it's comprised of 19 common shares with a market capitalization of \$4.52 Billion, 7 preference shares with a market capitalization of \$244 million, and 12 debt tranches with a face value of \$507 Million.²⁴

²⁰ Trading Economics. Accessed April 20th 2020 <https://tradingeconomics.com/>

²¹ Ibidem

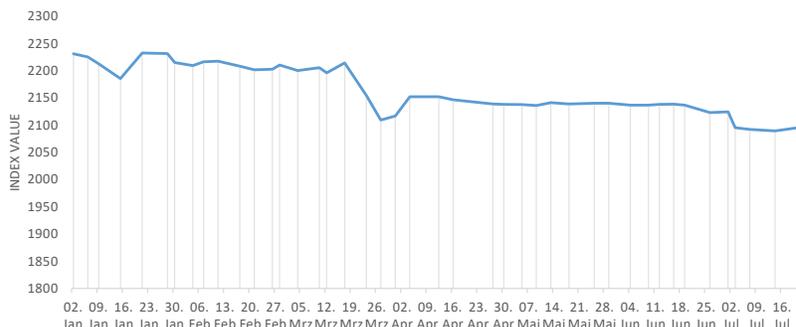
²² Central Bank of The Bahamas (2020). Op.cit.

²³ Central Bank of The Bahamas (2020). Op.cit.

²⁴ Bahamas International Securities Exchange. Accessed June 20th 2020. bisxbahamas.com

The results of the BISX in 2019 were moderately positive. The volume of shares traded grew by 3.9% adding to a 66.1% growth in 2018 and the value rebounded by 2.2% from a decline of 6.2% in 2018. As a result, the BISX rose by 5.8%, extending the 2.2% gain from 2018.²⁵ The beginning of 2020 represented a setback for the Index reflecting the impact of the COVID-19 crises on the value of The Bahamas companies. For the three months ending March 31, the BISX decreased by 5.13%. Since April, BISX showed a moderate recovery and has stabilized its price since, in expectation of the evolution of the numbers of the economy.

Figure 2. BISX Index Value for the current year



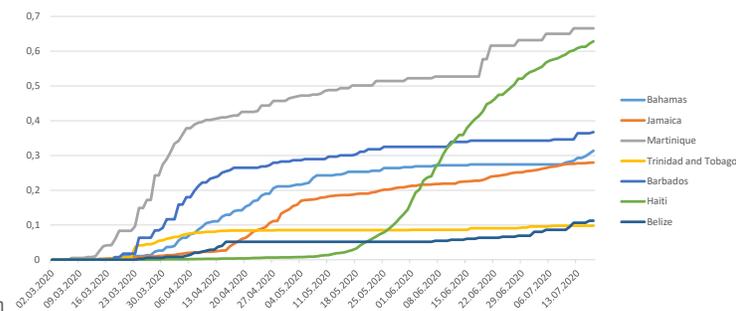
Source: Bahamas International Securities Exchange

3. Measures in Place

3.1 Public Health Responses

With only 119 COVID-19 cases up to July 17th, the health response has shown to be successful, similar to other countries in the region (Figure 3). While lockdown policies have controlled the spread of the COVID-19, the shutdown of the borders stopped tourism and thus significantly impacted the economy. Thus, the Bahamas is facing a more difficult scenario regarding the economic effects of the pandemic. At the emergence of the COVID-19, the Governor General of The Bahamas issued a proclamation of emergency that gave the Government emergency powers to aggressively combat the crises. Measures included the right to order the detention of a person for COVID-19 screening and the establishment of curfew hours and lockdowns among other exceptional policies. The government restricted the entry for nonresidents. It closed all airports and ports to incoming flights and vessels, and outbound flights were limited. A strict curfew was implemented on March 24th establishing weekend 24hr-lockdowns based on the evolution of the COVID-19 and with some differences between the various islands. Also, the Government created the National Food Committee and the Economic Recovery Committee to plan short term and long-term actions to recover the economy.²⁶

Figure 3. COVID-19 Cases per thousand people, selected countries



Source: World Health Organization

²⁵ Central Bank of The Bahamas (2020). Op.cit

²⁶ Government of The Bahamas. Accessed June 15th 2020 www.bahamas.gov.bs.

Classes were suspended on March 16th as The Ministry of Education (MOE) officially announced the closure of all schools, both public and private, as well as other educational institutions. While the content was uploaded on the MOE website and efforts were made to continue education remotely, internet connection is not homogeneous among students. Currently, educational institutions remain closed, but national examinations began on July 13th as part of phase 4 of the reopening.

The curfew policies generated significant reductions in economic activity, especially during the 24-hour lockdowns during weekends. Google's COVID-19 Community Mobility Report²⁷ of The Bahamas shows that mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters decreased 54% since the beginning of the restrictions, with peaks of almost 90% during lockdowns. Mobility trends for places like public transport hubs decreased by 74% while trends for places of work decreased by 34%. These numbers show that restrictions had a high compliance rate, which as a consequence will impact consumption.²⁸

After a month and a half of curfew and periodical lockdowns, on April 27th the Government published a re-opening plan consisted of five phases: Phase 1, opening essential services, hurricane preparation, delivery services, and construction; Phase 2, expanding operations in the Family Islands and existing services; Phase 3, open some non-essential operations. Phase 4, re-opening of restaurants, theaters, and cultural events; and Phase 5, restarting tourism and reopening the borders.²⁹

Following the plan, The Bahamas has started a process of reopening that will conclude in early July. On June 2nd, domestic borders were reopened for regular domestic commercial flights and domestic pleasure craft and yachts. As of June 13th, the country entered Phase 4. Weekend lockdowns were lifted but the 9 p.m. to 5 a.m. curfew Monday to Sunday will continue. On June 8th, beach and park restrictions were removed for the islands of Eleuthera, Harbour Island, Spanish Wells, Exuma, and San Salvador. Beaches and parks on New Providence, Paradise Island, Grand Bahama, and Bimini remain closed. As of June 8th, exercise was permitted from 5 a.m. to 9 p.m., places of worship and all professional services and commercial activity, except recreational, could resume regular operating hours but must be closed by 7 p.m. daily. On June 12th, restaurants reopened with outdoor seating only and ensuring proper physical distancing. Finally, on June 15th hair salons and barbershops reopened. Most importantly, Phase 5 of the plan began on July 1st when tourism reopened to international commercial travel, including commercial airlines, both international and domestic; hotels and vacation rentals, inclusive of Airbnb and HomeAway; and transportation ranging from taxis to jitneys and buses.³⁰

3.2. Economic Stimulus

The policies and programs implemented by the Government are focused mainly on the formal economy. The great majority of the budget allocations benefit registered business and contributing employees, as programs require approved licenses and registrations. Fewer resources are aimed at those that may be most vulnerable, which includes the informal workers and informal small businesses that characterize the poorest quintiles of the population. The programs aimed at supporting the poorest sectors took the form of food assistance which – based on experience in the region – is a suboptimal strategy to cope with increasing unemployment and poverty. Cash transfers through an unemployment program that covers informality could be a more efficient way to distribute help and support poorer quintiles.

²⁷ This report shows how visits and length of stay at different places change compared to a baseline (the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020). Accessed June 20th, 2020 www.google.com/covid19/mobility.

²⁸ Google's COVID-19 Community Mobility Report. Accessed June 20th, 2020 www.google.com/covid19/mobility.

²⁹ Government of The Bahamas. Accessed June 20th 2020 www.bahamas.gov.bs.

³⁰ Ministry of Tourism (2020) Op.cit.

To address the social and economic needs arising from COVID-19, the Government implemented unemployment and social assistance measures for unemployed workers and poor households, financial support for businesses, including, business tax deferrals and credits and business continuity loans and payroll grants. In March, the Government presented a fiscal stimulus response plan estimated in B\$121 million (1% of GDP), part of which B\$100 million was geared towards sustaining employment levels. As the crises evolved and the Government prepared the 2020/2021 budget, the emergency response budget allocation increased.³¹

The multiplicity of actions created by the Government were condensed in the plan “A Resilient Bahamas: A Plan for Restoration”, which is the baseline for the 2020/2021 budget presented in the House Assembly. The plan is composed of increased spending on policy stimulus for businesses, support for unemployed workers, an increase in social programs, and an increase in some health and education programs. The emergency increases due to the COVID-19, but also continuing the recovery from the Hurricane Dorian, add up to B\$811.1 million which represents 6.98% of 2019 GDP. Out of that total, most of it represents public construction projects to stimulate employment (63%). The total increase in social spending to protect employment, protect unemployed workers and poor households is 2.37% of GDP. To put this number in perspective, advanced economies are allocating an average of 11.6% of their GDPs to boost spending, while emerging markets are allocating 3.2%.³² If we take public construction projects as a different type of spending, The Bahamas is allocating fewer resources than the average emerging market, having a GDP per capita closer to advanced economies. Table 2 summarizes the main programs proposed and the respected budgets.³³

Table 2. A Resilient Bahamas Plan. Budget FY2020/2021

Program	B\$ (million)	% GDP*
Total Allocation	811.0	6.98%
Stimulating Economic Growth	565.1	4.86%
Public construction projects	515.1	4.43%
20% Customs duty on all building supplies	-	
Increase in small business funding	50	0.43%
Maintaining employment	150	1.29%
Tax Credit and Tax Deferral Employee Retention Program	120	1.03%
Extension of business support and continuity loan programs	30	0.26%
Expanding Social Support	76	0.65%
Social welfare initiatives.	11	0.09%
Unemployment assistance	48	0.41%
Increase in food assistance	17	0.15%
Public Health & Education	20	0.17%
Expansion of free primary care coverage	18	0.15%
Increase in allocations for scholarships	2	0.02%

* Calculations are based on the estimated 2019 GDP.

Source: PwC (2020)

Benefit for businesses focuses, by design, on registered enterprises and employment. The Tax Credit and Tax Deferral employee Retention Program provides benefits for companies with a minimum of 25 registered

³¹ Government of The Bahamas. Accessed June 20th 2020 www.bahamas.gov.bs.

³² Center for Strategic and International Studies (2020) Breaking down the G20 COVID-19 Fiscal Response. April 30, 2020. Accessed June 19th 2020. www.csis.org/analysis/breaking-down-g20-covid-19-fiscal-response

³³ PwC (2020) The 2020/2021 Budget. A Resilient Bahamas: A Plan for Restoration. June 2020. Accessed June 12th www.pwc.com/bs/en/assets/bahamas-budget-2020.pdf

employees that retain at least 80% of staff count as of February 2020. The program, administered by the Ministry of Finance, seeks to provide businesses with the cash flow to preserve current employment levels and to be used solely to cover payroll requirements. Businesses will be able to withhold their outstanding business license or VAT receipts collected up to B\$200,000 per month for up to three months. Of that amount, B\$100,000 will be in the form of a non-reimbursable tax credit, and the other B\$100,000 will be deferred until January 2021 and paid back over 12 months.³⁴ The Government estimated that 10,000 private sector jobs (8% of the total private employees) will be covered and around 200 companies would benefit from this initiative.³⁵

MSMEs with fewer employees, making less than B\$3 million annually, can access a Business Continuity Loan Program. Facilitated through partnerships with financial institutions, this program provides loans to small businesses that retain 51% of registered employees, ranging from B\$5,000 to B\$300,000 to cover operating costs such as salaries, rent, insurance, utilities, and inventory/supplies. Approved loans will have a 4-month grace period.³⁶ Also, the Central Bank has arranged with domestic banks and credit unions to provide a 3-month deferral against repayments on credit facilities for businesses and households affected by the pandemic.³⁷

The Government has also implemented direct assistance for laid-off workers through the expansion of the unemployment program. The regular unemployment benefit applies to formal employees that have contributed at least 52 weeks and are under 65-years-old. The benefit is 50% of the worker's average weekly insurable income for a maximum period of 13 weeks within a year.³⁸ The Department of Labour has stated that the fund currently stands at B\$1.7 billion, and has enough money to cover its benefit payments.³⁹

As the unemployment benefit is only for formal employees, the Government expanded the coverage through a government funded unemployment assistance for self-employed workers affected by the COVID-19 emergency. The program has two types of benefits. One applies to self-employed workers registered in the National Insurance Board (NIB) and with a valid business license. The second benefit is for self-employed workers in the tourism sector. In this case, while the program is administered by the National Insurance Board, it is outside of the NIB regular benefits and thus does not require the satisfying of contribution conditions. It is targeted to self-employed Bahamians that can prove that they are self-employed in the tourism sector.⁴⁰ The benefit for both types is \$200 per week for a maximum of 8 weeks, which is above the poverty line for a one-person household. Payment is made by bank transfers or checks, and the application is made by email by sending in the scanned document.⁴¹

The latest information from the NIB is for the period from March 23 to May 15th, the peak of the crises. The government funded unemployment program for self-employed persons paid B\$6.2million and benefited 6,105 claims, while the regular unemployment program paid to qualifying beneficiaries B\$28.7 million with a total of 26,185 claims.⁴²

³⁴ McKenzie, Natario (2020). Govt. to forego \$60 mil in revenue over payroll assistance plan. Eyewitness News March 30, 2020. Accessed June 17th 2020 [ew-news.com/govt-to-forego-60-mil-in-revenue-over-payroll-assistance-plan](https://www.ewnews.com/govt-to-forego-60-mil-in-revenue-over-payroll-assistance-plan)

³⁵ McCartney, Paige (2020) Tax deferral program announced to help retain private sector jobs. The Nassau Guardian. March 30, 2020. Accessed June 17th 2020 thenassauguardian.com/2020/03/30/tax-deferral-program-announced-to-help-retain-private-sector-jobs

³⁶ Access Accelerator. Accessed June 17th 2020 www.accessaccelerator.org

³⁷ IMF, Policy Responses to COVID-19. Accessed June 15th 2020. www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#B

³⁸ National Insurance Board. Accessed June 15th 2020. www.nib-bahamas.com/_m1869/Benefits-and-Assistance

³⁹ McKenzie, Natario (2020b). COVID-19 unemployment program extended to July 1. Eyewitness News. March 25, 2020. Accessed June 17th 2020 [ewnews.com/covid-19-unemployment-program-extended-to-july-1](https://www.ewnews.com/covid-19-unemployment-program-extended-to-july-1)

⁴⁰ The document could be one of the following: business license; letter from hotel allowing him/her to work from their property; relevant association membership letter; straw market permit; business receipts which show purchases related to the business; or any other documentation which can show that he/she work in the tourism sector as a self-employed person.

⁴¹ National Insurance Board. Accessed June 15th 2020. www.nib-bahamas.com/UserFiles/HTML/Editor/Government%20Unemployment%20Assistance%20-%20COVID-19.pdf

⁴² National Insurance Board. Accessed June 15th 2020 www.nib-bahamas.com/UserFiles/HTML/Editor/COVID-19Dashboard.pdf

The Government is also providing regular food assistance through the Emergency Food Assistance Program. Food is being distributed to walk-in clients in zones across the country and New Providence through the Ministry of Social Services and NGO Partners. Persons are provided with a B\$50 food voucher and assessed by social assistance providers to be placed on the Temporary Food Assistance Program upon which the client can be placed for up to three years. Meanwhile, the Urban Renewal Department distributes food packages to senior citizens utilizing curbside distribution policies.⁴³ The Government projected an extra 17 million budget for the food distribution program that will reach approximately 80,000 people for 12 weeks.

The Bahamas' social protection strategy for the COVID-19 crisis has almost a contributory logic. Those formal employees that are up to date with their NIB contributions will receive the traditional unemployment benefit, while registered self-employed (that therefore pay taxes), will receive a small cash transfer. Only informal self-employed workers in tourism can obtain a cash transfer if they can prove their activity. This means that formal employees with not enough contributions, self-employed informal workers for other industries (many indirectly linked to tourism), and informal employees are not included among the unemployment beneficiaries. There are approximately 13.5 thousand informal workers. Assuming that potentially 6.1 thousand were able to be among those receiving the government funded unemployment assistance program for self-employed persons, there are still more than half at risk of losing their main source of income.

With an estimated 43,000 poor in The Bahamas and a potential increase in unemployment to almost 30%, a strategy based on food assistance will fall short for the task. The distribution through a walk-in demand and the lack of up to date data and registration of poor households will significantly limit the effectiveness of this policy. Moreover, food assistance leaves households with the need to request other types of benefits to cover day to day expenses. This is not only detrimental for the households, but also for the Government that has to register the citizen again every time a benefit is granted. The poorest decile of the population, according to the 2013 household survey, allocate 24.7% of the income in food and non-alcoholic beverages. Most of the spending is on housing, water, electricity, and gas (44.4%). This indicates that the food service might not be the most adequate strategy to sustain consumption among those families most likely to lose their source of income due to the pandemic.⁴⁴

Benefit distribution could be improved if the economic transfer boost is channeled through a wide unemployment benefit. By allowing every person not registered as currently employed, or any other government programs, to receive the B\$200 benefit for up to 8 weeks, the government will be able to transfer cash directly to those in need at the same time that it increases consumption and reduces the bureaucratic cost of organizing food assistance. Assuming that the program covers all current unemployed workers and all informal workers (minus the 6105 already registered in the self-employed benefit) the estimation would be a total of 28 thousand new beneficiaries. With this back of the envelope calculation, the cost of such a policy would entail a total of 0.47% of the GDP, which is still lower than the 0.65% proposed for expanding social support in the 2020/2021 budget.

4. Fiscal and Economic Impact

In 2019 the budget was significantly affected by the destruction caused by Hurricane Dorian, which resulted in unplanned spending for reconstruction works and social assistance, as well as disruption in revenue collections. The outturn reflected an 8.9% hurricane-related growth in aggregate expenditure for a total of \$1,292.2 million. Despite the decline in business activity, total revenue grew as taxes of goods and services increased by 3.7% and VAT boosted 25.4% due to the shift from stamp tax to VAT on realty transactions.⁴⁵

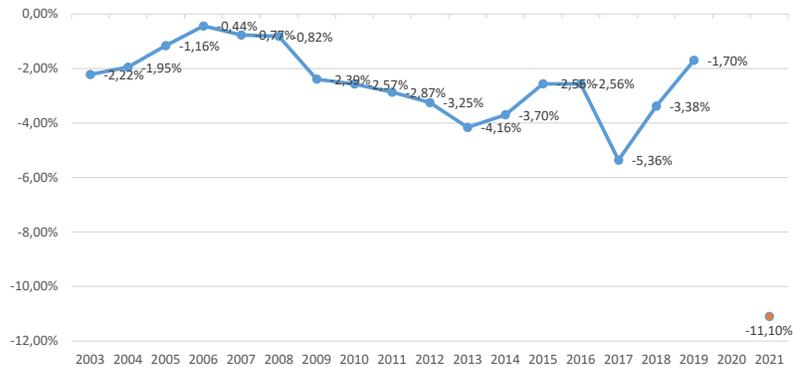
⁴³ Government of The Bahamas. Accessed April 15th 2020 www.bahamas.gov.bs/

⁴⁴ Government of The Bahamas. Department of Statistics www.bahamas.gov.bs/statistics

⁴⁵ Ministry of Finance (2020). Combined Nine Month Fiscal Snapshot and Report on Budgetary Performance FY2019/2020 July-March

The Government presented in June the 2020/2021 budget that went into effect on July 1st. The estimations take into account both the impact of Hurricane Dorian and COVID-19 pandemic. The first noticeable aspect of it is that the government does not plan to increase taxes, thus the projections include a significant rise in the deficit and a reliance on external borrowing. The total revenue for the budget year 2020/2021 is anticipated to be B\$1.7 billion which is down 15.7% compared to the previous fiscal year. Out of this decline in revenue, B\$232 million is estimated to come from Hurricane Dorian and B\$900 million from the COVID-19 crises. With estimated expenditures of B\$3 billion, the result is an expected deficit of B\$1.3 billion (11.1% of GDP) which is the largest in history for the country.⁴⁶

Figure 4. Government Deficit as a percentage of GDP, 2003-2019 and 2021 estimate



Source: Central Bank of The Bahamas; PWC

In terms of the balance of payments, external reserves are expected to contract in 2020, in line with the reduction in tourism sector activity and the remaining part of the essential domestic imports. Estimates from the IMF project a negative balance of 12.7.⁴⁷ Some external sector financing needs are expected to be satisfied by government borrowing. The average domestic fuel import costs are expected to remain moderate, both for the fall in the international price as well as by the reduced consumption. The situation will increase depending on the extension of the COVID-19 international crisis, the speed of the restoration in Abaco and Grand Bahama, and the potential of new major hurricanes in 2020.⁴⁸

The Central Bank expects that reinsurance receipts and contributions from international foundations will offset some of the shortage in revenue and that the remaining budgetary gap will be balanced by domestic and external borrowings. The government has already applied and obtained from the IMF a low-cost emergency loan. The loan amount is approximately US\$252 million and falls within the borrowing authorization approved in the Supplementary “Hurricane Dorian” Budget in February 2020 but will support the COVID-19 response and other budgetary operations.⁴⁹ In addition, The Bahamas has a US\$ 363 million active portfolio of loans⁵⁰ with the IDB and has already obtained US\$100 million to help finance humanitarian and reconstruction efforts in The Bahamas after Hurricane Dorian.⁵¹ The emergency help for reconstruction amounts to approximately 3 % of the GDP.

⁴⁶ PwC (2020). Op.cit.

⁴⁷ International Monetary Fund (2020). World Economic Outlook. June 19, 2020

⁴⁸ Central Bank of The Bahamas (2020) Op.cit.

⁴⁹ Government of The Bahamas. Accessed April 15th 2020 www.bahamas.gov.bs.

⁵⁰ IDB, Accessed June 4th 2020 www.iadb.org/en/countries/bahamas/overview

⁵¹ IDB, Accessed June 4th 2020 www.iadb.org/en/news/hurricane-dorian-idb-provides-100-million-emergency-funding-line-bahamas

4.1. Growth and Inflation

The global economy is likely to experience a historic decline in output in the second quarter of 2020 generating a global recession. J.P. Morgan expects a double-digit contraction in global growth in the first half of the year, with GDP contractions through the second quarter or until the outbreak fades.⁵² Regionally, the Caribbean Development Bank released its estimates indicating that, worldwide, the global growth will be at least 2 percentage points lower than previous estimates, while for the Caribbean region as a whole, the impact could be even more profound.⁵³ In accordance with these projections, ECLAC forecasted a drop in GDP of at least 1.8% and as high as 4% or more for the Caribbean region.⁵⁴

Given the nature of the economy and the dependency on tourism, projections show a more dramatic scenario for The Bahamas. While the IMF estimates an 8.3% fall in GDP,⁵⁵ the Government is projecting a 12% shrink in the country's economy, making it a historic fall.⁵⁶ This is sustained by the initial numbers calculated by the Department of Treasury that indicate that tax revenue for April was about half of that collected in April 2019.⁵⁷ What puts The Bahamas in a very difficult position is the fact that tourism will be one of the last activities to recover, so the shock to the economy might be long, lasting into 2021. This requires the Government to think beyond the short-term emergency and plan the stimulus and social protection policies to be more long-lasting.

Regarding prices, inflation is expected to remain subdued, following the 2.2% of 2018 and the annualized 1.8% of September 2019. Recent inflation was explained mainly by an increase in the VAT in 2018, so as prices already absorbed the tax increase and given the decline in global oil prices, the Central Bank expects inflation to remain around 2%.⁵⁸ In accordance with this projection, the IMF estimates an inflation of 2.4% for 2020.⁵⁹

The Bahamas is facing a difficult fiscal scenario. Firstly, the crisis will force the government to increase public debt as it will be required to increase spending to counteract the economic downturn and the fall in revenues. The already negative deficit will continue to grow threatening fiscal sustainability. In 2019, the National Debt to GDP ratio increased by 0.4% to an estimated 66.8%.⁶⁰ The cost of debt imposes constraints that might affect the expenditures on social policies. However, the Government should prioritize the risk of rising unemployment and poverty. In order to do this, the Government should consider alternatives to public debt. On the one hand, external reserves have grown consistently over the last years. The ratio of reserves to monetary base remained above 90% throughout 2019, even peaking at 113.4% in August.⁶¹ The use of reserves to promote credit and back the increased social spending could be an alternative to debt. On the other hand, the Government could increase some targeted taxes, something that is not present in the 2020/2021 budget. One alternative would be an emergency tax on oil consumption. Taking advantage of the fall in oil prices in 2020, a tax increase will not be reflected in an increase in inflation.

4.2. Unemployment

Tourism, the main direct and indirect private employment sector in The Bahamas, is also the most affected by the COVID-19 crisis. The country was showing steady growth in visitors, mainly through cruise arrivals (Figure 5).

⁵² JP Morgan. Fallout from COVID-19: Global Recession, Zero Interest Rates and Emergency Policy Actions. Accessed on June 14th, 2020 www.jpmorgan.com/global/research/fallout-from-covid19

⁵³ The Caribbean Community (CARICOM) Accessed on June 14th, 2020 caricom.org/caribbean-needs-financial-backing

⁵⁴ CEPAL. América Latina y el Caribe ante la pandemia del COVID-19. Efectos económicos y sociales. Accessed on April 13rd, 2020. No 1.

⁵⁵ International Monetary Fund (2020). Op.cit.

⁵⁶ PwC (2020). Op.cit.

⁵⁷ Rolle, Rashad (2020), 'Nobody Will Go Hungry': Pm'S Promise As He Warns 'Tough Decisions' Ahead, Accessed June 15th 2020 www.tribune242.com/news/2020/may/11/nobody-will-go-hungry-pms-promise-he-warns-tough-d/

⁵⁸ Government of The Bahamas. Accessed April 15th 2020 www.bahamas.gov.bs.

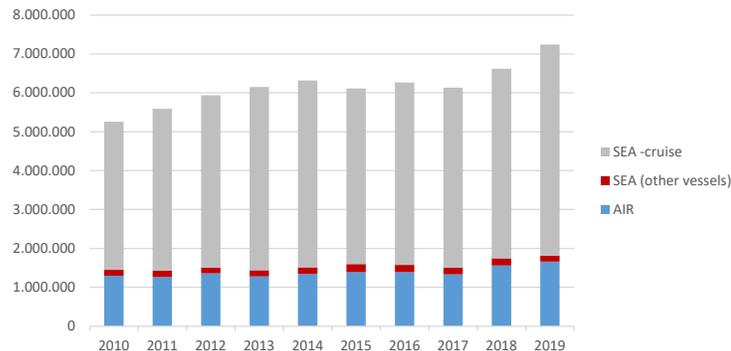
⁵⁹ International Monetary Fund, Accessed June 10th 2020 www.imf.org/en/Countries/BHS.

⁶⁰ Central Bank Of The Bahamas (2020), Op.cit.

⁶¹ Government of The Bahamas. Accessed April 15th 2020 www.bahamas.gov.bs.

According to the Ministry of Tourism, in March 2020 the country's air and sea arrivals already declined 59.7% relative to March 2019. While cruise arrivals fell only by 10%, air arrivals declined by 62.5%.⁶² In March, the average hotel occupancy rate declined significantly to 41.8% from 86.7% for the same period in 2019. The number of room nights sold contracted by 56.3%, while the average daily room rate reduced by 15.5%, resulting in a 59.0% falloff in room revenues. Regarding the vacation rental market, April showed a 59.4% falloff in total room nights sold.⁶³

Figure 5. Inbound tourism by type of arrival, 2010–2019



Source: Central Bank of Bahamas

Current levels of unemployment can be estimated from the unemployment benefits paid to workers by the government. In May, 32,290 workers qualified for an unemployment benefit. It's important to notice that 80% represent formal employees that accessed the benefit based on compliance with NIB requirements. Out of the remaining 20%, some are self-employed workers from the tourism sector (which do not require formal registration) and the rest are self-employed workers with a business license. Therefore, the real number of unemployed could be much higher.

With the current estimate of workers laid off, the level of unemployment rises from 9.8% to 25%, but if informal workers are considered as unemployed due to the curfew restrictions and the sudden stop in tourism, construction, and reduced wholesale, the potential unemployment rate could reach 28%, which is close to the 30% projection mentioned by the Prime Minister.⁶⁴ Unemployment is expected to remain high as the Tourism crisis lingers into 2021, this will naturally affect consumption and poverty in the country.

The Ministry of Tourism launched the Recovery and Reentry Plan to provide a road map for the reopening of The Bahamas' internal and external borders. The Plan focuses on best practices, new protocols, procedures, and guidelines to come into effect upon reopening the activity.⁶⁵ But with almost 80% of stopover visitors originated from the United States the recovery of the sector after the July 1st reopening will be directly affected by the evolution of the crisis in the neighboring country. With flights and cruises taking a halt due to the pandemic, the tourism industry will suffer a heavy hit in 2020. It's difficult to predict when this industry will fully recover, given that it's a luxury service in the context of a global recession. The Cruise industry, in particular, is facing a difficult challenge, as it has been the focus of several coronavirus outburst early this year. The fact that 74% of the tourism in The Bahamas arrives in cruise ships, reflects the importance that this situation has for the local economy.

⁶² Ministry of Tourism & Aviation. Tourism Statistical Review. March 2020 (Revised) Volume 2, Issue 3.

⁶³ Central Bank of Bahamas (2020b). Monthly Economic and Financial Developments (MEFD) April 2020

⁶⁴ Hamilton, Deandrea S (2020) COVID crisis to make 25,000 Bahamians jobless; unemployment expected to soar to 30 percent says Prime Minister. Magnetic Media. Accessed June 16th 2020 magneticmediatv.com/2020/05/covid-crisis-to-make-25000-bahamians-jobless-unemployment-expected-to-soar-to-30-percent-says-prime-minister

⁶⁵ Ministry of Tourism (2020), Op.cit.

The Bahamas has to prepare for a slow recovery, which entails higher than average unemployment. While in the short and medium-term this should be addressed through social protection policies, in the long term Bahamas should start a process of economic diversification to reduce the impact of natural disasters and reduce the dependency on tourism related activities.

5. Social Conditions

The economy, driven by the twin pillars of tourism and financial services, has been generally strong, making Bahamas' GDP per capita similar to developing countries. However, poverty and unemployment remain high. Around 13% of the population lives in poverty, with 25% of these being children between the ages of 5-14. This means at least 43,000 people are living below the poverty line set at \$4,247 per person per year.⁶⁶ There are geographical disparities within the country as well as with vulnerable communities living in sparsely populated islands and among the most historic communities in New Providence.⁶⁷ Table 3 shows that New Providence concentrates the largest proportion of the poor population.

There is an open debate among various stakeholders and sectors of the society on the need to diversify the economy. The reliance on tourism and financial services does not produce enough growth to drive sufficient employment expansion. Unemployment remains close to 10% before the COVID-19 crisis, and youth unemployment was as high as 30% in 2015.⁶⁸

Table 3. Population distribution, by quintile and across regions (percentages)

Region	Overall	Consumption Quintile				
		1	2	3	4	5
New Providence	72.6	73.1	67.3	67.3	78.1	77.6
Grand Bahama	14.4	10.6	16.8	18.9	10.9	15.3
Family Island	13	16.4	16.4	13.8	11	7.1
Total	100	100.1	100.5	100	100	100

Source: 2013 Household Expenditure Survey

In terms of work distribution of the poor population, 60% of the first quintile work in construction, wholesale, and hotels and restaurants, compared to only 33% of the richest quintile. These three sectors are the most affected by the crises. Among poor households, 62.3% of household heads are employed. These household heads are also more likely to be working as employees in the private sector (73.5% versus 53.8%), while non-poor household heads were more likely to be working as government employees (23.5% versus 8.9%) and self-employed workers (22.4% versus 17.0%).⁶⁹

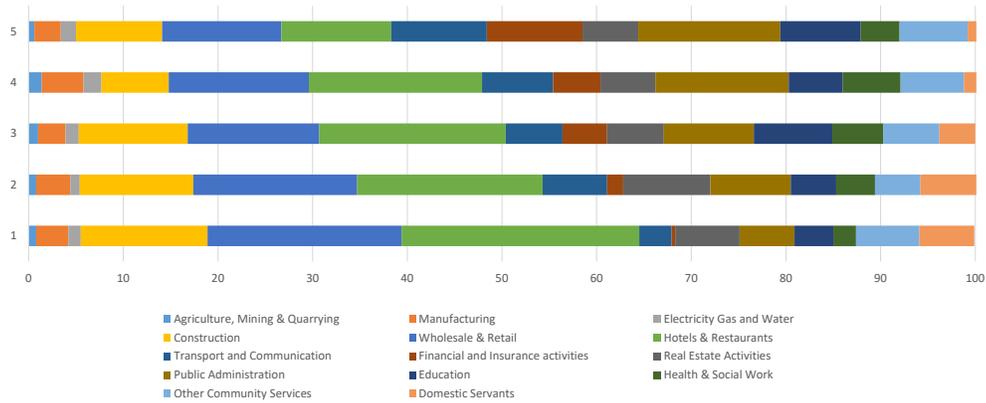
⁶⁶ Government of The Bahamas. Department of Statistics www.bahamas.gov.bs/statistics

⁶⁷ Government of The Bahamas (2018) The Bahamas Voluntary National Review on the Sustainable Development Goals to the High Level Political Forum of the United Nations Economic and Social Council. July 2018.

⁶⁸ Government of The Bahamas. Department of Statistics www.bahamas.gov.bs/statistics

⁶⁹ Department of Statistics (2013) Household Expenditure Survey 2013.

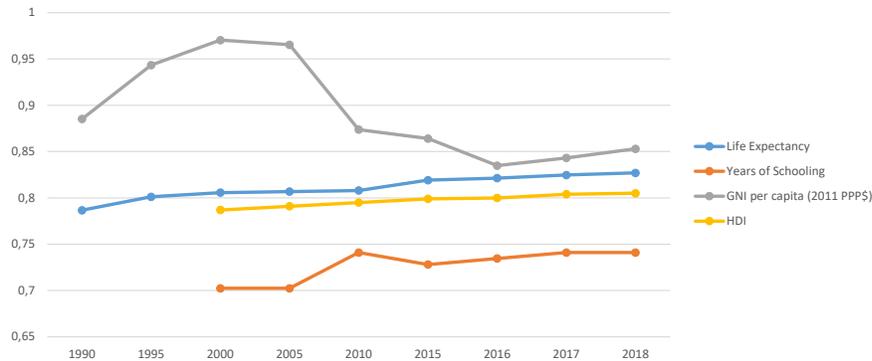
Figure 6. Distribution of employed population by quintile and employment sector



Source: 2013 Household Expenditure Survey

Nevertheless, the average quality of life is high, as evidenced by the Human Development Index (HDI) score that rose from levels of 0.778 in 1990 to 0.805 in 2018. This value of HDI puts The Bahamas in the very high human development category, positioning it at 60 out of 189 countries and territories. Bahamas’ 2018 HDI of 0.805 is below the average of 0.892 for countries in the very high human development group and above the average of 0.759 for countries in Latin America and the Caribbean.⁷⁰ Figure 6 shows the trends in HDI and some of the main components.

Figure 7. Trends in Bahamas’ HDI component indices 1990–2018



Source: UNDP. Human Development Report 2019

The Bahamas embraced the 2030 Agenda for Sustainable Development in The National Development Plan Vision 2040. The Sustainable Development goals aim at: (a) ensuring inclusive and sustainable economic growth with quality job creation and decent work for all, (b) ensuring social inclusion to facilitate access to quality education and health care, and (c) promoting safe and resilient communities and environmental protection. One key barrier identified by UNDP and IDB analysis for the achievement of these goals is public institutions, which require strengthening, increased accountability, transparency, and effectiveness.⁷¹

A clear example of the Government’s limitation to implement modern and efficient social policies is the RISE (Renewing, Inspiring, Sustaining, and Empowering) Program. In 2012, the Government together with the IDB

⁷⁰ UNDP (2019) Human Development Report 2019. Inequalities in Human Development in the 21st Century. Briefing note for countries on the 2019 Human Development Report. Bahamas hdr.undp.org/sites/all/themes/hdr_theme/country-notes/BHS.pdf.

⁷¹ Government of The Bahamas (2018) Op.cit; IDB (2018) Country Program Evaluation. Bahamas 2010-2017. Office of Evaluation and Oversight (OVE)

commenced a social protection reform program to modernize the delivery of social protection in the country. RISE was a Conditional Cash Transfer (CCT) aimed at tackling poverty, particularly among children, and improving educational and health outcomes amongst poor households. But although the program had the necessary technical organization, the IDB evaluated that it lacked practical thinking about what was possible in The Bahamas given the political economy issues surrounding the necessary challenging reforms. Less than 50% of the targeted 12,000 families were enrolled in it, and in 2017 the project was closed.⁷² Since then, social programs in The Bahamas remain inadequate without new technical and political strategies to reach 12.5% of poor living across the islands.

The NIB, the Ministry of Social Services and Urban Development, and the Ministry of Labour oversee the country's social protection system and the provision of social protection mechanisms. The NIB provides ten cash benefits and four cash assistance. The benefits are paid for Sickness, Maternity, Funeral, Retirement, Invalidity, Survivorship, Unemployment, Injury, Disablement, and Death. The assistances are the Old Age Non-Contributory Pension, Invalidity, Survivors' and Sickness. Benefits are awarded to insured persons who meet prescribed contribution conditions, while assistance is awarded to national residents who do not qualify for a particular benefit, after a means evaluation.⁷³

The Ministry of Social Services and Urban Development is responsible for administering noncontributory benefits and targeted subsidies designed to ensure access to health, education, housing or public utilities, and family care and services. The non-contributory benefits include food allowances (monthly food coupons), financial assistance (for clothing and household and personal items), disability allowances, and the national school lunch program among other smaller benefits.⁷⁴ The expenditures for the Department of Social Services in the FY2018/2019 was B\$34.4 million and is projected to rise 42% to \$49 million in the FY2020/2021 according to the proposed budget.⁷⁵

Only a small number of households have ever applied for assistance from any one of the social programs. The two most common programs, in terms of the percentage of households that have ever applied to them, were Food Assistance (5.3%) and Unemployment Benefit (4.6%). For all programs, the main reason for which households did not apply was that they did not qualify for the program. At the national level, 32.1% of households reported that they had received at least one social program.⁷⁶

As mentioned, when analyzing current social policies for the pandemic, the structure of social protection policies in The Bahamas faces two main problems. Firstly, that the contributory logic behind the largest programs excludes informal workers. Non-contributory policies are targeted at the poorest citizens and take the form of very specific subsidies for goods and services. When the country attempted to create a modern and comprehensive CCT program it was closed due to outstanding inefficiencies in its implementation. This leads to the second problem, which is the lack of updated records and data on household coverage and income. The last household survey was carried out in 2013, so without current information, it is impossible to plan a policy response to poverty and inequality. Thus, there is a pressing need to improve social statistics and registers to target help and subsidize appropriately, avoiding problems like the once faced by the RISE program.

6. Conclusions

Due to the COVID-19 pandemic, The Bahamas is facing greater danger in the economy than in the health scenario. While the COVID-19 cases and death toll seem under control, in large part due to the fast actions taken

⁷² IDB (2018). Op.cit.

⁷³ National Insurance Board. Accessed June 15th 2020. www.nib-bahamas.com/_m1869/Benefits-and-Assistance.

⁷⁴ Government of The Bahamas (2018). Op.cit.

⁷⁵ The Government of The Bahamas. The National Budget 2020/2021. Accessed June 10th 2020 www.bahamasbudget.gov.bs.

⁷⁶ Department of Statistics (2013) Household Expenditure Survey 2013.

by the Government, the impact on tourism is threatening the country with increasing unemployment and rising poverty. With an economy heavily dependent on tourism, the shutdown of international travel has increased unemployment to historic levels. The Bahamas must look at the long term diversification of its economy to avoid crises based on tourism like the current one. The United Nations, through initiatives such as the Support to Small Island Developing States (SIDS), can collaborate to develop specific strategies to support the growth of other economic sectors.

Following the crisis generated by Hurricane Dorian in 2019, the COVID-19 will affect public finances even further. The 2020/2021 budget already projects a historic deficit, which will result in an increase in public debt and a negative balance of payments. The financial analysis recommends that the Government should consider the use of external reserves and emergency increases in taxes (e.g. gasoline consumption) to reduce the deficit and allow for the implementation of a robust social spending package. The costs that may derive from the fiscal deficit and debt increase should not constrain the emergency increases in social spending. The Bahamas has already requested emergency loans from IMF and IDB and should pursue the support of multilateral institutions through the long recovery period ahead.

The Government designed a range of stimulus programs to support affected businesses and workers. However, this strategy puts a lot of emphasis on registered activities and employees. Although labor informality is lower than the regional average, estimates put the informal economy around 20 to 30% of the total GDP.⁷⁷ Assistance through goods and services as well as direct subsidies might fall short in helping those sectors of the population most affected by the crises. The document proposes a shift from food assistance to a wider unemployment benefit that can help maintain consumption and facilitate reducing the number of programs the Government is currently operating. This last point is especially important due to the lack of up to date register and statistics. The UNDP could play a significant role in collaborating with the improvement of national statistics and their implication for social policy planning.

With the beginning of phase 5 of the reopening and the reactivation of international tourism, The Bahamas will have a better sense of the behavior of tourism for the coming months. The reactivation will also expose the lasting effects on unemployment and poverty, as well as the effectiveness of the government's response. The UNDP, as the development agency of the United Nations, will continue to collaborate on policymaking design and support member states in their pursuit of solutions to the challenges ahead.

⁷⁷ Peters, Amos (2017), Op.cit.

Promoting Socio-Economic recovery in Paraguay Report – Economic Reactivation Strategies during COVID-19

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Abstract

This document is part of UNDP Paraguay's knowledge management actions, within the framework of the response for socio-economic recovery during COVID-19.

It encompasses an analysis of the Latin American context and the Paraguayan situation, before and after the pandemic. The report focuses on the analysis of labor and vulnerable communities, in order to offer proposals that shall allow for the advancement of 2030 Agenda's commitments.

It seeks to encourage different sectors to reflect and analyze collectively, within the socio-economic area so as to move towards an integral, participative and, above all, inclusive response, without leaving anyone behind.

Introduction

The United Nations Paraguayan Program began its Country Program for the 2020–2025 period in alignment with National Policies, Plans and Programs. This includes the National Development Plan (NPD) Paraguay 2030, sectoral programs, as well as the Sustainable Development Goals (SDGs) proposed within the 2030 Agenda.

Just as the period was beginning, the first COVID-19 cases in Paraguay were confirmed in March. This led the National Government to take immediate public health measures – and subsequently, economic and financial measures – that would allow the country to face the imminent threat.

Paraguay has stood out in the last few years for its good performance in the macro-economic sphere, as it has managed to maintain favorable indicators and stability. However, inequality levels remain high, with the Gini coefficient at 4.8¹. UNDP Paraguay's Country Program contemplates work with vulnerable communities such as people living in poverty, unemployed individuals and informal workers. Now, the Country Program has been adjusted to concentrate its efforts into offering a response to the socio-economic impact COVID-19 has caused on these groups that were in a previously disadvantaged situation.

Before the start of the pandemic, UNDP in Paraguay had set itself the objective to prioritize measures to improve equality, such as promoting poverty eradication and increasing equal opportunity sustainably. This objective requires doubling down on our commitments, taking into account the new context. Preliminary analyses with regards to possible social, economic and environmental impacts have demonstrated that the pre-existing problems related to inequality and access to opportunities could worsen and require quick, coordinated and fundamentally joint responses between actors, key economic sectors and institutions.

This report is part of the knowledge management actions and seeks to encourage different sectors to reflect and analyze collectively, so as to move towards an integral, participative and, above all, inclusive response, without leaving anyone behind.

It starts with a context analysis of Latin America's economic and social situation, as well as the political context that allows for a better understanding of the scenario in the broader sense. In the following chapters, the Paraguayan situation prior to the pandemic is described, so as to advance on the perspectives for 2020, which includes a first reflection regarding the different sectors who have been most affected. Likewise, a special section is dedicated to the pandemic's impact on jobs, the risk situations per economic activity, by gender, and other data that contribute to the analysis.

After presenting the findings and perspectives of key actors, the document advances towards an initial analysis of COVID-19's impact on the country's middle class as well vulnerable sectors. What it implies on job loss, income decrease for families and businesses. Next, it includes a chapter on the National Government's Response Framework for COVID-19, the measures it has taken including areas such as fiscal, monetary, support measures for SMEs as well as health and social measures.

Besides the bibliographic work, this document's structuring includes interviews to leading business representatives from different sectors: commercial, entrepreneurial, industrial, creative, agricultural, automobile, among others; who share their perception with regards to the measures adopted by the National Government. This information contributes to the analysis and above all, the search for sustainable and inclusive solutions. This report is the first of several analytical documents that the UNDP Paraguay office will be sharing. The context is even more complex than the one foreseen initially within the 2020-2025 UNDP Country Program. It challenges us and demands higher levels of coordination and strategic alliances, it calls upon us to build

¹ UNDP Country Program Document 2020–2025.

innovative solutions in a participative way, which seek to achieve a triple impact, socially, economically and environmentally.

Today more than ever, we find ourselves before an opportunity and the need to build a more inclusive and equal Paraguay. From 2015, the Sustainable Development Goals (SDGs) constitute a common Agenda for development; 2020 arrived with greater difficulties, but the objective remains the same: “Leave no one behind”.

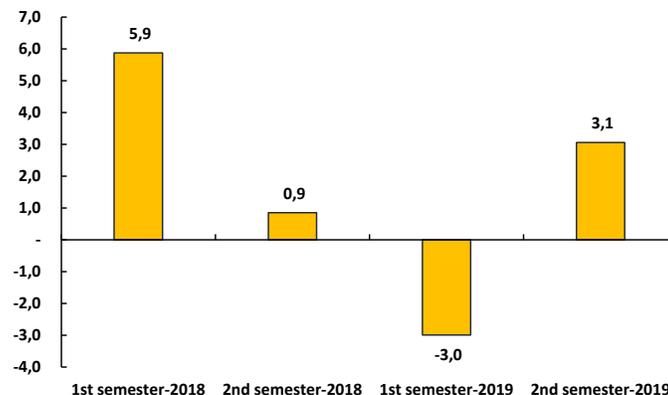
1. The Paraguayan Context pre-COVID-19

Uncertainty without growth

During 2019, Paraguay was impacted by both internal and external shocks. It was a year marked by political uncertainty due to a possible impeachment, a tax reform within the context of political weakness and a slowdown of the internal aggregate demand. As for the international context, commercial tension between China and the United States affected the price of raw material in their global commercial flow, and caused exchange rate depreciations at the regional level.

The combination of these elements led the Gross Domestic Product (GDP), according to data from the Paraguayan Central Bank (BCP), to maintain the same level registered for 2018. After a recession in the first semester, during which the GDP fell 3.0%, the government implemented a public works plan starting August², with which it sought to support economic activity. During the second semester, GDP fell 3.1%. At the end of 2019, growth was registered as 0.0%.

Graph 1. Gross Domestic Product semester growth rate (Percentage)



Source: MF Economía with data from the BCP

Meanwhile, monetary policy had a restrictive bias in its actions, despite a decrease in economic activity, during the year's first semester, and inflation (2.8%) below the central value of the established objective range (4% \pm 2 percentage points).

Sectoral economic behavior

With regards to economic sectors, data from the Paraguayan Central Bank (BCP) show that those that exhibited the greatest inter-annual falls in their production were electricity and water (11.2%); agriculture (4.9%); manufacturing (1.0%) and trade (0.4%). Particularly, energy generation was affected by the low flow observed in the Parana River.

² The amount destined to public investment rose to USD 1.543 billion. However, only USD 1.305 billion were spent, with which the fiscal deficit remained at 2.8% of GDP at the end of 2019.

Meanwhile, the agricultural sector was affected by the international price decrease in soy, associated both to the commercial tensions between China and the US, as well as the outbreak of African swine flu in China. The Asian giant is the biggest buyer of the aforementioned product in the world, which is destined to feed its animals.

However, climatic factors also intervened (slight droughts and floods) that impacted productivity levels for many crops, especially summer crops. In fact, the Paraguayan Chamber of Oilseeds and Cereals (CAPPRO) highlights that the harvest area yield decreased from 2.90 tons/ha (2018) to 2.37 tons/ha (2019), so that it went from the 9.81 million tons harvested in 2018, to 8.84 million in 2019.

With regards to country family farming, price uncertainty for sesame and mandioc (a local type cassava) has decreased incentives, which is why no crop expansion or increase in productivity levels has been observed. These conditions hindered any income improvements in this sector.

Regarding Paraguayan industry, it is mostly concentrated in agro-industry, meat-processing plants, auto parts, textiles and pharmaceutical products. The last three areas are part of the maquila industry, and also, some receive additional fiscal incentives.

Concerning agro-industry, during 2019, data from the Paraguayan Chamber of Goods, Services and Alike Providers (CAPPRO), recognize an inter-annual decline of 7.7% in oilseed processing, where the milling capacity used decreased to 80%. In addition, the meat industry registered a 5.9% decrease in slaughtering.

Industry under the maquila system, according to statistics from the Ministry of Industry and Trade (MIC) registered for 2019, the approval of 33 projects, with a USD 54.7 million investment, and the estimated creation of 1,723 job posts, which is below what was registered for the previous year. The number of approved projects was less (31), and the estimated investment (USD 86.0 million) and job post creation (1,940), were greater.

Within the framework of the Fiscal Incentives Law, 76 industrial projects were approved, which is expected to create 3,871 jobs, with an investment of about USD 318.6 million. In 2018, 71 projects were approved, which, with USD 163.3 million, would create 2,052 job posts.

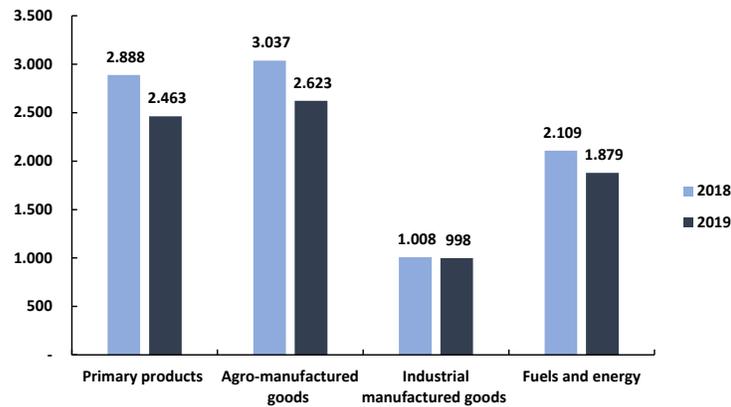
It must be noted that most of these investment plans corresponded to extensions to the original projects; in other words, they did not imply the establishment of a new business. In addition, it is important to note that there are maquila system projects that receive fiscal incentives this way.

The retail sector experimented the effects of the exchange rate run that has been going on in Argentina since 2018. Thus, the number of tourists coming from that country decreased from 1.6 million people per year to 1.2 million, which impacted the retail sales volume, particularly in the larger shops and clothing shops.

Likewise, the aforementioned decrease in individual income, reduced sales in industries such as the automobile industry, which fell, on average, 10.2%, as well as fuel (3.6%). The sale of construction material would have followed a similar trajectory had it not been for the public works plan, which altered the decreasing pattern during the second semester of the year.

With regards to foreign trade, during 2019, total export reduced by 11.9%, reaching USD 7.962 billion. It must be noted that the main sources of income for the country, which come from energy royalties and agricultural products, were affected. In fact, those related to soy, which represents 64.0% of primary products, decreased 28.5%. A similar pattern was observed with soy oil and flour, which reduced by 17.2% and 27.0%, respectively. Concerning energy, its export decreased by 10.9%, mainly due to the drought.

Graph 2. Exports by processing levels (Millions of USD)



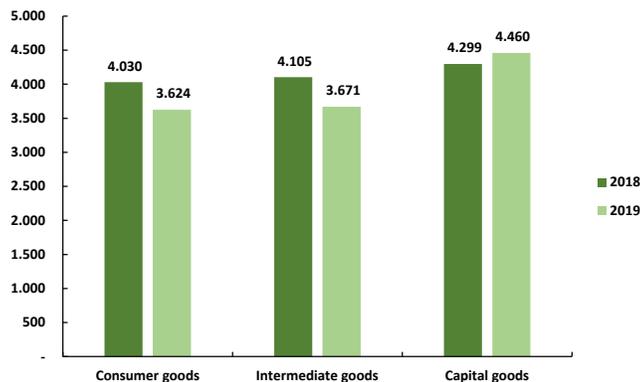
Source: MF Economía with data from the BCP

The country’s exporting dynamic was also affected by the loss of competitiveness, in comparison to neighboring countries. In effect, in 2019, while the real exchange rate appreciated in Brazil by 1.9%, in Paraguay, it did by 3.0%. While there is no data from Argentina, given the exchange rate’s multiplicity, in nominal terms, its official exchange rate parity was depreciated by 71.4% in 2018, which, combined with the inflation registered in 2019 (53.8%), it is pointing towards a real depreciation of its currency, which allowed them to gain relative competitiveness.

Argentina becoming cheaper in comparison with Paraguay, represented an additional issue for the country, which was the smuggling of goods, given the porosity of the borders. This phenomenon, in an environment where the commercial sector had experimented a decrease in sales, produced greater challenges for overcoming the economic context.

This minor source of external income, together with a decrease in productive activity, caused a fall in imports of 5.5%, closing the year with USD 11.755 billion. The purchase of intermediate goods suffered the most, falling back by 10.6%, followed by consumer goods (10.1%), while capital goods increased by 3.8%.

Graph 3. Imports by types of goods (Millions of USD)



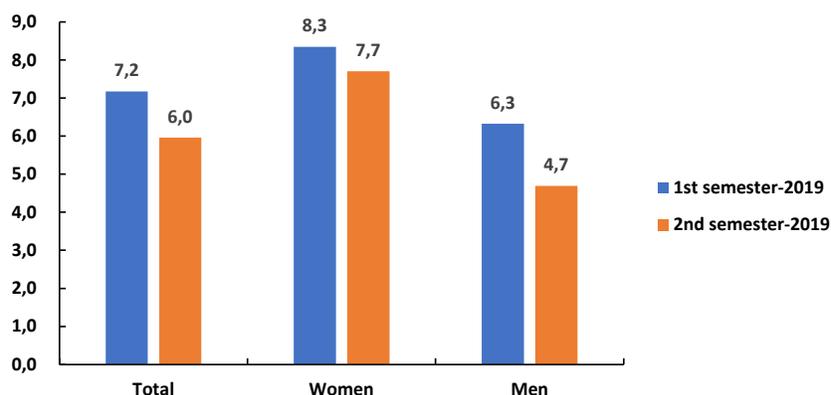
Source: MF Economía with data from the BCP

In short, economically, 2019 could be considered a regular year internally, but aggravated by the regional context conditions, which ended up limiting the economy’s growth as a whole.

Socio-economic context

These results were also reflected in the local market, with an average unemployment rate of 7.2% for the first semester of 2019, and 6.0% for the second semester. It must be noted that the unemployment rate for women was superior to the one registered for men.

Graph 4. Unemployment rate (Percentage)



Source: MF Economía with data from the General Office of Statistics, Surveys and Censuses

As is expected during a recession, the country experienced a decrease in individual income. In fact, a decrease from an average of 2,495 thousands Gs (2018) to 2,462 thousands Gs (2019) was observed, which implied a decrease of 4.0% in real salary.

Notwithstanding, the population's segment that was most affected was that of the independent workers, who registered a 7.0% fall in their income, placing it at an average of Gs. 2,179 thousands for 2019. In real terms, salary decreased by 9.5% for this group.

Despite these decreases in income, monetary poverty continued its decreasing pattern, going from 24.2% in 2018 to 23.8% in 2019, which represents 1.6 million people below the poverty line.

Regarding geographic distribution, rural poverty affects 33.4% of the population, while at urban zones, it affects 17.5%. Two phenomena can be observed in the latter differentiation, which will be described as follows. The first is that traditionally, cities represented better life conditions, as well as a varied offer of job opportunities, which have been powerful factors of attraction and social differentiation, and consequently, the exit door from poverty.

Nonetheless, cities seem not to be able to remove people from poverty as they did before, or at least with the same magnitude as they did in previous decades. Second, and very associated to the previously mentioned phenomenon, is that for the first time in a very long time, extreme poverty is decreasing at the national scale, especially in rural areas; but is increasing, although slightly, in urban areas.

Rural poverty presents a hard and stable nucleus, with particular socio-demographic statistics and with an economic structure that is less and less dependent of agricultural activities. About 820,000 people live in poverty conditions in rural areas. Income from social programs and remittances are increasingly maintaining a rural population in a true and inexorable ageing and, in some regions, emptying process.

Physical investments, especially in communication infrastructure, have represented an improvement in conditions to access services and, above all, employment in different urban centers, seizing the growth of a

number of cities, currently qualified as intermediate, which finally activated dynamism from urban to rural areas, but without having the latter optimize their traditional agricultural productivity schemes. The productive and demographic crisis of the rural family agricultural sector, generally reflects high levels of poverty, and more often than not, expel its young population, despite ongoing government programs to support them.

These results reveal the fragility, precariousness and informality of the urban employment structure, as well as the regional context in border cities with clear trading tendencies. Scarce economic impulse, added to the low level of efficiency of public policies oriented towards containing and reducing poverty, were not enough to reduce social inequality.

During the last two decades, economic growth, expansion and diversification resulted in a significant poverty decrease as well as a halving of extreme poverty. Concerning informality, it remained at high levels, even as a number of formal jobs were created as a result of economic growth. In effect, improvements in socio-economic conditions were not accompanied with greater job formality, particularly in segments with lower income: youth and women.

Poverty analysis through income must be complemented with approaches that go beyond the economic view and contemplate other social aspects. Multidisciplinary approaches also allow for the visualization of other deficiencies that affect people and homes beyond the income received and therefore incorporate a rights based approach. Thus, multi-dimensional poverty measurement can turn into a more precise and adjusted source of information³ for public policy creation.

The Multi-dimensional Poverty Index is a useful tool that is complementary to monetary poverty indicator, created by the DGEEC for 2017. This Index allows for a better understanding of the deficient situation in households, especially regarding access to social security.

2. Socio-economic diagnosis of COVID-19's impact

Socio-economic impact of measures taken against COVID-19

Economic activity was expected to recover in 2020, after a year of economic stagnation and no growth. The BCP estimated an economic growth of approximately 4.1% for 2020, explained, mostly, by the agricultural sector's performance. In fact, Paraguay had a record soy harvest of about 11.5 million tons, which would generate spillover effects in other economic sectors.

Nevertheless, the COVID-19 pandemic's irruption affected this preliminary forecast. The Paraguayan health system's vulnerability, which at the beginning of the outbreak in the country only counted with 700 intensive care unit beds, of which a significant percentage were occupied, led the National Government to apply, initially, preventive isolation, and later, to decree the quarantine and border closure.

Paraguay was one of the few countries internationally recognized for its good performance in combatting the contagium curve during the pandemic.⁴ Once the mandatory quarantine, and later the border closure, were decreed, the Ministry of Public Health and Social Wellbeing (MSPyBS) emphasized health vigilance in migratory posts, with significantly more thorough controls on conational entries. Suspicious cases were mandatorily notified and travellers self-reported to health authorities. In addition, isolation shelters were established in military bases.

³ The General Office of Statistics, Surveys and Censuses is currently adjusting a methodology for multi-dimensional poverty measurement through its Permanent Household Survey, in order to complement monetary poverty measurement. Studied dimensions include: education, health and environment, housing and services, as well as work and social security.

⁴ www.imf.org/en/News/Articles/2020/07/01/na0701220-paraguay-beats-the-pandemic-and-seeks-new-growth

The MSPyBS prepared a geolocalized app to control and monitor patients, send notifications and protocol updates.

As for testing, in the beginning of the quarantine,⁵ Paraguay had the capacity to carry out 30 daily tests. Currently, around 1,800⁶ tests are carried out daily. This increase is due to the inclusion of more laboratories, both public and private, as well as new testing sites.

As for health posts, such as the National Institute for Respiratory and Environmental Diseases (INERAM), the Alberdi District Hospital, the Itauguá National Hospital, the Institute for Tropical Medicine, among others, were reconditioned to respond to the pandemic. With this readaptation, the capacity for hospitalization for COVID-19 rose to 1,200 beds. Besides, two contingency hospitals with 100 and 102 beds for patients respectively, and 36 for medical staff, were created. According to data from the MSPyBS, in two months, 73 Intensive Care Units were added. In addition, 2,389 medical professionals were incorporated in 72 health posts.

Additionally, besides private donations, medication, as well as medical supplies and equipment were purchased. In total, more than USD 7,000,000 was distributed in personal protection equipment. The expenses in detail are detailed below:

- » 4,545,050 surgical masks
- » 666,710 surgical caps
- » 286,755 surgical gowns
- » 455,750 shoe covers
- » 14,915,287 examination gloves
- » 1,665,431 surgical gloves
- » 10,308 protection goggles
- » 15,537 face shields
- » 358,945 N95 facemasks or similar
- » 19,663 isolation gowns

The Institute for Social Prevision (IPS) also took measures against a possible increase in COVID-19 cases and established that the Ingavi Hospital become the attention center for coronavirus patients. It also purchased 2,500 bioprotection kits for medical staff.

Paraguay has 2,980 confirmed cases as of July 14, 2020, with 1,662 active cases and 1,293 recovered patients. Deaths due to the disease amount to 25 people.

It must be noted that social distancing has a high economic cost, which is seen in the losses experimented by businesses due to partial or definite closures; in people, through a decline in their income or job loss, and in the government due to a decrease in tax revenues.

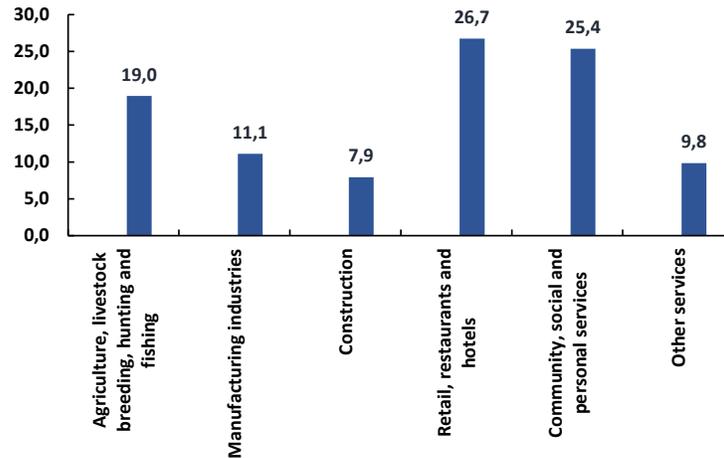
Its economic impact is observed in different sectors and subsequent sub-sectors. A number of value chains have come to a complete halt, while others have managed to maintain the same level of activity. For instance, restaurants, bars and other similar businesses, have not been able to work regularly, which is why income for both businesses and people income has substantially decreased.

⁵ The coronavirus pandemic quarantine in Paraguay, whose official name is Aislamiento Preventivo General (General Preventive Isolation), was declared at the national level by decision of the National Government, in a press conference led by President Mario Abdo Benítez on Tuesday, March 10, 2020 at about 6 PM, –three days after the first coronavirus case was reported–. The National Government established sanitary measures (partial quarantine) with Resolution S.G.Nº90/20208, with the purpose of avoiding spreading the virus –assuming a possible community circulation from the second patient who came from Argentina by land–. This measure, which at first lasted for 15 days, included the suspension of classes at every level, the suspension and restriction of all activities that imply the gathering of people, such as public and private events.

⁶ Last date 14/07/2020

To date, BCP forecasts that GDP will contract by 2.5%⁷ this year, with the services sector being the most affected by the implemented social distancing measures. In effect, it projects strong declines in restaurant and hotel activities (80.0%); home services (8.0%), transportation (7.0%) and business services (6.1%). Particularly, this sector is the biggest employer in the country, concentrating 61.9% of the employed population during 2019's fourth quarter.

Graph 5. Employed population by economic sector, 2019's 4th quarter (Percentage)



Source: MF Economía with data from the General Office of Statistics, Surveys and Censuses

It is important to note that, according to data from the BCP's input-output matrix, the service sector has a multiplying factor on the product of 1.61, that is, for each guarani increase in demand for services, the total effect on the product is of Gs 1.61.

In this regard, businesses and people observed that borrowing costs increased and financial conditions hardened, since banks estimate that the latter could not pay their loans back in time. However, as is known, a decrease in credit would magnify the slowdown, resulting from supply shock (an interruption of the value chain; business closures) and demand shock (income decrease). Also, no direct incentives are observed from businesses or people to obtain credit due to uncertainty over the date in which economic activities would relatively normalize.

Thus, in order to lessen the fall in economic activity, and with it, job loss, monetary, financial and fiscal stimuli are needed. The first two are determinant in order to avoid interrupting credit in the economy. Fiscal stimulus is given, initially, as tax relief for businesses and people. Nonetheless, it is also used to carry out transfers to more vulnerable sectors in the population, who mainly hold informal jobs; public services payments are postponed; food is provided, among others.

Nevertheless, the current scenario becomes increasingly more difficult, since businesses could reduce their spending and short-term investments, which would exacerbate business closures, job loss, and would hinder the potential growth of products.

⁷ This work was carried out with the Paraguayan Central Bank's (BCP) revision of GDP on April 28, 2020. On July 28, 2020, the BCP readjusted its forecast downwards to -3.5%.

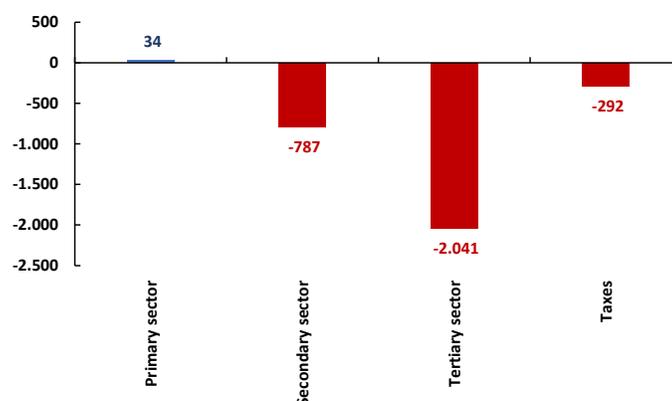
Economic loss and its impact on employment

Based on the BCP's growth premises, for both scenarios (pre-pandemic and pandemic), the monetary values the country will stop receiving from goods and services production as a result of the COVID-19⁸ pandemic were projected. In this regard, it is important to note that estimates must be used with caution, since, as these premises vary, so will the results.

In total, the country is estimated to lose USD 3.087 billion. The only profitable sector will be the agricultural sector, which, as mentioned above, had a record harvest this year⁹. The greatest losses will be given at the restaurant and hotel sector (USD 838 million); manufacturing (USD 468 million); home services (USD 313 million) and commerce (USD 298 million), all of them, with the exception of manufacturing, belonging to the services sector.

In addition, the productive activities with less projected losses include forestry, fishing and mining (USD 5 million), telecommunications (USD 7 million) and livestock breeding (USD 11 million). The latter has faced climatic issues this year, since the drought has caused producers to allocate a greater quantity of animals to slaughter, given the lack of adequate pastures for feeding.¹⁰

Graph 6. Economic profit and/or loss resulting from the COVID-19 pandemic (Nominal USD)



Source: MF Economía with data from the Paraguayan Central Bank.
 (*) The positive sign indicates profit, while the negative sign indicates loss.

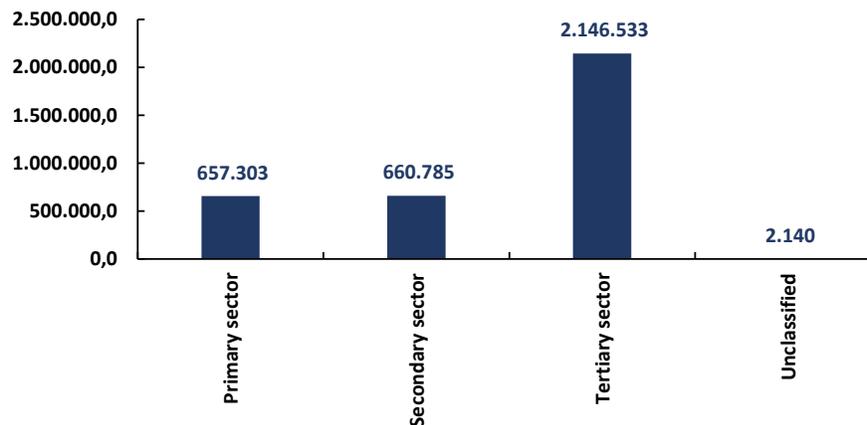
Additionally, tax revenues would decrease by USD 292 million, coming from productive activities.

It must be noted that, for 2019's fourth quarter, the economy's tertiary sector employed 2,146,533 people, followed by the secondary sector that employs 660,785 people.

⁸ For more on the methodology, see Annex 1.

⁹ Although the international price for soy has shown great variability, due, in great measure, to commercial tensions between China and the US and the swine flu outbreak in China, demand decreases due to economic closures during the pandemic results in additional downwards pressure.

¹⁰ An estimate for all economic sectors can be seen in Annex 2.

Graph 7. Number of people employed by economic sector

Source: MF Economía with data from the General Office of Statistics, Surveys and Censuses.

Concerning fiscal revenue, if the tax structure is taken as a reference with regards to GDP, it is estimated that profit loss could oscillate between 1.4% and 3.3%. Particularly, the Ministry of Finance forecasts that there would be a 2.3% decrease, which falls within the aforementioned range.

Loss expressed in terms of product can also be observed in the labor market. As was previously mentioned, those employed in the secondary and tertiary sectors are the most vulnerable.

In this regard, the Ministry of Labor, Employment and Social Security's (MTESS) numbers reflect that approximately 2.2 million workers are at high risk of being affected (63% of workers)¹¹. The sectors that are most at risk of job loss or facing decreases in working hours are: manufacturing industries, shops, restaurants and hotels; community, social and personal services.

Significant differences can be observed by gender. In effect, about 78% of women in the workforce are at high risk of losing their jobs or suffering any sort of modification; meanwhile, for men, the percentage is 52%. This situation is explained, in great measure, by women's high participation in the tertiary sector. In fact, women have limited participation in sectors such as construction, transportation, storage and telecommunications, and manufacturing industries.

Table 1. Workers at risk by economic branch and gender. 2019

Economic activity branch	Risk level	Total		Gender			
				Men		Women	
		Quantity	%	Quantity	%	Quantity	%
Electricity, gas and water	Low	14,346	0.4%	12,146	0.6%	2,200	0.2%
Agriculture, livestock breeding, hunting and fishing	Medium Low	657,303	19.0%	463,188	22.9%	194,115	13.5%
Construction	Medium	275,065	7.9%	271,580	13.4%	3,485	0.2%
Finance, insurance, real estate	Medium	218,327	6.3%	121,062	6.0%	97,265	6.8%
Transportation, storage and communications	Medium High	108,698	3.1%	95,908	4.7%	12,790	0.9%
Manufacturing industries	High	385,720	11.1%	265,506	13.1%	120,214	8.4%
Retail, restaurants and hotels	High	926,133	26.7%	484,278	23.9%	441,855	30.7%

¹¹ Specifically, risk refers to situations in which workers face a decrease in working hours, salary cuts and dismissals. These situations happen as a consequence of isolation measures taken by governments in order to reduce contagium expansion. In order to carry out evaluations, economic and financial data are taken in real time. Next, three types of indexes are selected so as to examine data from economic and financial sources. For more information, visit Technical Annex 3 of the document "ILO Monitor: COVID-19 and the world of work. Second edition".

Community, social and personal services	High	879,029	25.4%	312,818	15.4%	566,211	39.4%
Total		3,464,621	100%	2,026,486	100%	1,438,135	100%

Source: Ministry of Labor, Employment and Social Security, 2020

Particularly, private sector workers face a similar situation. The biggest risk lies in the tertiary sector and manufacturing industry. From the total number of private sector workers, 61% have a high risk of being affected by some sort of measure that may impact their work relation (suspension or firing), approximately 900 thousand employees. For formal workers, this percentage is 69%.

Table 2. Private sector workers at risk by economic branch, by formality, 2019

Economic activity branch	Risk level	Private			
		Private (Total)		Private (Formal)	
		Quantity	%	Quantity	%
Electricity, gas and water	Low	3,013	0.2%	1,009	0.2%
Agriculture, livestock breeding, hunting and fishing	Medium Low	114,932	7.6%	28,273	5.6%
Construction	Low	222,464	14.8%	17,207	3.4%
Finance, insurance, real estate	Low	159,052	10.6%	76,109	15.0%
Transportation, storage and communications	Medium High	83,963	5.6%	33,162	6.5%
Manufacturing industries	High	264,452	17.6%	120,045	23.7%
Retail, restaurants and hotels	High	512,912	34.1%	186,555	36.8%
Community, social and personal services	High	145,266	9.6%	44,917	8.9%
Total		1,506,054	100%	507,277	100%

Source: Ministry of Labor, Employment and Social Security, 2020

With the Emergency Law, the Ministry of Labor, Employment and Social Security achieved the temporary suspension of labor contracts for up to 6 months. Despite the fact that Paraguay does not have insurance against unemployment, the Institute for Social Prevision (IPS) provided support by paying part of workers' salaries from some businesses.

It must be noted that businesses belonging to sectors that have been greatly affected by the pandemic suspended their labor contracts. In fact, 87.6% of suspensions correspond to businesses belonging to impacted sectors.

Table 3. Percentage of businesses that incurred in contract suspensions during COVID-19 pandemic by economic activity, according to size, 2020

Economic activity	Big	Medium	Small	Uncategorized	Total
Agriculture, livestock breeding, hunting and fishing	0.4	0.7	1.5	1.6	1.4
Construction	1.1	2.3	3.0	3.5	2.8
Finance, insurance, real estate	6.7	2.9	3.6	4.6	3.7
Transportation, storage and communications	1.8	5.0	4.5	3.8	4.4
Manufacturing industries	31.4	13.1	8.6	14.9	10.7
Retail, restaurants and hotels	56.2	61.8	54.4	54.3	55.5
Community, social and personal services	2.1	14.2	24.3	16.8	21.4
Undefined	0.4	0.0	0.1	0.3	0.1
Total	283	824	4,477	368	5,952

Source: Ministry of Labor, Employment and Social Security, 2020

Table 4. Percentage of workers who incurred in contract suspensions during COVID-19 pandemic by economic activity, according to size, 2020

Economic activity	Big	Medium	Small	Uncategorized	Total
Agriculture, livestock breeding, hunting and fishing	0.0	0.1	1.5	0.4	0.7
Construction	1.3	2.6	5.9	0.2	3.3
Finance, insurance, real estate	1.7	1.5	2.3	1.2	1.8
Transportation, storage and communications	0.7	7.5	5.9	2.2	4.8
Manufacturing industries	49.5	22.1	11.5	8.3	20.1
Retail, restaurants and hotels	46.3	56.3	51.9	17.2	46.2
Community, social and personal services	0.5	9.8	21.0	3.1	11.7
Undefined	0.0	0.0	0.1	67.4	11.3
Total	14,989	21,427	36,462	14,582	87,460

Source: Ministry of Labor, Employment and Social Security, 2020

The closure of economic activity, with the consequential job loss and decrease in personal income, will lead the latter to concentrate their expenses in essential goods, therefore affecting other groups of products and services with different intensities. Additionally, businesses must make contingency plans in order to operate within a pandemic environment, which include maintaining strict security protocols, as well as working with a minimum quantity of employees, in order to continue operating. Also, they must evaluate their viability, for which they must determine the optimum quantity of employees, shops and other dependencies.

Thus, the COVID-19 pandemic that started as a transitional, external shock, could create social effects, through income and job loss, which could turn into a shock with internal effects in the medium and long term, whichever way they are classified. In this regard, it is very likely that both extreme and total poverty will grow, and the middle class will shrink. The most dynamic social mobility will be the one created between the middle, vulnerable and poor segments of the population, with a projected decreasing trend. Therefore, uncertainty regarding economic conditions, mainly employment and social protection measures, addressed by public policy, will be the main pillars of recovery.

Hence, public policies must sustain people's consumption, preserve jobs, and diminish business bankruptcies, so as to maintain the economy's potential growth in the long term. Policies that improve the Paraguayan economy's productivity, with a particular emphasis in human capital accumulation have also become indispensable.

Impact on vulnerable social sectors

The economic growth experienced in the last decade and a half generated social promotion mechanisms for a vulnerable sector of Paraguay's population. This progress by part of the middle class¹² can be observed in the report: Multidimensional progress: well-being beyond income (UNDP 2016), increasing from 18.7% of the population in 2004 to 38.1% of the population in 2013. Simultaneously, inequality metrics have had a limited improvement in Paraguay with an average annual change in the Gini coefficient, which from 2003-2013 was -1.31%, and -1.13% from 2003-2015. Inequality levels remain high and unchanged; greatly due to the fact that its bases run deep and measures to reverse it have not been very efficient.

The COVID-19 pandemic has affected the population living in poverty and vulnerable groups with different intensities, due to its economic effects, specifically due to income decrease and loss of social security. Public

¹² Understood as that whose daily income per capita is of between 10 and 50 American dollars according to parameters established by the World Bank.

initiatives towards social care and social protection systems have shown shy advances, and as a result, they have not become efficient tools to contain poverty and reduce vulnerability. Recently created social programs (Ñangareko and Pytyvõ) have begun to incorporate approaches that include this view and focus greatly on the vulnerable population, although still insufficient to continuously reduce existing gaps as well as those that have intensified in the past months.

Social distancing and the constituency of social and economic life of families at their homes also have an influence in multiple dimensions.

Beyond the fall of income, pre-existing social inequality, specifically pertaining to life at home, has been exacerbated during the pandemic. Homes have become, in addition to being a family space, a working and educational space. In lower-income households, the way homes operate has been modified, with new activities and functions, and thus, with a renewed complexity regarding its dimensions, conditions, equipment, and above all, number of users. For example, with regards to education, school has moved to homes and conquered the table as well as technological devices.

Families with greater incomes have several working spaces within the home (desk, living room table, outdoor table, among others) as well as a variety of technological devices (cell phones, tablets, desktops, laptops), while lower income homes, and particularly those with less access to these assets, probably have an unequal performance. The following data from the Permanent Household Survey reflect the percentage of the population that has used the Internet in the last months according to their income level.

People who have used the Internet in the last three months

Quintile	Urban	Rural	Total
1	13%	11%	12%
2	18%	16%	17%
3	21%	19%	20%
4	23%	23%	23%
5	26%	31%	27%

People who have not used the Internet in the last three months

Quintile	Urban	Rural	Total
1	31%	23%	26%
2	22%	22%	22%
3	21%	20%	21%
4	17%	20%	19%
5	9%	14%	12%

COVID-19's economic and social consequences have significantly affected the observed advances. Therefore, the main social effects, analyzed from a socio-economic class perspective, could be schematically summarized in:

- » **Contraction of the middle class:** loss of income, consumption decrease, transition to cheaper products and brands.
- » **Increase in fragility and size of the vulnerable class:** coming from the middle class, created by the decrease in income and consumption.
- » **Poverty increase:** due to the fall of the vulnerable class and deepening of existing poverty.
- » **Deepening of extreme poverty:** interruption of the social promotion process.
- » **Increase in social inequality:** due to decreases in income and access to services.
- » **Widening of educational gaps:** due to differences in Internet access and technological devices available at home.

- » **Increase in income gap:** among different social groups, due to job loss and income decrease in almost every category.
- » **Scarce approach in public policies:** regarding perspectives on gender, childhood and the elderly.

It is assumed that one of COVID-19's social impacts will be a new social stratification characterized a descending social mobility, due to a fall in income, as well as to a poorer performance on multidimensional poverty indicators.

Social impacts have also been observed in other fields such as:

Gender

The pandemic's effects on different family members are particularly significant. The workings of family's internal dynamics implied greater participation and actions from women at home.

The multiplication of productive and reproductive tasks, to which remote working must often be added, has increased the amount of working hours for women. A rise in the number of calls to the domestic violence call center (78% more between 2019 and 2020) can be interpreted as an indicator of stress within families, created by a complex series of different uncertainties: economic, social, personal, individual and family health.

Subsistency family agriculture

Family agricultural producers have been impacted by COVID-19 to a lesser degree in urban areas, due to the fact that the productive cycles have not been affected, although the commercial cycles have, but at insignificant levels. However, a decrease in urban labor activities could have reduced income for rural family members who work in cities, which could result in a decreased sending frequency of internal remittances.

With regards to product prices and participation in value chains, substantial modifications have not been observed over the past few years, which is why income originating from this source has not increased. Nevertheless, the diffusion of horticultural fairs, almost always led and driven by women, could be considered as a promissory aspect, that allows for the diversification of monetary income, as well as a greater workload for them.

In this regard, rural poverty reduction, especially in the departments of San Pedro, Caaguazú and Caazapá, has not managed to accelerate. This segment is still represented by a highly vulnerable social group, besides dragging a long list of historical reinvidications.

Environmental sustainability

Social distancing, manifested in a strong decrease in mobility and economic activities, has reduced pressure towards natural systems, especially the atmosphere, due to lesser use of vehicles. As for industrial emissions, these are not significant during normal periods, which is why it is estimated that during this pandemic, this sector reduced its participation even further.

Nonetheless, a more relevant aspect is the increased production of solid and liquid waste at home, with lots of cities lacking trash collection systems and solid waste management as well as wastewater treatment plants, thus affecting natural resources. The still scarce investment in house wastewater treatment systems and plants has a significant regional effect, comprising both superficial and subterranean water resources.

The latest data corresponding to employment, as of March 2020, indicates a decrease of one percentual point in employment, with urban areas being slightly greater than rural areas. It is estimated that by the next quarterly

cut, with data as of June 2020, will exhibit greater numbers of unemployment, with more elevated numbers in urban areas, especially in border cities that depend on international trade, such as Ciudad del Este and Pedro Juan Caballero.

3. The National Government’s response framework against COVID-19

Paraguay’s first COVID-19 case was announced on March 7. Low testing capacity and weak hospital infrastructure led the National Government to prohibit massive gathering events and to suspend all school activities. It then proceeded to declare a full quarantine and total isolation.

In this regard, the Law Declaring a State of Emergency (Law 6524), in which the National Congress authorized the Executive Power to implement exceptional measures concerning budget, fiscal and administrative matters, as well as those concerning employment protection, political economy and finance. The latter with the purpose to mitigate the COVID-19 pandemic, strengthen the health system and guarantee the payment system’s operation. For this, the hiring of USD 1.6 billion in public bonds (approximately 4.0% of GDP) was approved.

Budget reallocations were carried out in order to mitigate COVID-19’s effects, as well as assuming a new debt. Firstly, the budget reallocation approved by the National Congress and the Senate was redirected towards the Ministry of Health, for G 10.545 billion (USD 1.65 million). In addition, there were salary cuts for public employees with salaries over five times the minimum wage. Adjustments were carried out as follows:

- » 10% cut for permanent and hired employees with salaries between 5 and 10 times the minimum wage.
- » 20% cut for employees with salaries over 10 times the minimum wage.
- » Three-month period for cuts.

Thus, monthly savings of USD 1.6 million are estimated. For a three-month period, savings would amount to USD 4.7 million.

Also, in accordance with Art. 33 of the Emergency Law, a USD 1.6 billion debt will be assumed. USD 1.230 billion is currently available. The rest is being processed. Of which, USD 1 billion correspond to Sovereign Bonds at the International Market and 600, to loans with multilateral organizations.

Table 5. Debt composition related to Art. 33 of the Emergency Law

Detail	Status	Amount (in millions of USD)
Sovereign Bonds at the International Market	Issued	1000
Multilateral Organizations	Approved	230
Multilateral Organizations	In process	370
Total		1,600

Source: Paraguay in a Pandemic and Resource Allocation of the Emergency Law 6524/2020 Report – Ministry of Finance.

In another sense, Art. 35 of the same law states that debt that is currently being constitutionally processed must be added to the funds related to the COVID-19 situation. The sum is USD 390 million.

Table 6. Debt composition related to Art. 35 of the Emergency Law

Creditor	Status	Amount (in millions of USD)
BIRF	Approved	300
BID	Approved	90
Total		390

Source: Paraguay in a Pandemic Report – Ministry of Finance.

Measures taken by the Paraguayan government

In the fiscal area, measures were directed, mainly, at providing tax relief to both people and businesses. Some provisions are described in detail below:

	Measure taken
Fiscal policy	Extension for tax presentation and payment due dates.
	Public expense rationing.
	Waiver and/or extensions of public service payments.
	Reallocation of resources or unallocated credit balances towards the health emergency.

Source: Law 6524, which declares a State of Emergency.

In the monetary area, the Central Bank focused on injecting liquidity to the monetary market, with the purpose of facilitating credit in the economy. Other measures are described in the following table:

	Measure taken
Monetary policy	Decrease in the monetary policy rate.
	Decrease in the legal reserve in both the national and foreign currency.
	Renovations, refinancing or loan restructuring granted to people and businesses whose income was affected by COVID-19 will not be computed as delinquent.
	Extension of terms for the sale of personal property and real estate received by financial institutions as payments.
	Formalization of renovations, refinancing or restructuring of capital for loans granted to natural and legal persons, who as of February 29, 2020 have not been expired for over 30 days, shall not be computed as delinquent.
	For operations carried out in installments, the obligation to pay for the operation in total shall not apply, with renovations, refinancing and the partial restructuring of installments and grace period of up to a year, applying the originally constituted guarantees to the new agreement, should there be any.
	Implementation of a new liquidity window, in order to carry out discount operations with high credit portfolios, with repurchasing (REPO).

Source: Paraguayan Central Bank.

Although the BCP's liquidity provision is a necessary condition in order for credit to flow in the economy, it is insufficient, since the operating risks within the financial system must be reduced. For this, the Guarantee Fund for micro, small and medium enterprises, which are job providers, was created. Additionally, the following measures were taken:

	Measure taken
SMEs Support	It was stipulated that 20% the National Development Bank's (BNF) net profits that have not been capitalized, corresponding to the 2019 fiscal year, shall be allocated to the constitution of a trust, in order to support Micro, Small and Medium Enterprises (SMEs), which will be administered by the Financial Development Agency (AFD), as fiduciary. In addition, G 650 billion has been incorporated to the trust.
	The Ministry of Finance provided G 120 billion of capital to the AFD, to mitigate COVID-19's economic effects, focusing on SMEs.
	G 30 billion have been allocated to the SMEs Guarantee Fund to cover the guarantee and/or refinance possible renegotiations of credit operations. It was later complemented with G 654.752 billion.
	Credit lines were implemented through the Agricultural Loans Facility, to which G 120 billion was transferred.

Source: Law 6524, which declares a State of Emergency and the Ministry of Finance.

For the health sector, the objective was to give provisions to the medical system, given its significant vulnerabilities, including not only infrastructure and medical supplies, but also addressing staff scarcity. Some measures are mentioned as follows:

	Measure taken
Health policy	Expeditious public procurement for goods and services.
	Special and exceptional gratification for medical staff.
	Creation of an emergency sanitary fund.
	Purchase of medication, biomedical equipment, reactivities, disinfection services and medicinal gas.
	Construction of contingency hospitals.
	Conditioning of hospital beds.

Source: Law 6524, which declares a State of Emergency

Last, in the social area, the objective was to protect workers' income, notwithstanding their degree of formality, in order to soften family consumption. For more details, see the following table:

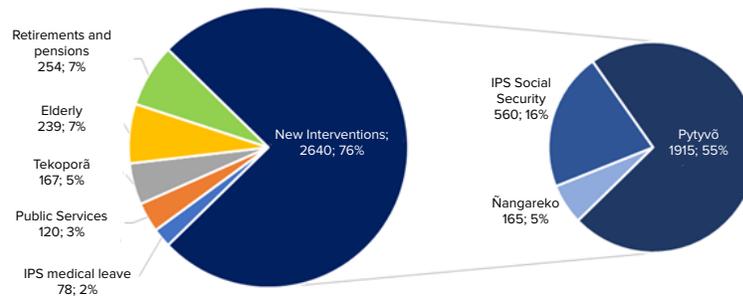
	Measure taken
Social policy	Implementation of the temporary economic aid program, Pytyvõ.
	Implementation of the food security program, Ñangareko.
	Payment for work terminations and suspensions through the Institute for Social Prevision (IPS).
	Strengthening of assistance programs for vulnerable families (Tekoporã) and the elderly.
	Payment to active workers for medical leaves of absence, by the IPS.
	Rent payment cannot be a cause for eviction until the month of June 2020, as long as at least 40% of the monthly rent amount is paid. Pending amounts shall be prorated and added to the monthly rent to be paid in total starting the month of July. Prorated debts shall be cancelled within a maximum period of 6 months.

Source: Law 6524, which declares a State of Emergency and the Ministry of Finance.

Management of social programs

The government has designed and implemented a series of health, fiscal, social and monetary measures for SMEs. In social terms, two new social programs were designed and implemented:

Ñangareko and Pytyvõ, which were added to the existing Tekoporã and Elderly programs. As can be observed in the graph, the new social programs demanded the most resources. The new programs were directed at the population directly affected by the COVID-19 pandemic, and it being a somewhat broad group, two more were created, since not only people living in poverty conditions and the elderly were economically affected by this crisis. Both programs' target audiences are detailed as follows.

Graph 8. Distribution of resources for social measures, Data as of May 2020 (In billions of guaranis)

Source: Ministry of Finance, 2020.

Subsidies for food bonds for families, known as Ñangareko, started as a food security program that delivered food kits. In order to increase speed in social assistance, avoid gatherings and minimize logistical complexity, the program was quickly modified, transforming into monetary transfers to families who get their income from subsistence activities and activities strongly affected by social distancing. Transfers were carried out through Electronic Payments Entities (EMPEs). Each beneficiary received a single transfer in one month of G 500,000 destined mainly to food purchasing. This amount is equal to 23% of the country's current minimum wage.

As of June 14, 285,340 people had received subsidies from Ñangareko for a total of G. 165 billion. This subsidy reached 14 of the country's 17 departments. The three departments with the most participants were:

- » Central: 102,210 beneficiaries and G. 51.105 billion transferred.
- » Itapúa: 28,344 beneficiaries and G. 14.172 billion transferred.
- » Alto Paraná: 27,491 beneficiaries and G. 13.746 billion transferred.

The subsidy program for informal workers, Pytyvõ, implemented by the Ministry of Finance, complements the former and is differentiated by the fact that it focuses on informal workers who carry out independent activities or who are dependent on a micro, small and medium enterprise. The program consists of temporary economic aid for two months of approximately G. 548,000, which corresponds to 25% of the current minimum wage. These payments were carried out twice, in April and June. Beneficiaries add up to a little over 1,150,000 people. The program's total cost is of USD 300 million.

As of June 16, 1,155,037 Pytyvõ subsidies have been granted, for a total value of G. 1.914600 trillion. Pytyvõ reached all of the country's 17 departments, being the program with the greatest scope and capillarity to date. The three departments with the most participants were:

- » Central: 238,634 beneficiaries and G. 130.822 billion transferred.
- » Alto Paraná: 128,660 beneficiaries and G. 70.533 billion transferred.
- » Itapúa: 78.692 beneficiaries and G. 43.140 billion transferred.

For both Ñangareko and Pytyvõ, inscriptions were carried out through a form available online at the responsible institutions' websites. The purpose of this method was to avoid that the programs end up with people who did not really need the support. Likewise, beneficiary registration allowed for traceability and a greater transparency in order to better know the reality of the segment affected by the pandemic. And, as is known, this avoided massive gatherings of people should in-person registration had been used.

In order to become a beneficiary of either program, applicants had to meet certain previously established requirements. One of them included not being an active beneficiary of the existing social programs: Tekoporã and the Eldery.

Nevertheless, a person could be beneficiary of both new programs with the caveat that in Pytyvõ's case, they would only receive the second payment since they had already received the first through Ñangareko. The sum of the amounts destined to both subsidy programs adds up to about 1% of the country's GDP. It is important to note that for the Pytyvõ Program, there is still a remaining balance pending for USD 114 million of the USD 300 million planned for execution.

Table 7. Social programs destined for vulnerable populations vis-à-vis COVID-19

Social Programs	Beneficiaries	Periodicity	Amount (millions of USD)	Amount (% GDP)
Tekoporã	165,229 families	Monthly payments	63	0.2
Elderly	205,000 people	Monthly payments		
Ñangareko	285,340 people	Single payment	26	0.1
Pytyvõ	1,155,037 people	Double payment	300	0.8

Source: Ministry of Finance, Ministry of Social Development and National Emergency Secretariat, 2020

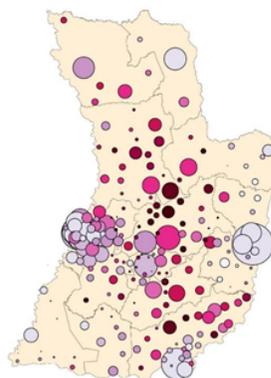
Both programs were created very quickly to ameliorate the impact of COVID-19 in vulnerable segments of the population. For this reason, and in order to increase transparency, as well as practicality and security, these programs were implemented using a dense network of electronic payment methods. These instruments had two very significant contributions. The first is that beneficiaries were able to access it in a practical and safe way; secondly, the financial resources were used in their respective communities of residence, thereby boosting commerce.

These programs' targeting has been an innovative particularity in this type of measure. If the number of beneficiaries by districts and their poverty levels are observed, a positive correlation can be seen, which indicates that the districts with the highest proportion of families living in poverty (according to the National Population and Household Census of 2012) accessed the programs. In addition, two noticeable facts are observed. The policies have responded to an urban demand, which was impacted in its service, retail and to a lesser degree, industrial sectors, and also in rural areas, especially in those departments and districts where family farming is located.

Two differentiated axes can also be observed, the horizontal one, from Asuncion to Ciudad del Este, which concentrates a larger urban population and with a majority of jobs in commerce and services. The vertical axis is much more rural, with agricultural and livestock breeding activities, where the nuclei of poverty are observed. These primary geographic details, along with others of greater complexity, will be very useful when optimizing targeting, as well as to generate economic and social relaunching programs.

Distribution of financial resources of Social Programs Ñangareko and Pytyvo, by district

1. The BIGGER the circles, the more money the district received (the largest being USD 2 million)
2. The DARKER the circles, the greater the number of poor households in the district (the darkest being 60%)



Source: MF Economía based on statistical data from the Ministry of Finance and the General Office of Statistics, Surveys and Censuses.

In addition to these new programs, advance payments and additional payments have been made to beneficiaries of Tekoporã and the Elderly, totaling more than 165,000 families for the former and 205,000 people for the latter.

The Recovery Plan to be implemented by the government stipulates an injection from the second half of the year for social programs, with amounts that total about USD 455.3 million. These are detailed below;

Table 8. Programs for social protection stipulated in the Recovery Plan

Program	Amount (Millions of USD)	Details
Pytyvõ	250	Reaching 770,000 people.
IPS	100	Strengthening the health system.
Senior Adults	48.3	Program maintenance and adding 10,800 beneficiaries.
Tekoporã	28.3	Program maintenance and adding 24,920 families.
Food safety	26.5	Delivery of food kits through the MEC, SEN, INDI and local governments.
Temporary lunchrooms	1.8	Reaching 89,703 people.
Abrazo	0.4	Reaching 1,931 families.

Source: Accountability of the Emergency Law - Ministry of Finance, 2020.

Social programs, especially those designed and implemented during the pandemic, have been efficient in containing the drop in income and job vulnerability. Likewise, its operation was quick and effective, especially in the most isolated rural areas. However, in addition to the high financial effort they entail, targeting tools are required, by specific sectors and in geographic regions with higher demands.

Low interest-rate credits were made available to formal small and medium-sized enterprises through the National Development Bank, the Financial Development Agency and the Agricultural Loan Facility. In any case, these measures have not been sufficient to meet the needs of the different social sectors; especially those employed in the retail and services sector, especially the self-employed, including micro and small entrepreneurs, the latter of an informal nature. Nonetheless, a limited number of businesses used these loans because the operating and billing conditions were still restricted, and therefore, they did not always find incentives to take the loans.

Informal entrepreneurs were served by the Pytyvõ program, with food transfers, but they require alternative strategies aimed at redirecting production and, above all, the commercial scheme. This segment includes several branches of activity, and thus requires greater attention so that once they get out of the vulnerable and uncertain situation; they can formalize and access other social benefits.

Micro-enterprises and informal entrepreneurs require aid packages that include training regarding the new context as well as the inclusion of adaptation and creative reconversion concepts. These and other actions can be developed through remote modules, on, for example, product innovation, market segmentation and marketing systems, led by the Ministry of Labor, Employment and Social Security.

Table 9. Non-agricultural formal and informal employed population, by occupational category in their main occupation

Occupational category	Year 2020 1st Quarter				
	Total employed	Formally employed		Informally employed	
		Absolute value	%	Absolute value	%
Total	2,642,590	985,282	37.3	1,657,308	62.7
Worker / Public employee	341,792	271,178	79.3	70,614	20.7
Worker / Private sector employee	1,210,340	458,912	37.9	751,428	62.1
Employer or boss	172,334	113,464	65.8	58,870	34.2
Self-employed worker	617,496	119,175	19.3	498,321	80.7
Unpaid family worker	73,610	-	-	73,610	100.0
Domestic employee	223,741	22,553	10.1	201,188	89.9
Not available	3,277	-	-	3,277	100.0

Source: General Office of Statistics, Surveys and Censuses, 2020.

Table 10. Formal and informal businesses by size

Type	Total	Micro	Small	Medium	Big
Formal (with TIN*)	263,106	236,989	18,640	4,293	3,184
Informal (without TIN*)	607,492	607,492			
Total	870,598	844,481	18,640	4,293	3,184

*TIN: Taxpayer Identification Number

Source: Accountability of the Emergency Law - Ministry of Finance, 2020.

The reduction in employment, caused by restrictive social distancing measures, required quick and focused responses in the informal sector and the self-employed sector, which lacked records, that for a long time impeded monitoring and greater attention to this segment. In this context, support and aid programs for informal workers, entrepreneurs and self-employed workers are designed and implemented.

The pandemic's contingency ended up generating two new social programs that, in addition to responding to social needs, constitute new tools of knowledge, analysis and monitoring of various sub-sectors that for decades had remained diffuse and therefore, without the deserved attention from public policies.

The new programs, no longer aimed at segments in poverty and extreme poverty such as Tekoporã and the Elderly, complement each other very well, since they serve vulnerable social sectors and middle-income sectors. Nonetheless, Ñangareko and Pytyvõ are destined to change from delivering temporary money to creating alternative and innovative labor capacities that result from a new demand for goods and services. In this regard, new opportunities that arise in the market must be explored in order to serve them effectively. For example, by observing the import matrix, it is possible to identify products that can be created, cultivated, and industrialized in the country in order to create added value internally, as well as create and maintain jobs.

These workers' new data and records will allow us to monitor and represent a new opportunity to generate new public policies, as well as adapt and focus the current ones, in order to integrate and formalize the sub-sectors most vulnerable to economic and social shocks.

Thus, the country's new social offer is structured in the following way:

- » Population living in poverty: Tekoporã and programs for the Elderly.

- » Population in a social vulnerability situation: Ñangareko.
- » Self-employed and dependent on micro, small and medium-sized businesses population: Pytyvõ.
- » Population working in formalized businesses: social protection (IPS).

The latest employment data (Continuous Permanent Household Survey), which compares March 2019 with March 2020, and therefore reflects only the first 15 days of social distancing, show a nationwide advance in unemployment from 6.9% to 7.9%, that is, 33,000 additional unemployed people. In urban areas, unemployment was felt more strongly, going from 7.6% to 8.8%.

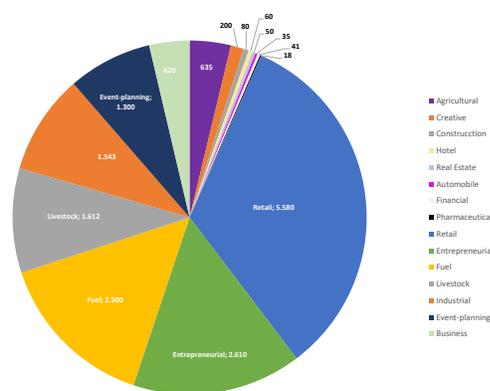
Social measures were very useful to respond to the social and economic contingency, but they did not alter the pre-existing conditions of inequality. It is also estimated that the situation of the most vulnerable population groups weakened in the last three months. Similarly, it can be assumed that the conditions of monetary poverty, and especially those associated with the multidimensionality of poverty, have increased and deepened.

4. Context according to sectorial actors – identifying institutional gaps and opportunities for action

With the Covid-19 pandemic, it was considered very useful to apply a survey to the country’s main economic sectors using 28 business chambers. This survey aims to capture their vision of the problems they have faced, as well as their expectations and challenges for the end of the year. In this regard, 28 chambers that cover 11 economic sectors and group approximately 16,700 businesses completed the form.

Regarding the composition of the sample by business size, 50% is made up of large businesses (51 or more employees); 25% of micro (1 to 10 employees); 14% for medium-sized businesses (31 to 50 employees) and 11% for small businesses (11 to 30 employees).

Graph 9. Distribution of chambers by industry and number of businesses that have answered the COVID-19 Impact Measurement Survey

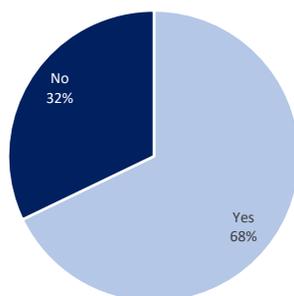


Source: MF Economía based on the gchambers’ survey.

Once the chambers had been characterized, the COVID-19 pandemic’s impact on their productive activity was analyzed.

In order to face the health crisis, the implementation of measures such as social distancing and quarantine was required by the State, which affected the productive activity of the businesses that make up the chambers. This led to 68% of those surveyed to stop operating, momentarily. For their part, the chambers that were not forced to stop their activities are concentrated in the livestock; agricultural; pharmaceutical; financial and mass consumption sectors.

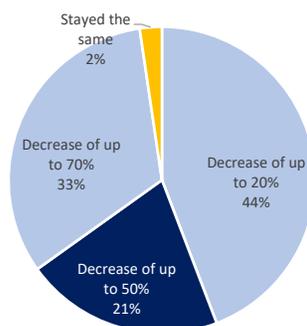
Graph 10. Need to stop activities at some point



Source: MF Economia based on the chambers' survey.

This halt caused 98% of those surveyed to affirm that their sales decreased, however, these reductions were not uniform. 44% of those surveyed experienced a reduction of up to 20% in their sales; for 21%, a drop of up to 50% and for 33% it was up to 70%. Only 2% of the surveyed chambers did not register variations in their sales.

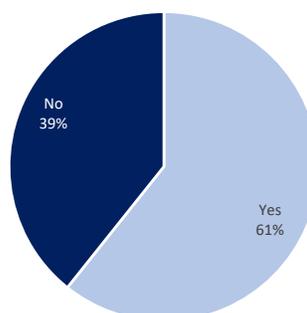
Graph 11. Sales variation during the pandemic



Source: MF Economia based on the chambers' survey.

With regard to work, 61% of those surveyed stated that they offered their employees the possibility of remote working to face the situation. On the contrary, chambers whose businesses belong to sectors such as livestock; industry; trade and event planning could not implement this working method.

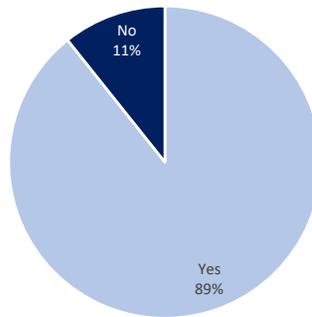
Graph 12. Possibility of remote working



Source: MF Economia based on the chambers' survey.

Regarding working hours during the workday, these decreased in 89% of the chambers. It should be noted that only the pharmaceutical and agricultural sectors maintained their normal working hours.

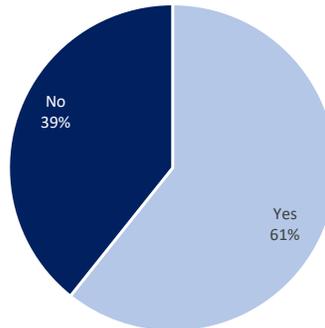
Graph 13. Need to reduce working hours



Source: MF Economia based on the chambers' survey.

In addition, 61% of the unions surveyed reduced the salaries of their employees, significantly impacting family income. If the size of the business is considered, it is important to note that 57% of the unions that used this measure correspond to large businesses, 19% to micro, 14% to medium and the remaining 10% to small businesses.

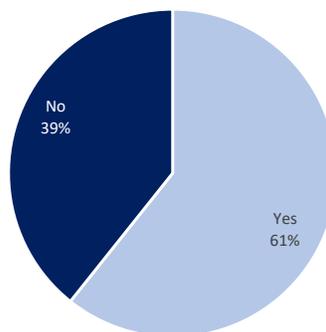
Graph 14. Need to reduce salaries



Source: MF Economia based on the chambers' survey.

Similar behavior is evident when consulting about the suspension of employment contracts, under the Institute for Social Prevision (IPS) modality. This mechanism was established, within the framework of the Law that declares the State of Emergency, as a measure to face the health crisis.

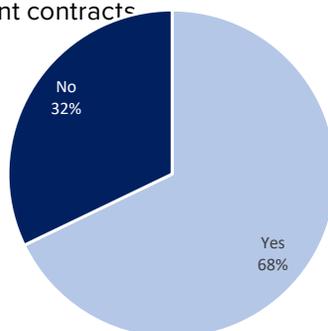
Graph 15. Need to suspend employment contracts



Source: MF Economia based on the chambers' survey.

A more complex scenario is observed when the need to terminate employment contracts arises. Faced with this question, 68% of the chambers surveyed indicate that they terminated their contracts with their employees. There is no additional information that allows inferring if this measure will be permanent or if workers will be hired when the hardest part of pandemic is overcome. The remaining 32% that maintained their employment contracts corresponds to chambers whose businesses are in the real estate, pharmaceutical, mass consumption, livestock and agricultural sectors.

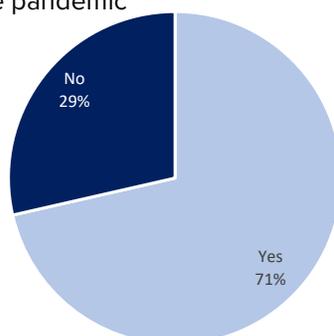
Graph 16. Need to terminate employment contracts



Source: MF Economia based on the chambers' survey.

Given the sales reduction and the partial relief obtained by the implemented salary measures, 71% of the businesses belonging to the surveyed chambers opted to take at least one loan.

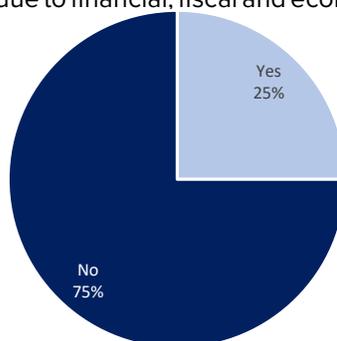
Graph 17. Need to take loans during the pandemic



Source: MF Economia based on the chambers' survey.

Finally, 75% of the unions mentioned that they did not feel a relief with the financial, fiscal and economic measures applied by the government. Within this percentage are businesses from the industrial, retail, livestock, motive, real estate, hotel and event-planning sectors.

Graph 18. Relief for chamber businesses due to financial, fiscal and economic measures taken by the government



Source: MF Economia based on the chambers' survey.

Based on the characterization previously presented, several points must be highlighted. Given the strong decrease in the income of businesses, while their operating costs remained almost unchanged¹³, they faced

¹³ The businesses agreed to an extension in their tax settlements, as well as in the payment of public services. Except for specific cases that received payment exemptions for some public services.

the decision to continue operating or close. Most of those that continued with their activities implemented adjustment measures in their hiring, in order to reduce their operating costs and fulfill part of their salary responsibilities.

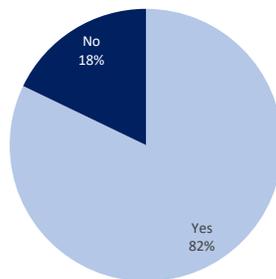
In other words, employment was preserved, but the measures applied affected, to some extent, people's income, either because they had a reduction in their remuneration or in their working hours. Obviously, in the case of the businesses that closed, many lost their jobs and, therefore, their source of livelihood.

Additionally, some chambers had access to a tool through which the Institute for Social Prevision was responsible for covering part of the worker's salary.

In any case, whatever the measure applied to the worker may be, their monthly income registered a decrease, which placed them in a highly vulnerable scenario, even more so if they were the head of the family.

When the interviewed chambers were asked for a perspective moving forwards, they highlight their favorable expectations. In this sense, 82% of those surveyed consider that the economic situation will improve in the year's coming months.

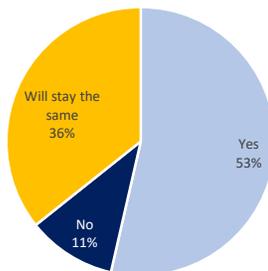
Graph 19. Expectation for improvements in the following months of the year



Source: MF Economia based on the chambers' survey.

Furthermore, 53% expect their sales to pick up during the year, while 36% estimate that they will remain the same and only 11% believe that they will worsen.

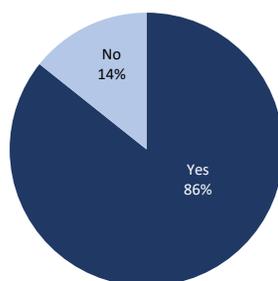
Graph 20. Expectation for sales improvement for the following months of the year



Source: MF Economia based on the chambers' survey.

Despite the recovery estimated by the majority of chamber members, 86% of those surveyed will not hire additional staff during the year, while 14% expect to do so.

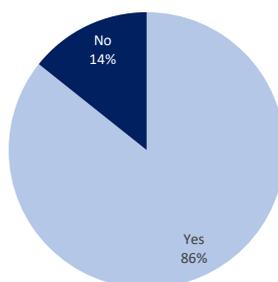
Graph 21. Will hire more staff during the year



Source: MF Economia based on the chambers' survey.

With regards to financing, 86% of chambers foresee that they will obtain a loan in order to alleviate their business's current situation, while 14% will not. It should be noted that those surveyed who hope to access financing consider term extensions to be decisive, as well as a drop in interest rates. There are also requests for a procedure simplification for the use of the Guarantee Fund (FOGAPY).

Graph 22. Will take loans during the year in order to alleviate the situation



Source: MF Economia based on the chambers' survey.

Finally, numerous reflections can be extracted from this instrument; one of them is the importance of business formalization, which resulted in some workers receiving part of their remuneration through the Institute for Social Prevision.

Another element is the need to have unemployment insurance, which guarantees that people who lost their job can access remuneration, which allows them to meet their family group's basic needs.

Likewise, it is important to remember the contributions that Carmen Reinhart has made to the study of economic crises, where she shows the fundamental role that credit plays in supporting spending, either for households or for businesses. In other words, an interruption in the banking financial intermediation activity prolongs and deepens the economic recession.

People need access to credit to sustain their consumption; otherwise they will face problems to satisfy their needs. For some, this may imply a reduction in the purchase of durable consumer goods, such as vehicles, but, for others, it may represent problems to cover food needs, which implies a loss of calories that will affect their future performance.

In the case of businesses, financing is directed mainly to cover the labor payroll and fixed expenses, which are necessary to keep the business operating. This, in turn, maintains employment, people's income and favors economic recovery.

Although the measures taken by the Paraguayan Central Bank (BCP) were initially aimed at increasing liquidity in the financial market, through the reduction of legal reserve requirements, as well as the provision of liquidity facilities, the fall in the business sales and people's income increased their credit risk.

Furthermore, the BCP lowered its monetary policy rate to a historical minimum, as a sign that the economy’s interest rates should be lowered. However, for the financial system, the increase in the probability of default by the potential loan recipient led to the application of credit contraction measures.

Therefore, tools such as credits guaranteed by the State allow the fluidity of resources in the financial system, by minimizing the risk that the applicant represents for the institution. Currently, they are mainly aimed at covering the operating capital of businesses. However, it is expected that, in the near future, it will be available to people.

The Covid-19 pandemic generates enormous challenges for the country. If the necessary measures are not taken to smooth household consumption and support businesses’ operation, the levels of poverty, unemployment and informality will increase, which represents a strong setback for the country. Furthermore, recovering lost positions takes years of public policy. In line with this, the chambers presented some policy proposals.

Policy proposals suggested by surveyed parties

In tax matters, the request for tax incentives persists

Taxes	
Proposed measure	Establish tax incentives for formalized businesses.
	Tax adjustments for Ciudad del Este’s commercial sector.
	Tax and fee exemptions.
	Tax simplification and incentives for SMEs

Regarding financing, they propose simplification in procedures, which includes loans with government active support.

Financing	
Proposed measure	Access to long-term financing and low interest rates.
	Maintain customers’ credit rating.
	Facilitation in loan approvals.
	Promotion of financing through the National Development Bank.
	Strengthening credit lines for SMEs.
	Refinancing of loans with longer terms.
	Simplification of procedures to access credits guaranteed by the State (FOGAPY Guarantee Fund).
	Coordination between economic reactivation objectives and regulatory tools for credit risk management.
	Loans for operating capital.
	Implementation of longer grace periods.

Regarding the institutional area, the implementation of electronic procedures in public entities stands out, which helped to overcome corruption problems in other countries of the region.

Institutions	
Proposed measure	Facility in formalization and creation of new businesses.
	Independence, institutional strengthening and improvement in the National Office for Health Surveillance's management.
	Strengthening of the National Competition Commission's management.
	Implementation of electronic procedures in public entities.
	Facilitating and simplifying procedures at public institutions.
	Control of informality.
	Legal security.
	Work on the maquila regime renewal within Mercosur.
Formalization of businesses free of charge.	

For trade, the greatest concern is concentrated at the border. It also seeks to improve import and export logistics. In fact, it should be remembered that, in 2018, World Bank data showed that Paraguay ranked 74th out of 160 countries in terms of the Logistics Competitiveness Index, with countries like Ecuador in a more favored position, despite the fact that the degree of openness of that economy is considerably lower.

Commerce	
Proposed measure	Strengthening of demand.
	Improve import and export logistics.
	Schedule change for border trade.
	Opening the border with sanitary measures.
	Updating the tourism regime or modification towards a border trade regime.
	Establishment of thorough inspection controls for imports.

Concerning the industry, the deglobalization phenomenon is highlighted, since there is concern about the supply of raw materials, but the construction of regional industries is also being thought of, in other words, they are looking towards the region and not towards the world.

Industry	
Proposed measure	Control of anti-competitive structures.
	Establish alliances with countries that produce raw materials, to guarantee their supply.
	Advice and support for SMEs.
	Make alliances with Latin American countries for the development of the pharmaceutical and chemical industries in the region.

The central issues for management of the State are widely known, such as, for example, public spending rationing, which is why it was also included in the Law that declares the State of Emergency.

State Management	
Proposed measure	Efficiency in public spending.
	Reactivation plan.
	Retirement and health system reform.
	Allow the participation of private capital in public and energy works.
	Greater participation of SMEs in public sector purchases.
	Employer's contribution exemption to the Institute for Social Prevision.
	Adjustment in utility rates.
	Purchase of national products in public tenders.

5. Public policy pillars: promoting socio-economic recovery

When the pandemic started, fiscal accounts showed a deficit of 2.8% in the GDP, above of what was established in the Fiscal Responsibility Law (1.5% of GDP), mainly due to the public investment plan implemented during the second half of 2019, with a view to reactivate economic activity. Therefore, the fiscal authority lacked internal resources to face the pandemic's effects, beyond certain expense reallocations. This led to the use of external debt, which Congress authorized up to a maximum of USD 1.600 billion.

The COVID-19 pandemic has brought societies on different continents and countries into a situation of deep social, economic and institutional stress. Countries, regardless of their development level, do not have enough tools or instruments to face the magnitude of the health challenge and contain the economic impact.

The first challenge is to contain the pandemic, which would allow us to return as soon as possible to a state of social activity that can be called the new normal, with a very significant burden of uncertainty.

The Paraguayan economy and society are in a situation of high demand for public policies, but at the same time with extremely limited resources. The main challenges revolve around employment maintenance and recovery and, on the other hand, the improvement, expansion and deepening of the social protection system.

The central pillars for an economic recovery are presented as follows.

Support for employment and business recovery

The employment and business support approach must be targeted at the most vulnerable in order to mitigate the social and economic consequences of the confinement period. Given the vulnerability of small businesses and workers in the informal economy, governments should explore all options that allow the financing of measures to support businesses and their workers, and provide adequate social protection. Despite the great challenges, there is room to calibrate public policies to address certain key pillars.

- » **Financing support.** Optimize credit and guarantee systems to reduce risk levels and strengthen the capacity to generate employment for all types of businesses. Risk perception should be reduced through the guarantees generated by the State, reactivating the different economic sectors, especially services and retail. The Paraguayan Guarantee Fund (FOGAPY) should be expanded to constitute a better financial instrument designed to improve access to loans. The extension should have the following characteristics:
 - » Provide more FOGAPY resources to have a greater reach.
 - » Expand FOGAPY's scope to businesses of all sizes, including individuals.
 - » Increase the coverage level of the Fund to 90% so that financial institutions incur less risk.
 - » Create conditions for competition between financial institutions when using funds and granting loans so as to guarantee better rates.

- » That covered funds, granted by guarantee, are under a rate that is within the FOGAPY regulations (less than 10%). While funds not covered by the guarantee remain in accordance with market rates.
- » Through this premise, competition is generated between entities for deposit rates and efficiency costs so that loans' final rates are attractive for both parties (financial entity and clients).

These financial instruments will be key to sustaining businesses during the period of productive and commercial activity reduction. In addition, it is important to favor the survival of economic units in the short term. The support must be well calibrated and geared towards SMEs, increasing the available loans and targeting support by stages and sectors of the economy according to levels of effects and impact on employment.

- » **Support for businesses affected by the crisis.** It is suggested to consider the possibility of monetary support for the most affected microenterprises. These contingency lines can help them survive the impact, avoiding asset loss and maintaining sources of employment. Legal and institutional mechanisms and tools must be created to prevent the death and disappearance of job-creating businesses. It should be noted that, with the interruption of activities, the payment capacity to meet financial commitments is reduced, destroying the quality and credit capacity of these businesses. Policies should seek to alleviate the high costs imposed by isolation measures, avoiding the loss of the Taxpayer Identification Number, and postponing entry to Infor-comf (the debtor reporting system).

State subsidies have managed, to a limited extent, to maintain family income, but at a very high cost. The little help has offered some relief, focusing the assistance on food resources, although lacking any other tool, method or strategy for reintegration and linkage with the labor market. The progressive loosening of social distancing cannot be the tacit answer to the economy's relaunch. Cross-cutting interventions are required to maintain and generate new jobs, such as reconversion towards sectors that will have greater demand (meal preparation or home improvement and maintenance products, among many other creative resources that can be thought for each sub-sector) as well as to integrate more people and workers into the Social Protection System, through an increase in economic activity formalization.

Finally, family businesses have been the refuge for many of those who lost jobs. Therefore, their realities must be considered when designing assistance measures, and flexible measures must be taken so that businesses, regardless of size, are able to maintain jobs.

- » **Prioritize public spending on health and social protection.** State spending should prioritize the strengthening of health systems and focus its scarce resources on innovative social programs that assist the affected population.
- » **Encourage public works with high employment demand and a greater multiplier effect on the economy: urban connectivity routes, cobblestones, sidewalks, social housing, among others.** On the other hand, work reintegration programs must also be carried out, as well as the modification of the commercialization pattern, favoring direct sale to the final consumer, using digital sales tools and channeling local businesses, among others.

With the drop in revenue, the State will have less fiscal space to make public investments in certain key sectors. Furthermore, in a context where political conditions to increase the level of indebtedness are limited, it is essential to strengthen the incentive scheme to attract investments in infrastructure from the private sector through public-private participation projects.

- » **Simplify and streamline regulations to ensure greater private sector participation in public investments.** Given the decrease in maneuvering room for public finances, the State must provide greater agility to investments with high social impact. For example, housing infrastructure project initiatives can be carried out with the private sector's participation, through existing tools, such as the Public-Private Alliance Law. These regu-

lations should be adapted to achieve higher levels of implementation, for example, with the modification of decrees to reduce bureaucracy levels and thus channel private investment to areas of interest to the public sector. In the same sense, if ministries could probably carry out some procedures and processes with greater agility, project feasibility analysis can be facilitated and accelerated.

- » **Improve efficiency in public spending, prioritizing saving in superfluous expenses and linked to management by results.** Similarly, the generation and processing of information on social programs and other public services can become a very valuable tool to increase the public investment targeting. Social Cabinet initiatives aimed at characterizing the different sub-national territories and depending on their characteristics, problems, challenges and vocations, implement the respective public policies with greater precision and efficiency, especially in the social aspects of the policies and programs.
- » **Increase the different sectors' formalization through the use of investments in technology that automate procedures, optimizing data and expanding the tax base.** For example, a significant percentage of businesses that participated in the Ñangareko and Pytyvõ operations could formalize, if the technological instruments that would also enable an increase in VAT collections existed. Operations to reduce formalization obstacles are necessary, as well as using social programs to obtain consolidated data on consumption patterns, through inter-operational technological systems that allow for data feedback that contributes to a better targeting of said programs.

In a less positive scenario, with a resurgence of social confinement measures due to an increase in the number of cases and fresh outbreak, the State's fiscal ability to continue assisting vulnerable and heavily impacted sectors will not be sufficient.

- » **Structural adjustment measures to generate savings and a more efficient use of resources will be required.** The downward adjustment of public salaries, the elimination of superfluous expenses, and redirecting programs and projects towards new needs, will require great administrative efforts, as well as courage in their management. The traditional State, with its historical institutions, is called to become more agile, efficient, small, cheap and useful.

Faced with a quarantine prolongation scenario even until 2021, it will be necessary to rethink the functions, responsibilities and actions of various ministries and public offices. They should be modified and adapted to a new way of life that ensures the fulfillment of their objectives in a different way. If traditional state management carries decades of challenges in terms of spending, the pandemic may be the turning factor to achieve reform, adapt and build a government structure with clear, focused, practical public policies that ensure attention to the different strata of the population.

Support for the Social Protection System for vulnerable communities

The COVID-19 pandemic has required high levels of social distancing, which has resulted in a weakening of living conditions for social groups that already experienced situations of vulnerability and exclusion. Social protection, historically limited to the minimum wage and social security, must be complemented with access to quality public services, health, and protection for families and individuals.

The economic precariousness of the lower-income groups, due to limited availability of assets, will be deepened by pre-existing inequalities. In a context such as that of COVID-19, the social protection policy must face the contingency, in order to limit the effects of social exclusion while rebuilding the production system that generates jobs. This pillar's components are:

- » **Maintenance, monitoring and exhaustive targeting of social programs:** Tekoporã, the Elderly, Ñangareko and Pytyvõ, in order to ensure that the transfers meet the needs of families and at the same time generate

an impact on local and regional businesses.

- » **Intervention strategies by risk and social vulnerability type and according to age groups: childhood and adolescence, youth, adulthood and the elderly.** Childhood and adolescence require differentiated attention, given the effects of academic activities suspension. Furthermore, especially for children, school is no longer a platform with access to school meals. Reformulated and adapted social care practices are therefore required. It is necessary to increase the level of Internet connectivity, through the participation of private providers, to ensure children and adolescents' access to the school system. Likewise, contents must be reorganized by recording classes, so that they are replicated in all schools and public colleges, in order to reduce infrastructure and equipment asymmetries between teachers and between regions of the country. The existing digital gap could increase even more between the different regions and social segments, especially in those homes with school-age children who do not have any technological devices or Internet. In the event that the pandemic extends its effects until 2021, due to continuity or a fresh outbreak, the mechanisms for access to education must be identified in advance. Innovation and the use of the different communication channels (radio, television, Internet) should be mobilized to satisfy the educational demand. The creation of a platform with specific videos for each of the educational levels, which can be recorded once and played many times, and with the best teachers, can be an alternative solution.
- » **Renewed social security that allows adjustments in contributions' engineering and operation, and containment programs in the event of job loss.** Strategies cannot be uniform, but must respond to specific problems and situations in terms of geography, life cycle and type of service. The current situation should be used to rethink the different social security and retirement schemes, in order to achieve a better distribution of the social burden, even more so considering the aging of the population. An alternative after the pandemic could include the private sector in the labor contribution model, generating incentives towards the formalization of workers, businesses of different sizes and entrepreneurs.
- » **Public offer of services must improve, expand and specialize, in order to adapt not only to the new demographic structure (aging) but also to social practices resulting from social isolation.** Obstacles that limit access and permanence in the educational system must be reduced and eliminated. Training options and human capital development should be generated through open and public television channels, as well as through social networks and specific sites. The creation and implementation of a formal and non-formal educational platform can be valuable tools to reduce the educational impact in schools and colleges, in order to take advantage of the time available at home.
- » **Reinforce the gender perspective in all interventions,** considering that women are the ones in charge of care activities and especially because in urban areas, a greater number of female productive and reproductive tasks are assisted in households, especially when they are heads of household.
- » **Reduce geographic, gender and age group gaps in the supply of public services and in social infrastructure and investments installation.** The precarious urban settlements of Asunción, Central, Caaguazú, and Alto Paraná should receive focused and appropriate attention to each territorial context.
- » **Rethink strategies to contain, support and strengthen peasant family agriculture,** depending on productive rates, demographic structures, business relationships and the presence of value chains in each of the regions. Attack the hard nuclei of poverty and extreme poverty concentration. The return of the urban population to the rural ones represents an opportunity to relaunch productive and value-adding processes. Mobility reduction could lead to a limitation of producers' access to markets, as well as a decrease in the demand for agricultural products that, in several areas, could be offset by a greater supply and proximity to cities, which could increase their demand for food.

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Annex

Annex 1. Calculating economic gains and/or losses methodology

Gains and/or losses for the different economic activities that make up the Gross Domestic Product (GDP) were constructed from the macroeconomic relationship that exists between nominal and real GDP. The premises used come from the estimates made by the Central Bank of Paraguay (BCP), which considered, for the pre-pandemic scenario, real economic growth of 4.1% and inflation of 4.0%. For the pandemic scenario, the BCP forecasts a 2.5% drop in economic activity and 2.4% inflation.

Real and nominal GDP are linked by the following relationship:

$$\text{Real GDP} = \frac{\text{nominal GDP}}{\text{GDP deflator}/100}$$

In terms of growth rates, the relationship would be:

$$(1+g) = \frac{(1+v)}{(1+p)}$$

Where:

g = Real GDP growth rate

v = Nominal GDP growth rate

p = Inflation measured through GDP deflator

We worked with the growth rate equation, for which the previously mentioned premises were used. Inflation was approximated through the interannual variation of the Consumer Price Index (CPI). Gains and / or losses are obtained by difference between both scenarios (pandemic and pre-pandemic).

Annex 2. Economic gains and/or losses calculation**Table 11.** Economic gain and/or loss derived from the COVID-19 pandemic (Nominal USD)

Productive sector	Gains and/or losses (*) (In USD Millions)
Agriculture	50
Livestock and breeding	-11
Logging, fishing and mining	-5
Primary sector	34
Manufacture	-468
Construction	-122
Electricity and water	-197
Secondary sector	-787
Trade	-298
Transportation	-178
Telecommunications	-7
Financial Intermediation	-116
Real State services	-155
Business services	-114
Restaurants and hotels	-838
Household services	-313
Governmental services	-22
Tertiary sector	-2.041
Taxes	-292
Gross Domestic Product	-3.087

Source: MF Economía based on data from the Paraguayan Central Bank. (*)The positive sign indicates profit, while the negative sign indicates loss.

Annex 3. Surveyed chambers**Table 12.** List of consulted chambers

Nº	Chamber	Nº	Chamber
1	Paraguayan Association of Poultry Farmers (AVIPAR)	18	Paraguayan National Chamber of Retail and Services (CNCySPy)
2	Paraguayan Association of Banks (ASOBAN)	19	Paraguayan Chamber of Meat (CPC)
3	Paraguayan Association of Entrepreneurs (ASEPY)	20	Paraguayan Chamber of Parceling and Real Estate Businesses (CAPELI)
4	Association of Paraguayan Businesses – Events Suppliers (ASSEPE)	21	Paraguayan Chamber of Exports (CAPEX)
5	Association of Micro, Small and Medium Enterprises (ASO MIPYMES)	22	Paraguayan Chamber of Cereals and Oilseeds Exports and Retailers (CAPECO)
6	Association of Owners and Operators of Service Stations and Related (APESA)	23	Paraguayan Chamber of Construction (CAPACO)
7	Paraguayan Hotel Industrial Association (AIHPY)	24	Paraguayan Chamber of Supermarkets (CAPASU)
8	Paraguayan Association of Meat Producers and Exporters (APPEC)	25	Executive Club
9	Paraguayan Chamber of Food and Beverages (CABE)	26	Paraguayan Federation of Creative Industries (FIC)
10	Paraguayan Chamber of Advertisers (CAP)	27	Union of Production Chambers (UGP)
11	Paraguayan Chamber of Shopping Centers	28	Paraguayan Industrial Union (UIP)
12	Ciudad del Este Chamber of Retail and Services		
13	Pedro Juan Caballero Chamber of Retail and Services		
14	Chamber of Automotive and Machinery Distributors (CADAM)		
15	Chamber of Credit Businesses		
16	Paraguayan Chamber of Maquiladora Businesses (CEMAP)		
17	Paraguayan Chamber of the Pharmaceutical Chemical Industry (CIFARMA)		

COVID-19 in Bolivia: On the Path to Recovering Development

UNDP Bolivia Office*

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Abstract

Bolivia, just like the other countries of the region, was not excluded from the impact of COVID-19 and the pandemic appeared in the midst of an economic and political crisis as a result of the failed presidential elections of October, 2019. Despite the fact that timely measures were adopted to face the pandemic at the beginning of the outbreak and that, in effect, it did slow down the initial increase of the epidemiological curve, later it became impossible to stop the exponential growth of cases and finally the health care system collapsed exposing its deficient structure. The lockdown paralyzed activities and many people lost their jobs; livelihoods were partially or totally destroyed which resulted in a loss of income for many. The economy was faced by a supply shock followed by a demand shock because the level of household consumption dropped. By imposing dynamic and flexible quarantines the government has now started to re-open the economy and has provided the financial system with funds for loans needed to boost the domestic demand.

The COVID-19 not only unleashed the crisis but has also opened opportunities and the urgency to get back to work as soon as possible very often was not made visible or ignored. This concerns a society that needs to recover its rights under a new equitable, inclusive and just framework of social justice that focuses on making progress and re-channeling efforts to achieve the Sustainable Development Goals.

1. Introduction

Bolivia, a landlocked country in South America, with a population of 11.5 million of inhabitants, had a favorable macro-economic context for nearly a decade reaching growth levels of up to 5% of the GDP. Nonetheless, it was unable to avoid the spread of the COVID-19 pandemic.

The pandemic reached Bolivia on March 10, when the country was socially and politically fragile resulting from a crisis triggered by the failed 2019 General Elections and the subsequent transitional government model. Similarly, the macroeconomic context was already fragile as a result of a slowdown in economic growth since 2015, which tested the sustainability of social progress achieved in the previous decade in its attempt to further reduce poverty and consolidate the recent widening of the middle tier.

The sudden appearance of COVID-19 and its exponential growth not only weakened the economy of the country further, but also brought to the forefront the severe weakness of the health care system. Although measures were immediately taken to cope with the pandemic and this helped to slow down the epidemiological growth curve, the spread of the infection and, the collapse of the health care system, revealed underlying structural problems.

This report is based on a previous analysis of the United Nations Development Program (UNDP) (Levy, 2020; Hevia and Neumeyer, 2020) and aims at studying the current situation of the COVID-19 crisis in Bolivia, its transmission mechanisms, as well as certain of its socio economic impacts and furthermore provides food for thought to pave the way towards a collective and inclusive recovery with a focus on multidimensional wellbeing.

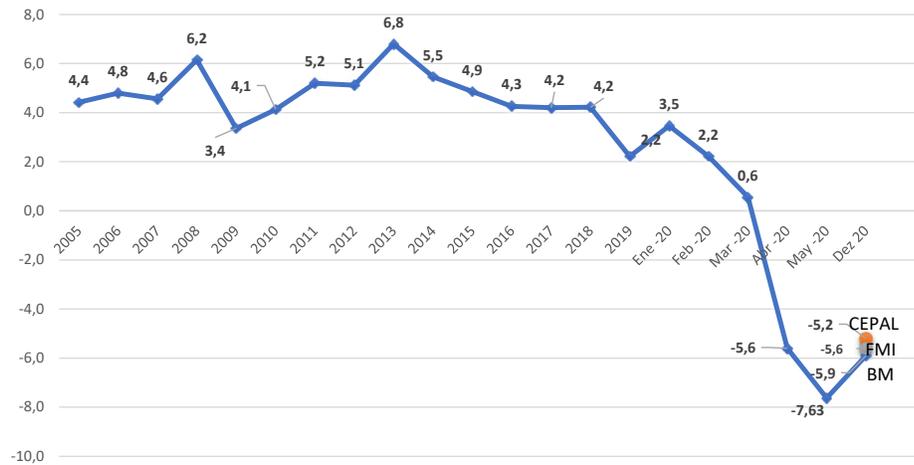
The document is divided into five sections which begins with the introduction followed by the second section that describes the macro-economic situation of the country just before the pandemic struck; the third section describes the socio economic situation before COVID-19; while the fourth section studies the impact of the mitigation measures adopted by the government to curb the economic crisis. Finally, the fifth section provides certain recommendations and conclusions that contribute to the discussion on how the country will recover and the country will continue its path towards a sustainable and integrated development.

2. Macro-economic situation prior to the COVID-19 pandemic in Bolivia

2.1 The real sector

At the beginning of this year the country was bound in a state of inertia since it had enjoyed an economic boom (2004–2013) based on high prices of raw material exports, particularly natural gas, in addition to a dynamic domestic demand spurred by public investment.

Chart 1. GDP growth rate and outlook



Source: In-house preparation based on NIS data in Bolivia.

By 2019 the economic cycle that began in 2004 was reaching its end and the GDP growth rate had dropped to 2.2%, which was the same level as in 2000, the year of the financial crisis. The mining and hydrocarbon sectors were the most affected and registered the biggest contraction due to a fall in the natural gas export volumes to Brazil and Argentina, the main export markets. No less important was the fact the public investment fell and it had been a stalwart for domestic demand during the boom.

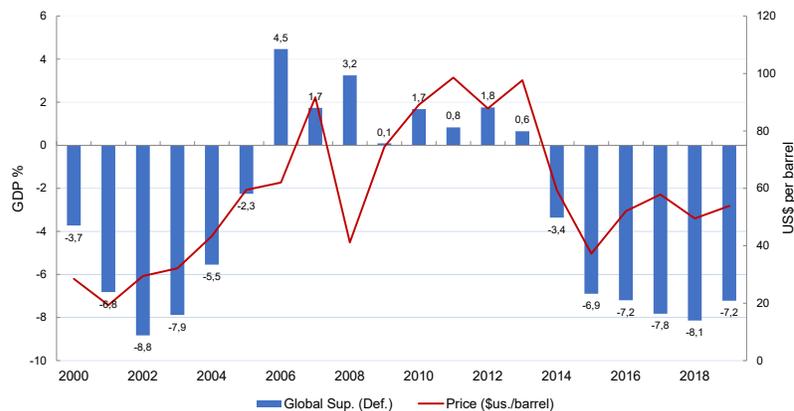
Aside from the economic slowdown, the last quarter of 2019 marks the beginning of a political crisis sparked by the annulment of the General Elections which led the incumbent president, Evo Morales, to resign and ushered into office a transitional government in charge of summoning new elections originally planned to take place in May. However, once the pandemic arrived the election had to be postponed until September 2020, but, due to a high rate of infection, the elections once again had to be postponed until October 18. The enactment of a Law by the Plurinational Legislative Assembly (PLA) ratified this date, following social turmoil in August when the elections were postponed again.

2.2 The fiscal sector

The pandemic hit Bolivia under a very bad fiscal position. The fiscal deficit had been growing since 2014 and had reached the level of 8.1% of the GDP in 2018. Percentages more than 8% had only been recorded during periods of crisis, 8.8% (2002) and 8.1% (1985).

In 2019, the deficit of the Non-Financial Public Sector (NFPS) dwindled to 7.2% of the GDP because public companies received fewer investments. In addition, the general government deficit increased from 6% to 6.9% mainly because it received less current income due to lower hydrocarbon sales. Chart 2 shows the relationship between the SPNF deficit and the international price of oil, taking as a reference the price of natural gas (the main export commodity). The ratio is 0.67 which confirms that the fiscal balance is directly linked to international hydrocarbon prices.

Chart 2. SPNF Surplus and the international price of oil.



Source: Ministry of Economy and Public Finance

The SPNF deficit was mainly sourced by internal credit basically for public entities and, more recently, the central government. In any case, Bolivia still has the possibility of seeking external funds because the external debt in proportion to the GDP barely reaches 28%, which is less than 40% that marks the limit of sustainability. However, there is concern regarding more internal funding since it is already close to 30% of the GDP.

In the first quarter of 2020 the GDP registered a deficit of 0.3% which makes the fiscal deterioration before the pandemic became evident since in former years the first quarter steadily recorded surplus amounts. This deficit has its roots in central government expenditures since public entities registered a surplus. Thus, while the general government financed 86% of its deficit through internal credit, public entities paid for their internal credit. In any case, the government’s public finance is under a double stress, a greater pressure on expenditures and a lower fiscal income.

2.3 The monetary sector

Despite the fact that Bolivia’s monetary policy benefitted from the “Bolivianization”,¹ allowing the Central Bank of Bolivia (CBB) to exercise a greater influence on the monetary market, the foreign exchange policy in place since 2011 somehow restricted the intervention of the CBB in the monetary market by selling dollars to maintain the level of the foreign exchange rate. In fact, the monetary policy is still a policy based on monetary aggregates and is adjusted according to foreign exchange monetary market fluctuations.

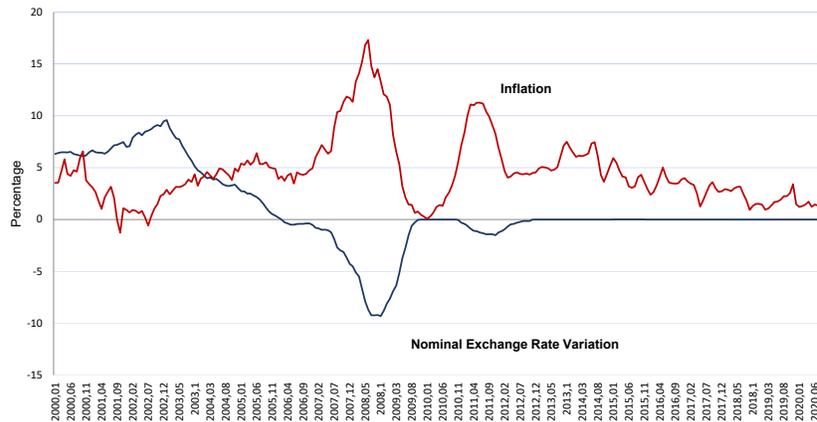
Bolivia started to accumulate Net International Reserves (NIR) as of 2005, as a result of the trade surplus since 2004 and the condonement of the foreign debt in 2005². Since it practically had no external liabilities, it accumulated all the foreign exchange from the current account surplus. This accumulation reached its peak in 2012, when it had 52% of reserves as compared to the GDP. After this year and from thereon the reserves were de-accumulated since there were more external liabilities and, as of 2014, the current account registered a deficit.

Chart 3 depicts the relationship between inflation and the type of variation of the nominal exchange rate. It shows that once a fixed nominal exchange rate is adopted (November, 2011), the inflation trend starts to drop to a level lower than 5% that explains the importance of the nominal exchange rate and how it curbes inflation. After the supply shock due to the quarantine, in April the rate of inflation up to 12 months rose slightly to 1.72%, however during May and as a result of the demand shock, inflation fell to 1.23%.

¹ 99% of the loans and 86% of the deposits are in dollars.

² Multilateral Debt Relief Initiative (MDRI).

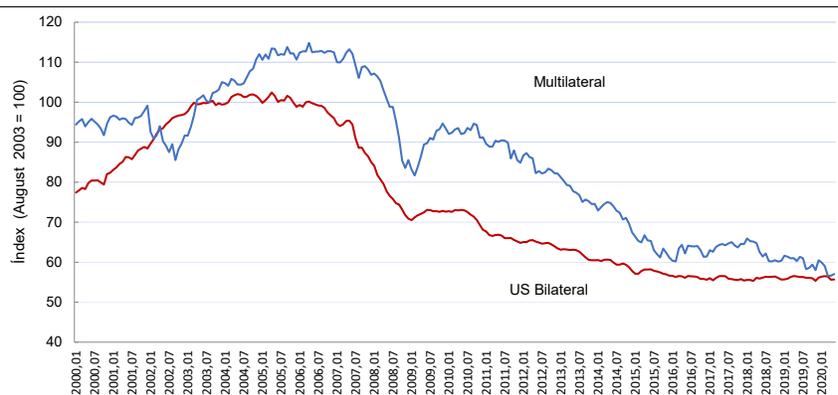
Chart 3. Inflation and nominal exchange rate (variation rate up to 12 months)



Source: In house preparation based on CBB and NIS data

When a fixed nominal exchange rate was adopted this triggered an over-evaluation of the real exchange rate (RER) reflecting how many national goods are required to purchase a foreign good making exports more “expensive” and imports cheaper. Chart 4 shows how the multilateral and bilateral index with the United States RER has evolved and when the over-evaluation began in 2006 and, as can be seen, with the exception of a real depreciation between February and October 2009, the RER has been constantly appreciated.

Chart 4. Real Exchange Rate Index



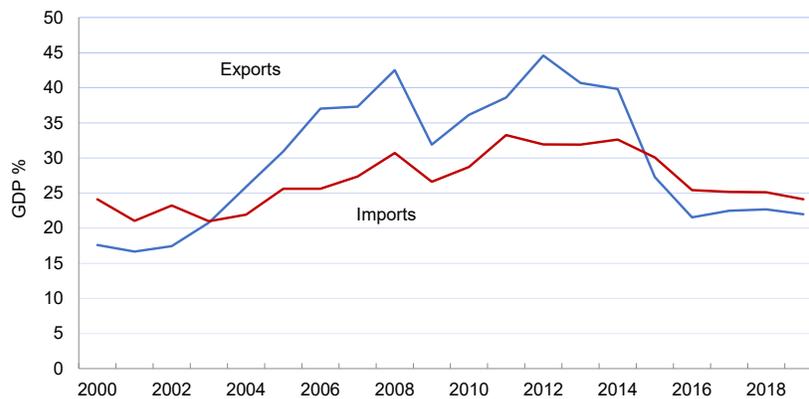
Source: BCB

2.4 The external sector

Between 2004 and 2014 the country had a trade surplus due to an increase of traditional exports, mainly hydrocarbons, and specifically, natural gas, as can be seen on Chart 5. In 2003 hydrocarbon exports accounted for 6.3% of the GDP. In 2013 these exports represented 22% of the GDP. Since then, they started to shrink until reaching 7% of the GDP in 2019.

According to Jemio (2019) the economy of Bolivia was experiencing a phenomenon called “the Dutch disease” since there was a higher average of extractive export activities and non-tradable activities of the GDP and a lower average as concerns non-extractive tradable products.

Chart 5. Exports and Imports (% of the GDP)



Source: NIS

Similarly, the economy of Bolivia has become increasingly dependent on imports. As compared to the GDP, imports have increased from 21% in 2003 to 32.6% in 2014. Afterwards they have steadily dropped until reaching 24.1% in 2019. The fact is that there were more imports due to a higher income from exports and this appreciated the RER, making foreign goods cheaper in terms of national goods.

During the boom period (2004–2013) there were many more imports of industrial supplies and capital goods. The latter increased mainly because of the higher levels of public investment, which has a high imported component. This explains why, since 2015, imports declined because the level of public investment diminished and, as a result, public entities made fewer and lower imports. This also explains the important share of the deficit in services in the current account of the balance of payments. These services are mainly related to public investment.

In 2020, in the period between January and April, the total exports of goods fell by 13.9% as compared to the same period in 2019. Imports also fell by 29.5%. This explains how in the first months of the year, the trade balance had a surplus, in fact, it increased up to US\$198 million, by the third quarter of 2020. This surplus explains the increase of gross international reserves in April.

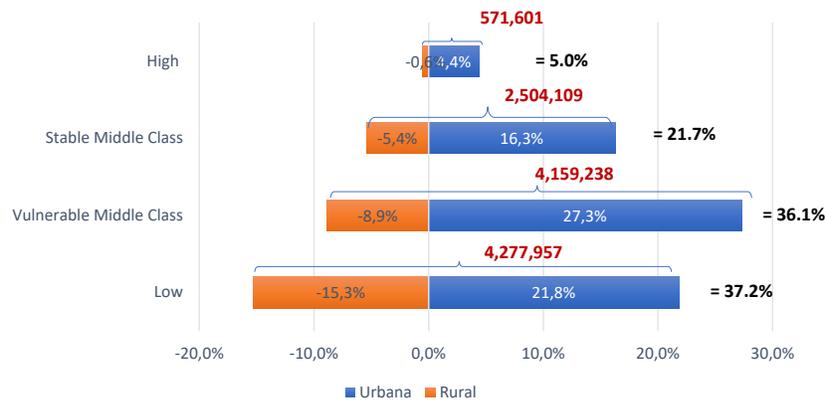
3. Socio economic context prior to the COVID-19 pandemic

3.1. Poverty and vulnerability

In 2019, 70% of Bolivia’s population lived in urban areas, 26% declared to belong to a native indigenous people and most of them were young and in a stage of a constrictive demographic transition. In 2019 life expectancy at birth was estimated at 73.47 years and in that same year the Gross National Income (GNI) per capita was US\$ 3,552. ranking Bolivia as a low medium income country, one of the poorest in the region.

In the midst of the most fragile macro-economic context in the country, the social progress achieved in the last decade has been put to the test, especially as concerns poverty reduction and the strengthening of the middle class which are the first hit in an economic slowdown, particularly in urban areas, due to a contraction of the domestic demand.

Chart 6. Income strata according to residence area



Source: In-house preparation based on a 2019 Household Survey. NIS, Bolivia.

During the economic boom in the period between 2004 and 2013 the population was able to afford much better living conditions and this helped to lift more than 21pp. of the population out of poverty. These people were able to fit into the medium vulnerable and medium stable income segments. However, according to the 2019 Household Survey (HS) the lower segment still comprises the largest part of the population (37.2%) followed by the vulnerable middle class segment (36.1%). Both segments represent a total of 8,432,747 inhabitants.

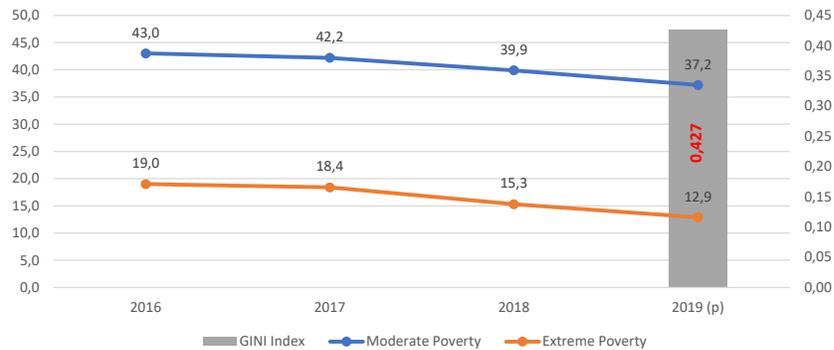
Moreover, Chart 6 indicates that out of 30% of the population that live in rural areas are poor (15.3%) while in urban areas the population is mostly made up of vulnerable middle class. Despite the fact that the pandemic mostly focuses on cities, the data shown herein makes the vulnerability of the rural poor stand out.

Up to 2019, political measures, such as, direct transfers and the backing of public investment with a focus on infrastructure, benefitted the poor and middle class segments of the population. However, the political crisis and the intrusion of the COVID-19 pandemic has affected the performance of the economy and could undo the former social achievements.

Between 2014 and 2015, despite the economic slowdown, monetary poverty continued to shrink due to the stalemate of the economic activity, particularly the service sector and the fiscal impulse that sustained occupation and remunerations at high levels.

In 2019 an estimated 4.3 million people were moderately poor (37.2%) while 1.5 million were extremely poor (12.9%). In addition, the Gini Index concerning the per capita income per family in that same year reveals a severe disparity in the income distribution (Chart 7) to such a degree that the wealthiest decile of the population concentrated 22 times more income than the poorest segment.

Chart 7. Monetary poverty in Bolivia³

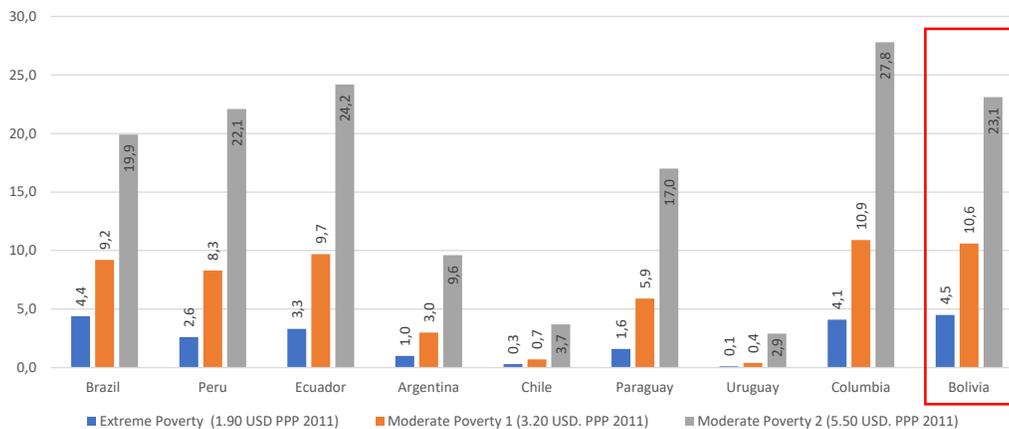


Source: In-house preparation based on the 2016 - 2019 Household Survey. NIS, Bolivia.

*The GINI Index for the period 201-2018 could not be calculated since the data available, that is, the complete household survey adjusted to the new poverty lines is for the year 2019.

According to World Bank estimates, despite having reduced poverty, as compared to neighbouring countries, Bolivia continues to be one of the poorest countries in South America.

Chart 8. 2019 Monetary policy in South America (%)



Source: In-house preparation based on World Bank, 2018.

Bearing in mind the line of indigence or extreme poverty of US\$1.90 per day, which for many countries does not cover the cost of the basic food basket, Bolivia has an incidence of poverty of 4.5%.

There are considerable challenges to avoid returning to former levels of the reduction of monetary poverty in Bolivia which, with the presence of the pandemic, underscores the urgent need to design a complex set of social protection policies.

3.2 The labour world

Despite the growth levels of the Bolivian economy over the past decade, which considerably improved the workers' income, the productive structure of the country did not change nor did the generation of employment and quality jobs improvement (Pereira, et al., 2018). This is related to the development model, which from a

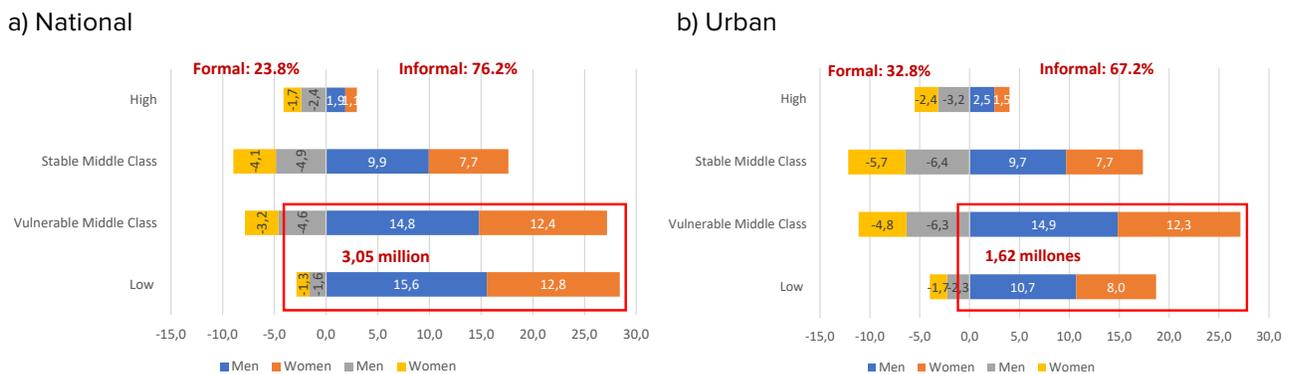
³ The series only considers the 2016-2019 period since it contains the new construction of poverty lines based on the 2015-2016 Family Budget Survey. Therefore, poverty measurements registered in former household surveys are no longer comparable.

historic perspective has consistently been based on labour-intensive natural resource exploitation and exports coupled by extremely low investment rates. This rates are due to a lack of domestic savings, which restricted the funding to drive productive investments to aid diversification throughout the country with a focus on efficiency and productivity.

According to the 2019 HS the potential supply of labour from urban areas represented an estimated 51% of the total population with a slightly higher proportion of women than men. The economic share represents 64.6% of the working age population (WAP) and a considerable gap of 19.1% in detriment of women is evident; with a 6% unemployment rate, the economic dependency is more than two people per each person with a job, more in the case of women than men.

There has been no change of the productive economic matrix and a large part of the population still has precarious jobs in addition to a low level of productivity and quality in the informal sector, which in 2019, increased to 76.2% at a national level and to 67.2% solely in urban areas.

Chart 9. Occupation in the formal and informal sectors according to socioeconomic strata

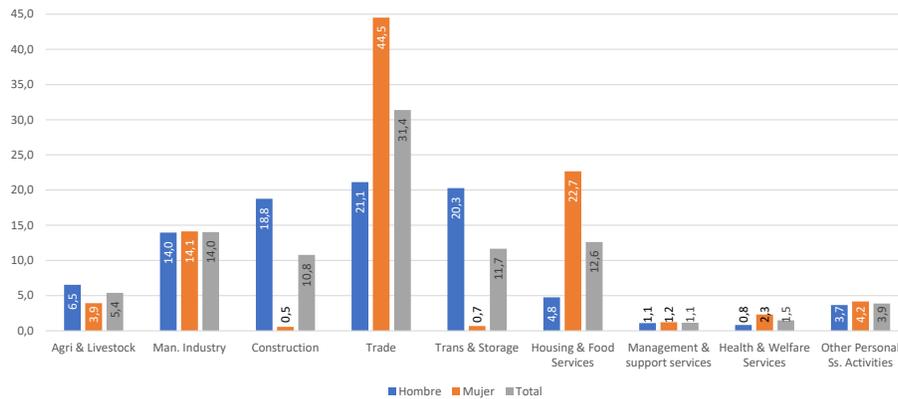


Source: In-house preparation based on 2019 HS, NIS, Bolivia.
 * The indicators have taken into consideration 14 years old as the working age.

Despite a remarkable economic growth, labour concentrates its largest share particularly in the low and vulnerable middleclass population segments as seen on Chart 9 which represents more than three million people. Moreover, this market absorbs nearly eight out of each ten men and a similar proportion of women between 24 and 54 yrs. old who have rudimentary tertiary education.

The sectors with the highest percentage of informal workers in urban areas are, in order of size, trade (31.4%), manufacturing industry (14.0%), hospitality and food services (12.6%), transportation and storage (11.7%) and, construction (10.8%) all of which have been hard hit by the economic crisis generated by the pandemic.

Chart 10. Main informal workers' activities in urban area (%)



Source: In-house preparation based on the 2019 HS. NIS, Bolivia.

These outcomes match the data reported by the Ministry of Productive Development and Plural Economy (MDPyEP) and micro-businesses comprise 90% of the total economic units mostly active in the wholesale and retail market, the manufacturing and foodstuffs industries.

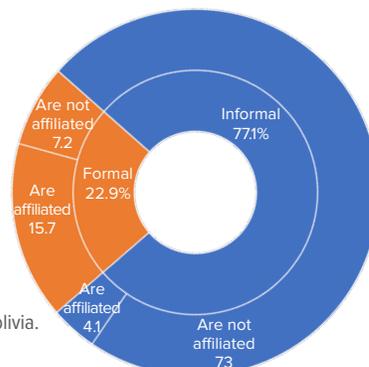
Depending upon the activity, there is also a higher share of women than men, for instance, in trade, since more than 44.5% are unemployed women as compared to 21.1% men, and in smaller numbers, the same happens in the hospitality and food services sectors.

Bolivia is now in a stage of constrictive demographic transition and has a demographic dependency of six per ten person in productive age and consequently there is a margin that can be used positively from this demographic bonus.

However, the narrow spectrum of labour demand for the formal economic sector hampers dynamic links to labour supply that, in the best of cases, do not have the necessary skills or training. In addition, together with the extractive development model that is low labour intensive, the demographic bonus and window of opportunity are not being properly used, and the matter is even worse since the pandemic is rampant and there will be very few opportunities for jobs in the formal and informal sectors.

Self-employed people in the informal market, particularly in the field of trade, work in precarious conditions with no short or long term social security benefits. Social security is linked to formal jobs which are also few despite the fact that application as a social security beneficiary is voluntary and is not only valid for formal workers. Barely one out of each two people have a job in the formal sector and less than one out of eight people in the informal sector are social security beneficiaries (Chart 11).

Chart 11. People registered in a pension fund



Source: In-house preparation based on the 2019 HS. NIS, Bolivia.

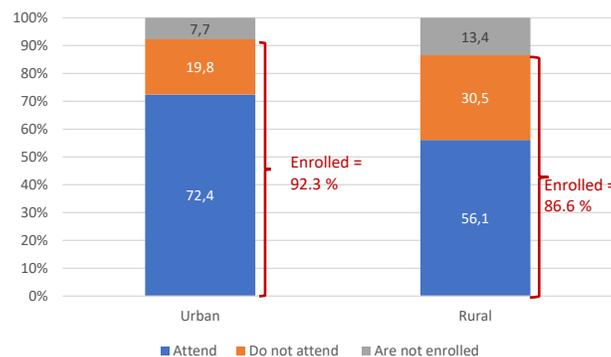
In summary, the labour market structure in Bolivia is extremely fragile and cannot manage the shocks, not only as concerns the domestic demand shocks, but also the supply shocks generated by the COVID-19 mitigation and response measures.

3.3 The To Do List concerning Education

Although the coverage of and permanence in the educational system has improved over the last decade, the sector still has a list of pending issues such as the coverage gaps per place of residence, gender and particularly, quality education measurements.

According to the 2019 HS, the net enrollment of primary and secondary education in Bolivia is 90.4%, but, as seen on Chart 12, the situation by place of residence reveals a 5.7pp. gap in detriment of the rural area as compared to urban areas. However, attendance is more important than enrollment, and, out of the total number of children enrolled in school of age for the grade in an urban area 72.4% attend school while school attendance in rural areas is much lower at 56.1% and this greatly widens the gap.

Chart 12. Net enrollment and attendance in primary and secondary schools according to residence area



Source: In house preparation based on the 2019 HS. NIS, Bolivia.

Since 2006 Bolivia implemented the Juancito Pinto Bonus as a social protection policy to broaden the coverage of school age boys and girls and encourage them to go to class and continue their studies. However, Hernani (2013) concludes that depending upon an ex ante and a counter-factual evaluation method the bonus has only motivated the growth of enrollments but has been unable to encourage school age girls and boys to remain in school, and this situation has not changed according to the above chart.

With the exception of higher levels of education it is evident that gender gaps exist amongst schoolchildren of educational establishments from pre-school, primary to secondary levels. Although the gaps are decreasing in national averages, it is evident that there are still differences in the opportunities that women have to acquire skills related to educational training, particularly at the secondary education level in rural areas, where the gap between men and women even reaches 8.5 pp, this possibly attributed to the domestic and care work that women must assume.

Moreover, the information and communications technology (ICTs) for internet services in households is still scarce in the country and only two out of ten households have internet services. One of the main impacts of COVID-19 will undoubtedly be the educational gap to have access to and use ICTs. In fact, only 24.8% of the households with children enrolled in a public school have access to ICTs as compared to 42% of the households with children enrolled in a private school who are connected. However, this does not mean that having access to the internet through a mobile device, such as an intelligent cellular telephone, has registered a much larger growth as compared to fixed and wireless connections as revealed by the 2019 Study of the Regulation and

Oversight Telecommunications and Transportation Authority (ATT 2019) that reported that in 2018, 94.3% mobile telephones used access technology.

3.4 The universalization of a precarious health care system

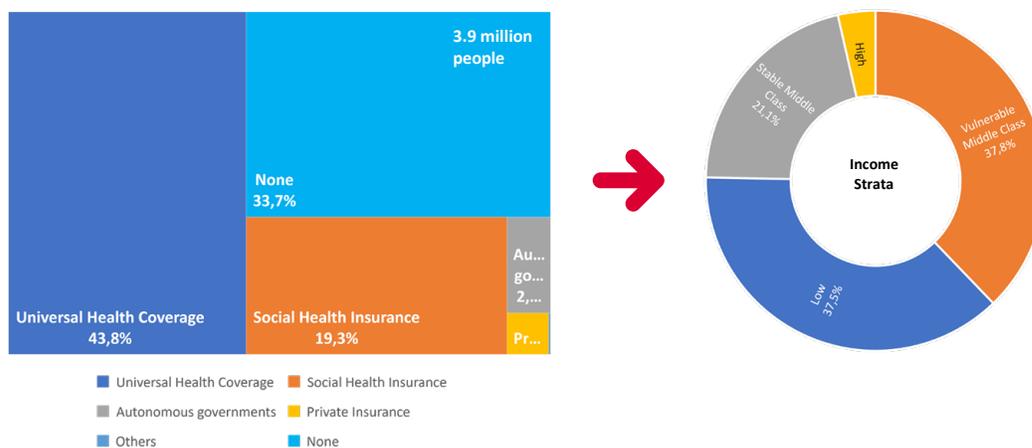
The health care system was established in the decade of the nineties with the National Maternity and Infant Insurance (SNMN) and Old Age Health Care Insurance (SSV) in 1996; the purpose of the former that has 32 benefits was to reduce maternal and neonatal mortality and the second was designed for senior citizens. Both insurances had been added more benefits until the beginning of 2019 under the current Unified Health Insurance (SUS according to the Spanish acronym) which is free and universal and provides an estimated 1,200 medical services; while the Old Age Health Insurance substituted the SSV in 2006 and provided health care services at all levels of medical attention of the health care system.

The National Treasury of the Nation (NTN) financed and will continue to finance 90% of these insurance schemes as regards to the human resources component and will fund 10% through the Municipal Joint Tax (CTM according to its Spanish acronym) from the national tax collection earmarked for infrastructure within its sphere of jurisdiction and according to its level of government.

Unfortunately, changes in the public health care system were not matched by an adequate planning nor the infrastructure or human resources required, nor did it receive substantial funding from the different levels of government, nor did these levels coordinate amongst each other or with the health system. Consequently, this universal health care insurance is actually limited, oversaturated and plagued with flaws and furthermore receives funds in fragmented remittances.

Despite the universal coverage of the public health care system and the fact that it is free of charge, according to the 2019 HS only 44% of the population had been enrolled in the SUS, 19.3% was registered in the short term social security, 1% in private security schemes, while an estimated 34% has no health care insurance.

Chart 13. Population enrolled in a health care insurance

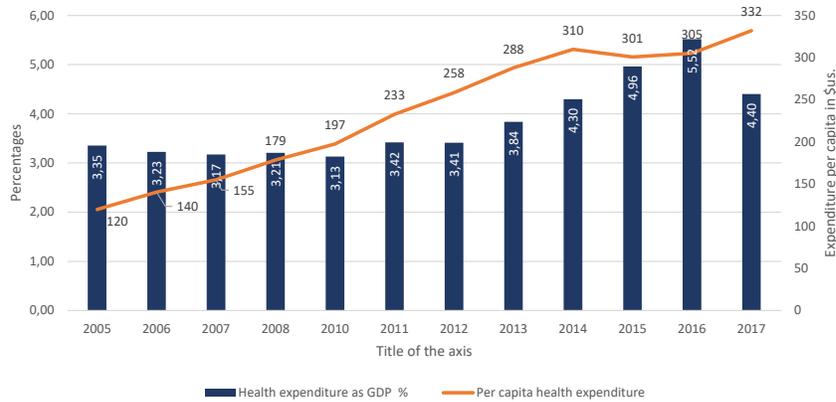


Source: In-house preparation based on the 2019 HS. INE, Bolivia.

As shown in Chart 13, 75% of the population with no insurance coverage belong to the low and vulnerable middle class segments partially due to socially determining factors, such as, the place of residence, family income, adoption of healthy habits and, culture, to mention a few, but also a mistrust due to the poor quality of health care services.

Regarding health expenditures, latest data from the World Bank reveals that in 2017, Bolivia had a public expenditure of 4.4% of the GDP which is less than the Latin American average (4.8%) and although it is higher than countries such as Brazil and Peru, it is still far from the recommended 6% declared by the World Health Organization (WHO). Moreover, due to the relatively small size of the Bolivian economy, in per capita terms, the estimated US\$332 per year as expense in health is one of the lowest in the region, well below the amount Brazil invests (US\$600 per inhabitant). Therefore, although there have been increases in health care expenses, these have been too little and have not keep pace with the demographic growth of the past decades, as shown in Chart 14.

Chart 14. Public health per capita expenditure



Source: In-house preparation based on UDAPE 2018 data, Bolivia.

Great strides have been made in the area of mother child health which registered a higher coverage of institutional child births, however the figure has remained at 84% since 2012 despite the implementation of the Juana Azurduy Bonus.

According to regional data, in 2017 the doctor/inhabitant ratio in Bolivia was 14 per 10,000 inhabitants. Neighbouring countries more than doubled that ratio, Chile (36), Argentina (37), Paraguay (34) and Brazil (31) which comply with the required minimum level as declared by the WHO, to mention a few countries. In Bolivia there is one doctor for each 714 people when the minimum WHO recommendation specifies that there should be at least one doctor for each 333 people.

Although there is no standard number of hospital beds per inhabitant the ratio in Bolivia (1.1 beds per 1,000 inhabitants) lags considerably behind its neighbouring countries such as Argentina (5), Peru (1.6), Chile and Brazil (2.2) and this places the country as second to last in South America.

As concerns high resolution infrastructure, Bolivia has a total of 33 third level hospitals of which, based on data from the Bolivian Society of Critical Medicine and Intensive Therapy (SBMCTI) only 24 have intensive care units. Altogether the number of beds in these hospitals used for these purposes add up to 220, the estimated average bed occupation is 90%, and the 10% in the balance is not functioning. If the WHO recommendation was taken into account, i.e., one bed for intensive care per each 10,000 inhabitants, the public health system could hardly cover 20%.

It is in this extremely precarious situation that COVID-19 struck and due to the universalization of the health care, health care system services had already collapsed. Demand was rampant and overwhelmed the supply, the infrastructure was precarious and had not been renovated since the decade of the 80s and there was a shortage of human resources.

3.5 Housing conditions

Although the possession of a home and adequate housing is a fundamental right this is an issue which together with basic water and sanitation services continues to be missing in Bolivia, particularly in rural areas where the coverage has hardly improved for decades. In the last few decades, the governments implemented several housing programs as a solution to the lack of housing for a large portion of the population. However the living conditions of the people did not improve much at all and even worsened, the qualitative deficit of housing, understood as the possession of housing with structural flaws or flaws in utilities affected 963,327 households per year in 2011, that is, 36.1% (2,669,794 households) of the total number of households, the shortage grew to 1,515,172 households in 2018, that is, 43.8% (3,459,453 households) of the total (UDAPE, 2018).

A look in detail, for example, into the quality of the construction material used to build the walls and ceilings leads to the conclusion that in the country two out of ten households have built their homes with inadequate construction material, and this figure is doubled in low income segments of the population.

Chart 15. Construction material

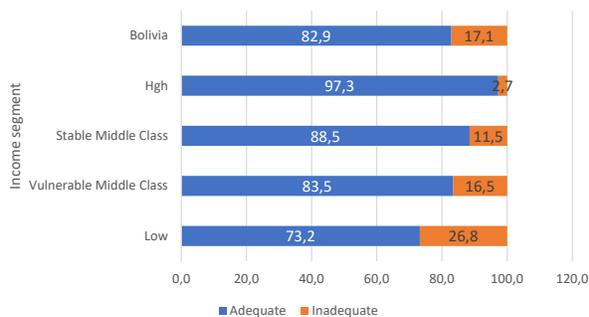
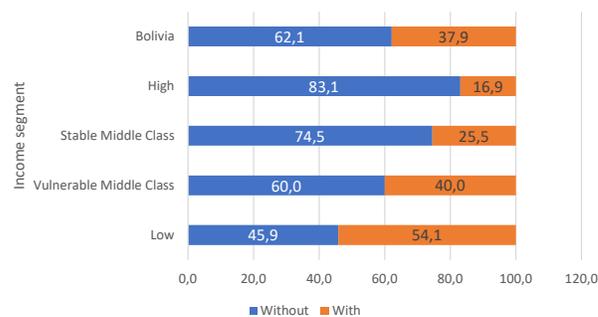


Chart 16. Overcrowding



Source: In-house preparation based on 2019 HS. INE, Bolivia.

Similarly, an estimated 40% of the households in Bolivia are overcrowded and have more than three people per bedroom. It is worse for the lower income segment of the population that register more than 50% living in these conditions.

The qualitative deficit of housing which is made particularly evident in the over crowdedness is not only a breeding ground for sickness and disease but also aggressiveness, violence and even mental disturbances and the development of a person’s personality, but also reveals the qualitative deficit of decent living quarters.

As concerns utilities, such as improved water and sanitation services, the situation is grim, especially as concerns the latter which has serious deficiencies. (See Chart 18).

Chart 17. Improved water

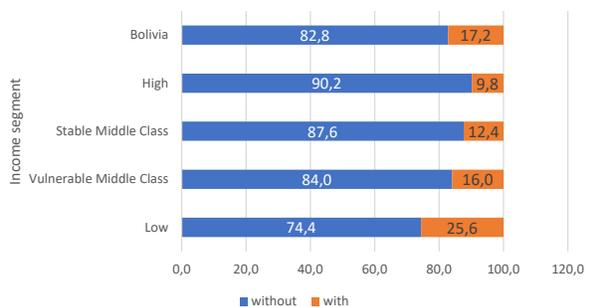
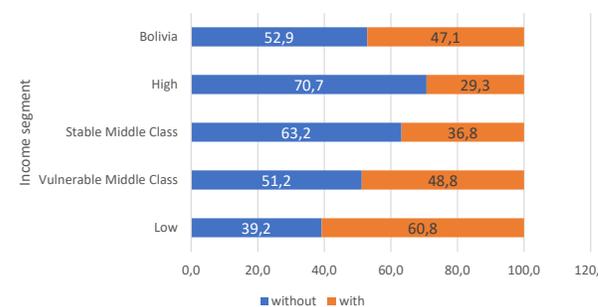


Chart 18. Improved sanitation



Source: In-house preparation based on 2019 HS. INE, Bolivia.

Despite the implementation of a series of government policies to improve the sanitation of housing and investment programs, there have been little progress, not only in rural areas but in urban areas as well. Sanitation has now become one of the main problems and should attract the attention of the government to formulate a public policy. (Escalera and Córdova, 2016).

Although the housing and living conditions are, persistent and structural problems, the COVID-19 pandemic has unveiled the urgent need to address them, since they not only involve deficiencies in rural areas but also deprivations and a lack of rights in urban areas where over crowdedness also uncovers the true shortage of living quarters and its effects, such a surge in intrafamily violence.

In summary, the socio economic context prior to the COVID-19 pandemic in Bolivia reveals that, although the country reduced poverty in the past decades and fostered a growth of the middle class, it focused on the vulnerable middle class more than the stable middle class since the exposure to risks and economic shocks could easily provoke a new fall of the population into a lower income segment.

4. Impact of the measures adopted by the government

The sickness caused by SARS-CoV-2 declared by the WHO as a global pandemic on March 11, 2020 started to spread in Latin America, and Bolivia was also engulfed thus affecting its public health and economy. (CEPAL, 2020).

After the first cases of COVID-19 were confirmed, Bolivia was one of the first countries that reacted immediately to cope with the pandemic. Some of the main measures adopted were closing down borders, suspending classroom teaching at all levels of education and sub-systems; encouraging physical distancing once public spaces were shutdown; lesser working hours; partial, total or dynamic quarantines were declared; income compensation bonuses were created to strengthen the social protection of households, financial support was provided, especially for micro, small and medium sized businesses (Mipymes according to its Spanish acronym), and the health care system was strengthened, just to mention a few measures taken. All of this aimed at safekeeping the lives of people and keeping the economy afloat.

4.1. Sanitation measures

By mid March, a few days after the first cases had been reported, the government declared a State of National Health Emergency and a partial quarantine. Borders were closed to foreign travellers and, in less than a week, the government imposed a total quarantine throughout the national territory in an effort to mitigate the possible impact on the most vulnerable population and the population at large. All types of economic activities were forbidden except those considered to be of essence (health and food supply related). In the meantime the sanitary and economic response would be organized since all business activities had been stopped. In addition to these measures swift processes were established to purchase medical supplies.

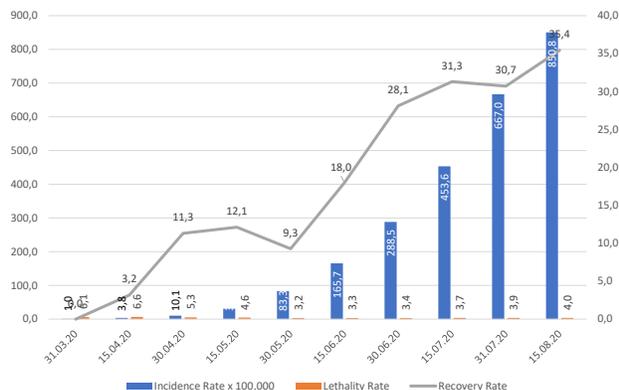
Moreover, the government declared the treatment of COVID-19 free of charge in the public health sector and adopted an extension of working hours for health care workers of the national health system; customs tariffs on medical supplies and equipment were declared to be 0%.

With an exponential increase since the end of March, the COVID-19 indicators turned out to be more aggressive going from a 10% rate of incidence per 100 thousand inhabitants to nearly 850 by mid August. As compared to neighbouring countries in that same period, the indicators revealed very different behaviours, for example, Chile has the highest rate of incidence of contagion (an estimated two out of each 100 inhabitants) but, at the same time, it has a moderate rate of lethality as compared to Brazil and Peru, that also have a high rate of contagion but even so the rate of lethality is lower than that of Bolivia that has less than double the rate of incidence. This time line demonstrates the health crisis response and management capacity handled by each

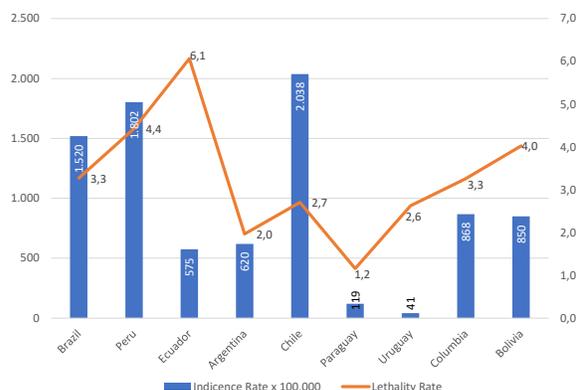
country and especially evidences the precarious health system.

Chart 19. COVID-19 Indicators

a) Bolivia



b) South America



Source: In-house preparation based on data from the Ministry of Health. 2020.
* The data for South America are for 15.08.20

Since it is impossible to maintain a strict quarantine, a dynamic quarantine was established in May based on the construction of a Municipal Risk Index (MRI) that classifies the 339 municipalities of the country into high, medium and moderate risk bearing in mind a combination of epidemiological and demographic variables. This index is updated each week and enables the partial opening of certain territories of the country. Additionally, health care workers were given an incentive with a double work day and double pay.

The outbreak of the COVID-19 pandemic continued to spread and the Department of Santa Cruz became its epicenter, the place that registered the highest number of people infected by this coronavirus. This also entailed several consequences, especially the income lost since this is the most heavily populated Department of Bolivia and has the highest level of agribusiness activity.

With a precarious and overcrowded sanitary infrastructure and a low density of doctors per inhabitant, as seen in the previous section, the pandemic was not restrained despite the prevention efforts to flatten the contagion curve, sentinel hospitals were organized that were obliged to change into a second or third level hospital without complying with the infrastructure requirements for that level, and the same happened in La Paz, and Santa Cruz where hotels and sports grounds were organized to accommodate and isolate the less sick people.

These measures contributed to generate a certain capacity to immediately respond, but other structural problems arose, such as a shortage of human resources, a lack of laboratories to diagnose at a national level, insufficient reagents and diagnostic tests, as well as a scarcity of biosafety equipment and medicine, which unfortunately have undermined the measures related to the quarantine.

Leaving aside the extreme gravity due to a lack of intensive care units, the fact that there are not enough beds required to provide such services is critical, and as mentioned in item 3.4, 90% of the 220 beds available in the public system at a national level for this purpose were occupied, while the balance of 10% was not being used due to several reasons and therefore even without the COVID-19 scenario the SUS were unable to satisfy the demand of their affiliates.

For decades, the health sector in Bolivia has presented a series of deficiencies such as: an adequate planning of public insurance schemes and their implementation, universal coverage and with no charge, public services without infrastructure nor an adjusted budgetary allocation, complete records of the services provided, an

evaluation of the insurance by type of service and not by beneficiary/, a census of the doctors and an analysis of the transitions of the epidemiological profile amongst others, that are needed to plan in keeping with the growth of the population and their real needs as concerns health care services. Moreover, the pre-elections political situation makes the transparency of the records related to COVID-19 sensitive, and there is only partial information available.

At present, Bolivia has entered into a massive contagion phase, however, the size of the occupation in the informal market aggravates the economic crisis and is more severe than the sanitary crisis, making more lockdowns impossible which can also accentuate the health services crisis.

4.2 Social protection measures

The sudden stop of the economy had immediate consequences for the population, affecting their livelihoods, particularly for the men and women of the informal sector, that represents 77% of the occupied population, or an estimated 2,5 million households who are self-employed and are involved in trade (wholesale and retail of non-food products), manufacturing and construction, for example.

With the purpose of compensating the income loss of households due to the lockdown, the government provided three different bonuses especially targeting the vulnerable population: the first was the Family Bonus for a value of US\$ 72, the second was the Family Basket Bonus for a value of US\$57 and the third was the Universal Bonus for a value of US\$ 72 (consider that the minimum national wage is equivalent to US\$ 305).

However, since the country does not have a unified registry of the beneficiaries of social transfers, it is difficult to spot them. The Family Bonus used, as a criteria to identify the vulnerable population, the Sole Students Registry (RUDE for its Spanish acronym) that enabled all households with children enrolled in primary schools in the public education system to have access to the bonus, and later due to the limited scope, pre-school and secondary education levels were included as well in addition to the inclusion of educational establishments of the private system.

As concerns the second bonus that covers the family basket, this should have been originally distributed in kind but, due to the difficulty in logistics, it was handed out in cash, using criteria such as the identification of the registry of Renta Dignidad, the Juana Azurduy Bonus and the registry of individuals with a disability in order to broaden the coverage of the vulnerable population.

Finally, as concerns the Universal Bonus, the criterion used was the exclusion of the former two, the population between 18 and 60 yrs. old and people that do not receive fixed income nor social assistance (retirement pensions) and regarding the latter an effort was made to maximize the scope of the direct transfers. Additionally and with a universal nature, the government declared a reduction of the water and gas service rates by 50% and electricity with differentiated percentages according to the household consumption, for the period the sanitary emergency lasts.

It is estimated that the bonuses for a total quarantine that lasted 70 days (from March 22 up to May 31) were not enough to cover the expense of a complete basket of products and services that a family normally consumes, despite the fact that it did help to cope with the food needs with a value of US\$66.7 per person per month in 2019, in an urban area and US\$47 in a rural area (INE, 2019). Considering that up to August 13 more than 7.6 million payments were made, it is expected that the low income segments were benefitted covering 4.3 million people.

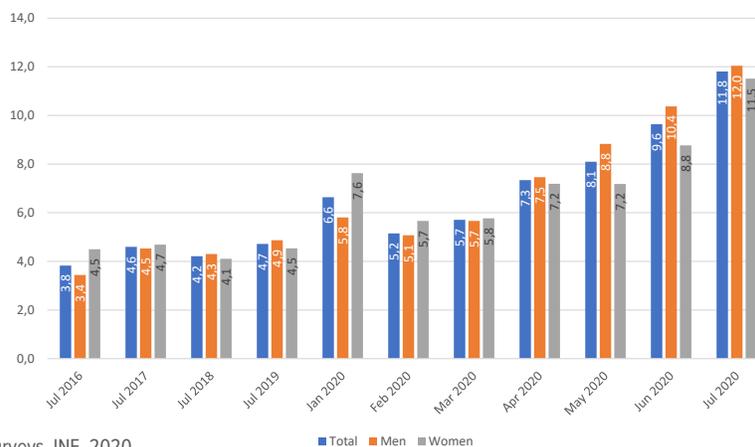
Households have been mostly concerned about preserving their source of income. According to a research done by the ARU Foundation on the effects of the pandemic in Bolivia, by using micro-simulations a conclusion was reached in that the family income diminished by an estimated 42% during the lockdown, mainly affecting

independent workers (salesmen, members of business associations and constructors, to mention a few) that represent 80% of the informal sector and this involves more than 3.5 million people, especially women in low Income and vulnerable middle class segments.

The balance of 15% comprised by the micro and small businesses also stopped working and were witness to the partial or total destruction of their activities that interrupted the supply chain to the markets. Many of them, which had taken loans, had to pay them back and had to pay salaries, and practically, in both groups they were excluded from benefitting from social security because of the typical characteristics of this sector.

Similarly, 26.4% of labour in the informal sector of the economy is exposed, since on the one hand there is too much home office work that clashes against the routine of household chores, especially in the public sector. On the other hand, workers in the private sector and who are not involved in foodstuffs or personal protection products, are affected because they are also running the risk of being fired. This would lead to an increase of unemployment and underemployment because of the reduced working hours. Although the Ministry of Labour, Employment and Social Security (MTEPS for its Spanish acronym) forbids the unjustified dismissal of workers both in the public and private sectors to guarantee job stability and payment of wages, in reality this has not been sustainable and has generated even higher levels of unemployment, 11.81% in July as well as the exit of the labour force that reflects the lower dynamics of the urban labour market.

Chart 20. Behaviour of the urban unemployment rate



Source: Rolling Employment Surveys, INE. 2020
 *Considers 14 yrs. old as the lowest age to work.

According to the Continuous Employment Survey (ECE, 2020), it has been estimated that the population affected due to the pandemic's mitigation effects up to July was 698 thousand people, made up of 289 thousand (60%) circumstantial inactive people and 409 unoccupied people (40%) and in the measure in which the economy was reactivated, the inactive people started looking for a job and therefore fell into the classification of dismissed in the unoccupied dismissed workers category (in April the composition was 82% inactive workers and 18% unemployed).

Of the people who became economically inactive due to the pandemic, 62% were women and 38% men, while those who had been dismissed were 59% men and 41% women, which is reflected in the unemployment rate of Chart 1. In this manner, the most affected age groups were individuals between 18 and 44 yrs. old.

Table 1. Dismissed unoccupied population according to the last economic activity

Economic Activity	April (p)	May (p)	June (p)	July (p)
Construction (%)	20	23	30	23*
Foods and restaurants (%)	13	11*	8*	13*
Transporte and storage (%)	11*	5*	5*	6*
Trade (%)	10	14	13*	15*
Manufacturing Industry (%)	8*	14	9*	9*
Other (%)	37	33	34*	34*
Unemployed people affected (in thousands)	81	123	153	289

Source: Rolling Employment Survey, INE. 2020 (p) Preliminary

* Variation coefficient higher than 20%

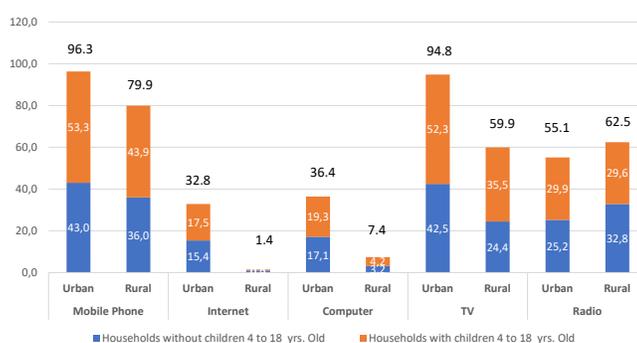
Moreover, the most affected activities of the dismissed unemployed up to July were in order of importance: construction (23%), trade (15%) and food and restaurants (13%).

The quarantine exposed the households to daily coexistence within the dwellings (24/7), which in 44% of the cases had deficiencies either because of the poor quality of the construction material, the over-crowdedness (38%) or no running water or improved sanitation. But especially because the overcrowded urban living conditions, aside from contributing to the spread of the virus also sparked more intra-family violence against girls, boys and women. Of the total criminal acts processed by the Attorney General of March 22 up to May 31, 81% (2,378) involved domestic violence and, although the figures are lower as compared to the same period in 2019, this does not mean that there are fewer cases of intrafamily violence as such, but that the Attorney General's Office assumes that the victims were unable to present a formal accusation.

Also important is the impact caused by the pandemic on the education sector, especially in the public sector, affecting an estimated of 3.1 million students (14.5% pre-school, 36% primary, 30.1% secondary and 18.6% tertiary). The education system did not adapt to a virtual model, partially because of the students and the teaching staff but also because they did not have the necessary tools (a computer or an intelligent device) nor access to internet services. In addition if they had access to Internet the bandwidth speed was deficient or ultimately they had not acquired the skills or training to know how to use the virtual classroom modality.

In this sense the government declared that as of August 3, the school year would be closed and decided that all the schoolchildren at the pre-school level, primary and secondary levels would pass the grade with no student failing the grade.

According to the 2019 HS 47.9% of the households have internet, although only 23% of them had the service in their homes, and, the situation is worse in rural areas where a bare 22.8% of the homes use internet but only 1.4% have access to the service in the houses.

Chart 21. Possession of ICTs in homes, according to school age children and place of residence


Source: In-house preparation based on 2019 HS. INE, Bolivia.

These numbers reflect the challenges faced by the education sector as it struggles to adjust to the new virtual classroom modality including the use of radio and TV. In addition, the entire educational curricula must also be adapted and teachers must be trained to become adept in the use of these new modalities. Thus, the quality of education is postponed.

Since the educational system needs time to adjust, in the long run this situation will most probably exacerbate the asymmetries of education. Aside from having access to ICTs, these innovative distance learning methods must also provide students with the basic tools, in order to guarantee that these initiatives will be effective for each and every student and teacher, regardless of their socio economic situation, gender or place of residence. (López-Calva, 2020).

4.3. Economic policy measures and their repercussions

In aggregate terms, there have been expansive economic policies to alleviate the effects of the pandemic. The fiscal policy has focused on implementing social protection measures and expanding the health care supply while the monetary policy has aimed at increasing the economy's liquidity.

The three Bonuses (transfers) distributed under the framework of the social protection system generated a fiscal expenditure of an estimated Bs.3,478 million (US\$500 million) that have been completely funded by domestic loans from the Central Bank of Bolivia and the National Treasury. As seen in Chart 2, up to August an estimated 7.6 million people benefitted and US\$475.71 million had been distributed which represents 95% of the planned amount.

Table 2. Expenditures and beneficiaries of the mitigation measures against COVID-19 adopted by the Government

	Amount (in USD)	Benefited (in millions)	Total (in millions USD)	(%) of GDP (2019)
Transfers (al 19 de agosto)		7,58	475,71	1.17
Canasta Familiar	57	1,05	59,85	0.15
Bono Familia	72	2,91	209,52	0.51
Bono Universal	57	3,62	206,34	0.50
Credit deferral		1,00	431	1.06
Payment of basic services		10,4	112,1	0.27
Special support program for micro, small and medium enterprises		0,78	215,5	0.53

Emergency plan to support employment and work stability			287,3	0.7
Total			1521,11	3.75

Source: In-house preparation based on data from the Ministry of the Presidency and the Micro and Small Businesses and Pension Funds (MEyFP).

The extension of the term to repay loans is an important program since it provides a relief for an estimated Bs. 3,000 billion (US\$431 million). Through this program financial intermediation entities put into effect the automatic extension of loan payments on capital and interests and other types of obligations as of April 1, and this has been extended for the full term of the sanitary emergency. In May, the government extended this term until June, July and August for borrowers with a debt less than Bs.1 million (US\$143,678) and, if the debt is larger, an additional three months more. This program has been extended until December and this could overload the financial system.

A Financial Relief Program was adopted for up to Bs.1,500 billion (US\$216 million) for loans to Micro and Small Businesses (Mipymes) in the service, production and trade sectors, for up to five years, with a grace period from six months to a year and an interest rate regulated by the Ministry of Economy and Public Finance (MEFP according to the Spanish acronym). With a maximum amount of a loan of up to Bs.115,000 (US\$16,523) this program aimed benefitting people who do not have social protection, workers, self-employers and family business, who buy goods and services in the informal sector. This also includes employers and employees of the Micro and Small Business (Mipymes) sector that have 10 or more workers who are not protected by the General Labour Law.

An Emergency Plan was also implemented to Support Employment and Labour Stability that provided resources to legally incorporated companies with a payroll of employees covered by the pension system to enable them to pay their workers. This plan was implemented by providing loans through the financial system for an amount equal to two national minimum salaries per worker per month up to a maximum of two months. The credit plan, of concessional type for a term of up to 18 months and with a six month grace period was financed with resources from the MEFP and the Ministry of Development Planning, and Bs.2.000 billion (US\$ 288 million) were given, which is equal to 0.7% of the GDP. However, these loans have no government guarantee and the amounts channeled by banks are unknown.

Moreover, other tax-related measures have been applied. The payment of the Corporate Profit Tax has been postponed until May 31 (IUE), aside from the option to pay in installments. The declaration and payment of Value-Added tax, Transaction Tax (IT), RC-IVA and others, have been postponed until June. The tax collection up to August 3 registers a drop of 30.5% as compared to the same period in 2019. However, since April there has been a moderate recovery.

All the fiscal measures involve a total expenditure of Bs.11,693 billion (US\$1.680 billion), representing a fiscal impulse of an estimated 4% of the GDP, as shown In Chart 3.

Table 3. Monetary and Fiscal Impulse

Measurements	In millions USD	in % GDP
Fiscal cut due to taxes	368,3	0.9
Discount in basic services	112,1	0.3
Sub-national transfers	19,4	0.0
Business and support for employment	502,9	1.2
National transfers	677,4	1.6
Total	1680,1	3.9

In the Financial System		
Purchase of public securities held by the AFPs	499,4	1.3
Credits guaranteed by the CPVIS funds II and III	520,54	1.3
Potencial credit guaranteed by the CAPROSEN fund	456,75	1.2
Potencial credit with repo collateral with DPF	2658,33	6.8
Reprogramming of loan repayments from the financial system to the private sector	2498,27	6.4
Credits in repos with public titles	126	0.3
Credits guaranteed by the RAL fund	602,87	1.5
Increase of funds in custody	79,88	0.2
Total	7442,09	19.0

Source: In-house preparation based on MEFP data.

Note CPVIS Fund: CAPROSEN Fund for the Productive Portfolio and Social Interest Housing; Credit Fund in National Currency to Purchase National Products and Pay Services of a National Origin; RAL Fund : Liquid Asset Requirement Fund.

The CBB adopted an expansive monetary policy by implementing several mechanisms, for example, the injection of liquidity into the Financial System for an amount of Bs. 3.476 million (approximately US\$500 million). This injection applied the TGN bonus purchase mechanism that the Pension Fund Administrators have in their power (PFA). The PFA channeled these resources obtained through sales to the banks by purchasing Fixed Term Deposits (FTDs) in keeping with their investment policies. This operation increased the level of deposits and liquidity in the banks and funds were injected in national currency in terms between four and 20 years, that were used to increase the credit portfolio, and also to improve the yield of the Pension funds. This purchase was made directly to the PFA and not through the Stock Exchange just because it was a quicker mechanism. In essence the CBB acquired a debt of the TGN.⁴

Chart 3 shows others measures applied in the financial system which in total represent a financial impulse of Bs.51.797 million (US\$7.442 million), that comprise 19% of the GDP. This amount has been placed at the disposal of the financial system in order to reactivate the domestic demand through loans. However, the amount that has been channeled through loans is unknown, but it is estimated to be large because the banks have been reluctant to provide loans.

According to the CBB (2020), the stimulus offered through the measures to increase loanable funds was reflected by an increase of liquidity, for the first time in the last ten years, up to the first semester, a positive flow of Bs.1,811 million (US\$ 260.2 million) was registered.

The fiscal policy will continue to be expansive and will focus on creating long term employment programs and on providing short term loans, partially driven by the elections agenda. A decree has been recently issued that adopts the “National Employment Reactivation Program” which aims at implementing employment programs and projects for infrastructure rehabilitation work in health, education, water and basic sanitation, irrigation, roads and highways, urban areas, environmental care and protection actions and others, in capital cities, municipalities and departments most economically affected by the spread of COVID-19.

The implementation period of this plan is two years and it has an initial funding of Bs.100 million (US\$14 million), therefore it will require external funding. Undoubtedly the fiscal deficit will increase due to the sanitation and economic expenditures. However, on the other hand, the public investment adjustment which will continue may somehow compensate the expenses, consequently, the deficit is not expected to grow very much (at least not for the moment)⁵.

The adjustment to be made to public investment will also reduce imports, and therefore a reduction of the

⁴ www.paginasiete.bo/economia/2020/3/25/bcb-inyecta-bs-3476-millones-la-economia-para-garantizar-la-estabilidad-250836.html

⁵ Moodys estimates a deficit of 13% of the GDP (Government of Bolivia, Issuer in Depth, Moody's Investors Service (May 26).

deficit in the current account of the balance of payments can be expected. A drop in exports is also expected, both as concerns the volume and value. It is still too soon to foresee how much the deficit can grow. In any case, the twin deficit will persist (the fiscal deficit and the trade balance deficit), and will give feedback in the coming months as a result of the expansive policies applied by the government to mitigate the impact of COVID-19.

Bolivia has the advantage of having a low level of the external debt to GDP ratio which is 28% and according to the IMF (2020) this level fits perfectly well into the pattern of medium-low income countries. Moreover, it is a long term debt and at extremely favorable rates which considerably reduces the probability of short term non-sustainability episodes. The total public debt represents 58% of the GDP by the end of 2019 and the IMF foresees an 8% increase by 2021.

Additionally, the CBB through the internal credit to the public sector has been financing all the policies applied to contain the pandemic and mitigate the economic effects. The loans granted by the CBB to the TGN for an amount of Bs.7,000 million (US\$1.005 million) used to finance the social protection programs stand out. This loan was made under the framework of the 2020 Financial Program, signed between the MEFP, the MPD and the CBB. Although the government could continue to finance itself through internal credit from the CBB the increase of this credit without reducing the RIN, can only be possible through a bigger emission that could trigger inflation.

Bolivia has had access to several loans from multi-lateral organizations, however not all have been implemented to date, due to a delay in their approval by the ALP, and the ongoing political party discussions between the Executive and the Legislative branches of government. In total US\$1.251.3 million, have been received as shown in Chart 4.⁶

Table 4. External credit (in millions of US\$)

Multilateral Organization	Amount	Destiny
International monetary fund	327	Health expenditures and social protection
CAF-development Bank LA	50	Health expenditures
World Bank	424.3	Temporary transfers and social investments
Inter American development Bank	450	Social investments
Total	1,251.30	

Source: In-house preparation based on data from multi-lateral organizations.

The first disbursement was made by the IMF for US\$327 million. This is a loan, through the Quick Financing Instrument (QFI) mainly used to confront the needs of the balance of payments related to the COVID-19, to support the necessary medical expenses and measures to assist and protect the wellbeing of the population⁷.

The CAF – Latin American Development Bank provided a loan for US\$50 million, to build the response capacity of the health care system by purchasing personal protection equipment for the health care staff, contracting specialist doctors and nurses, training the staff in how to manage a pandemic and purchasing goods and equipment for the different levels of health care.⁸

The World Bank placed at the immediate disposal of the government of Bolivia US\$170 million to strengthen the response capacity of the health care system. These resources, the only that were executed, were used to buy

⁶ Private contributions account for Bs. 19.7 million, channeled through the UNDP.

⁷ www.imf.org/es/News/Articles/2020/04/17/pr20170-bolivia-imf-executive-board-approves-emergency-support-to-address-covid-19

⁸ www.caf.com/es/actualidad/noticias/2020/04/caf-otorga-credito-de-usd-50-millones-a-bolivia-para-atender-la-emergencia-sanitaria-ocasionada-por-el-covid-19/

medical goods and supplies, equipment and material for the prevention, detection and treatment of COVID-19, as well as to protect the health care professionals. These funds were provided thanks to the restructuring of the Health Services Network project.⁹

Additionally, the World Bank approved two loans agreements (one of which is concessional) for US\$254.3 million, with the purpose of supporting the financing of temporary transfers to poor and vulnerable households with school age children and youngs, people with a disability, senior citizens, and informal workers affected by the lockdown imposed on all.¹⁰

Finally, the Inter-American Development Bank (IDB) approved a loan for US\$450 million to contribute to assure the minimum levels of the quality of life for the vulnerable population vis a vis the sanitary crisis. Clearly these resources are for social investment in order to alleviate poverty.¹¹

The ALP has recently approved the loans from the World Bank and the IDB for US\$704.3 million. However, it did so by modifying the destination of these resources that are now being used to finance the “Bonus Against Hunger” through a benefit of Bs. 1,000 (US\$143.68) for individual over 18 yrs. old who have no means of income, breastfeeding mothers and people with a disability.¹²

Should all these external resources be approved, bearing in mind that the external debt by the end of 2019 was US\$11.267.8 million, this means an 11% more debt and this accounts for 30% of the GDP in 2019.

5. Conclusions and recommendations

When at the beginning of 2020, most economic sectors started to recover from the social turmoil due to the conflict over the elections at the end of 2019, the economy was shaken once again by the COVID-19 pandemic and ensuing emergency.

It all began with a supply shock that obliged the trade, services, manufacturing, construction, restaurants and hotel, transportation and storage sectors to stop their activities because of the lockdown. These sectors concentrate a large percentage of employment (60%), both formal and informal jobs, and salaries and wages were not being paid and in other cases workers were either sent home or obliged to leave the job. This had a major impact on household incomes, whose members had to reduce their consumption, which then provoked a demand shock.

The 2020 growth forecasts aimed at a growth rate of nearly -6% of the GDP. Such a low rate has not been seen since the decade of the 50s after the National Revolution. This means that many achievements in the field of socio economic development over the last decade could be lost, exposing not only the population of the vulnerable middle class, but the stable middle class as well, since it could fall into poverty once again or become poor.

The health care crisis has made the need to have a well-structured social protection system. Its structure must be especially created and designed for this purpose and must be able to adapt and respond to a crisis. The non-contributory transfer that already exist must be restructured and centralized (Bono Juancito Pinto, Bono Juana Azurduy and Renta Dignidad) at the same time a unified registry of beneficiaries must be developed at a national level (for both urban and rural areas) that will enable a timely identification of individuals who need different types of medical attention and that covers all their life cycle.

⁹ www.bancomundial.org/es/news/press-release/2020/05/08/el-banco-mundial-apoya-con-us170-millones-la-respuesta-a-la-emergencia-por-el-covid-19-en-bolivia

¹⁰ www.bancomundial.org/es/news/press-release/2020/05/15/impacto-economico-hogares-bolivianos

¹¹ www.iadb.org/es/project/BO-L1216

¹² eldeber.com.bo/economia/asamblea-aprueba-bono-contra-el-hambre-financiado-con-creditos-del-banco-mundial-y-bid_195729

The registry and the focalization should be transparent and linked to the other registries to form a triangle of information as well as criteria for additional options, in a manner such that the addition or deletion of beneficiaries can be monitored, depending upon the effectiveness of the policies. Similarly, aside from contributing to an efficient expenditure by focalizing programs, money transfers or deliveries in kind, this would also foster a gradual clarity required to plan other possible short term temporary allowances, taking into account that in Bolivia there is no unemployment insurance.

Since Bolivia has no registry of beneficiaries, the allowances practically have a universal nature and the people in need benefitted as well as those not in need, and this has made the measure ineffective and regressive.

As the pandemic spread and the lockdown measures were longer than expected, many companies had to shut down and dismiss workers, resulting in a higher rate of unemployment. From the lockdown period and up to date the NIS has registered the loss of wage-earning jobs, however, on the other hand, non-salaried workers and family assistants were thrust into the informal job market.

In this sense, maintaining household incomes has become a challenge and the nature of informal employment and its link to the field of economic activity must be understood. Many entrepreneurs will have to reinvent what they do, change their business model or include new digital technologies, together with a re-structuring and administrative simplification for their creation and performance. This is an interesting opportunity for micro and small enterprises since by digitalizing their business activities they will be able to increase their productivity. As concerns education, a broader vision is needed to prompt adaptation in a crisis. Initially, an adjustment is needed using the tools, material and technology available. Virtual classroom activities through radio and TV would be helpful not only in rural areas, but also in cities; for homes that cannot afford internet services or do not have technological devices. No less important for this effort is constant teacher training and formation. Second, the aim is to gradually reach connectivity regardless of the sanitary crisis and that it should be considered as a basic service in households. In addition, a structured curricular program must be developed that complies with the standards required to deliver quality education.

As regards to health, regardless of the timely measures adopted to mitigate the effects of the pandemic, the government's reaction has not been enough. At present, in three of the major cities located in the central axis of the country the health system has collapsed due to a lack of infrastructure, medicine or medical supplies. According to Cardona et al. (2020), the capacity to conduct continuous diagnosis is still limited and the reporting of new cases and deaths due to COVID-19 is deficient. Epidemiological monitoring is hampered because there are no updated variables or detailed information available and furthermore, the data in general has not been updated. The lack of updated data regarding the number of beds in the ICU as well as the number of respirators available in the health establishments must also be mentioned.

At the moment, telemedicine in some contexts is beginning to work, as well screening measures in homes with the purpose of preventing people from becoming extremely sick and requiring intensive care. However, this modality could even continue beyond the health emergency, thereby improving control over public health.

The health sector has more deficiencies than others. However, the crisis has made the most urgent and priority issues that need to be re-structured come to the fore. Similarly to education, a process must be followed and therefore, in order to make an adjustment of what there is (as concerns the infrastructure) in this period, an extremely detailed and transparent registry must be prepared that will be used to improve health planning and that keeps pace with the population's needs and growth.

As concerns the economic aggregates, as explained, Bolivia still has the capacity to become indebted externally since it is 12pp below the threshold considered to be sustainable. Moreover, it is the country with the highest monetary impulse in South America (19%). If the fiscal impulse were added, there would be an economic policy impulse of 22.9% of the GDP, which only Brazil has surpassed (25.6% of the GDP).

The monetary policy has accomplished its role of providing the financial system with enough liquidity through different mechanisms including the CBB that gave loans to the banks at a 0% interest rate with the commitment by the banks to provide loans to purchase national goods and services. The red tape involved is still cumbersome and these funds have not been effectively channeled, especially as concerns the productive sectors (at present there is no data regarding the progress made) despite the overwhelming demand. A UNDP survey in July reported that 80% of the Micro and Small Enterprises need a capital injection through loans in order to ensure their reactivation.

Therefore, in the coming months the CBB together with the Authority of the Financial System (ASFI) must design the necessary mechanisms to encourage the banks to give out the loans. This is of the essence in order to reactivate the micro, small, medium and large enterprises that are in great need of credit.

Bolivia has also experienced an external shock due to the drop in the volume of exported gas to Brazil and Argentina and lower terms of trade. However there have also been fewer imports of capital goods and inputs for the industrial sector. Consequently, up to June the Trade Balance registered a surplus of US\$163 million, a figure not seen since 2015, and this has helped to recover the Net International Reserves (RIN) which is fundamental to maintain the exchange rate policy.

There is a limited margin to broaden the fiscal Impulse, since the TGN has few resources left and funds from the CBB will not be forthcoming, because, by Law it can only offer loans to the NFPS in exceptional and emergency cases. Under this framework between March and May, 2020 Bs. 9,800 billion (US\$1.408 million) have been provided and therefore in the future, the best funding option of the TGN will be external indebtedness.

Last but not least, aside from the sanitary and economic crisis, the political crisis is pervasive and has become worse since members of the transitional government have decided to run for office in the elections. This reveals a dispersion between the elections campaign and the administration of the government. This has sparked serious social cohesion problems, as well as a regional polarization (between West and East) and racial issues. All of this compounds a good governance crisis that the elections on October 18 will hopefully resolve.

In summary, the COVID-19 pandemic not only introduced a crisis but opportunities as well and the pressure to get to work as soon as possible is paramount despite the fact that this is often not made visible or ignored. This concerns a society that strives to recover its rights in a new framework of a social contract, that is, more equalitarian, inclusive and just. It must have a perspective of sustainable development as concerns the productive sectors, and must protect nature and the environment. In this manner it will be able to refocus efforts towards attaining the Sustainable Development Goals.

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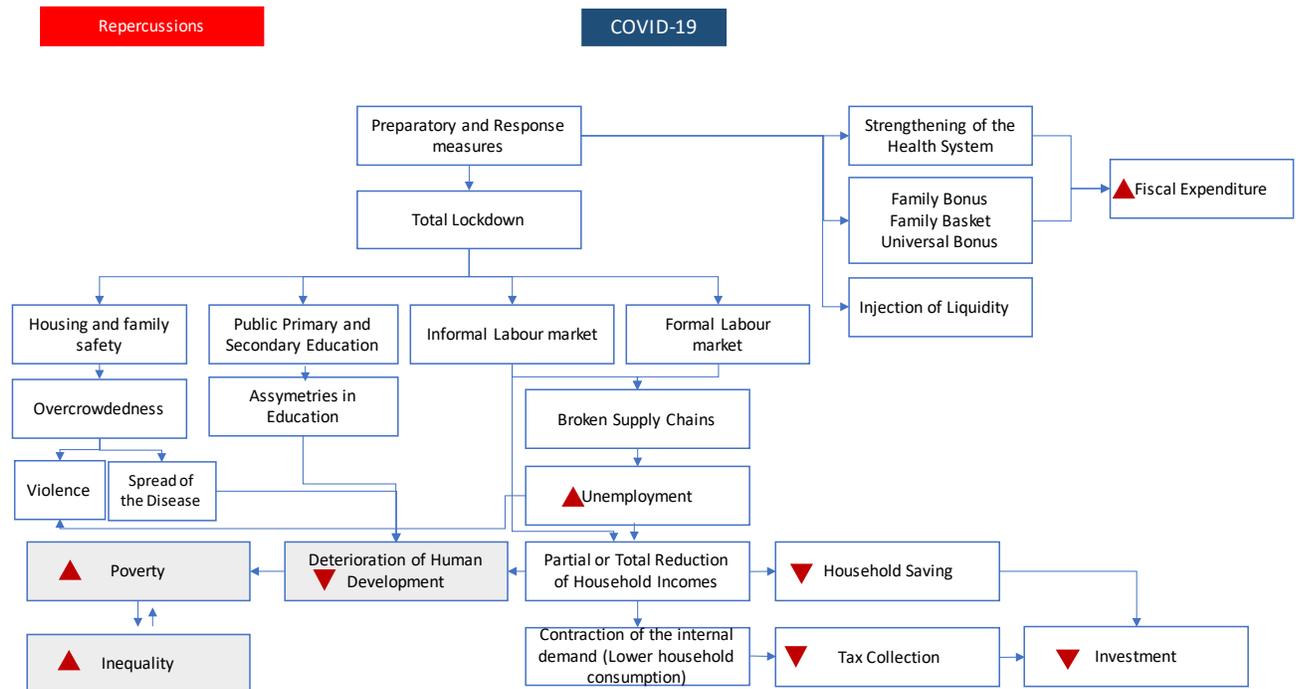
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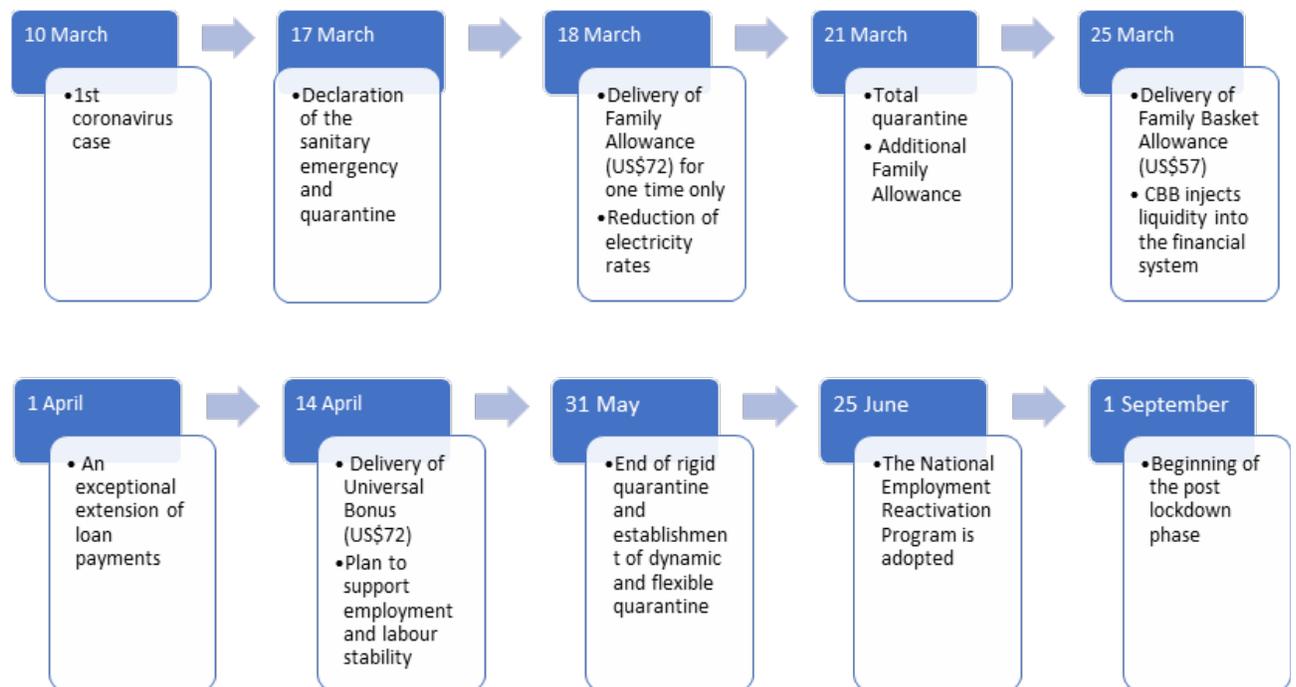
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Annex 1. Socio economic impact of the measures to cope with the COVID-19 pandemic



Annex 2. Timeline of the measures adopted



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



V2 Country Notes

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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