



UNDP LAC C19 PDS N°. 15

Social and Economic Impacts of the COVID-19 and Policy Option in the Dominican Republic

By Sócrates Barinas and Mariana Viollaz*

UNDP Dominican Republic | Centro de Estudios Distributivos, Laborales y Sociales (CEDLAS), IIE-FCE, Universidad Nacional de La Plata.

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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.

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Introduction to the series:

Evidence, Experience, and Pertinence in Search for Effective Policy Alternatives

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 policy-making 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 F. Lopez-Calva
United Nations Development Programme
Regional Director, Latin America and the Caribbean
New York, March 2020



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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.

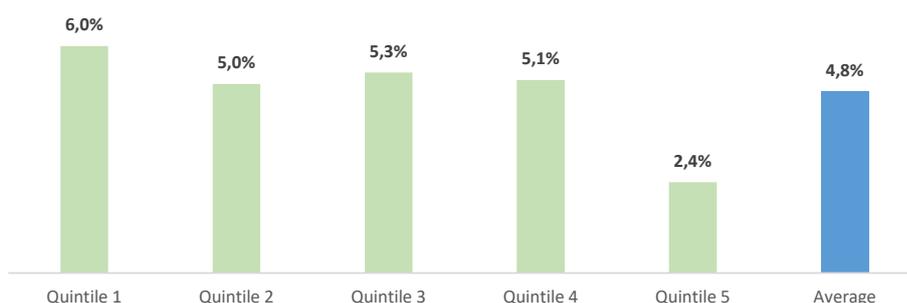
The Dominican Republic is a small and open economy. Its openness index (exports and imports of goods and services as a percentage of GDP) is around 50%, exports are equivalent to about 24% of GDP, and incomes from the current account of the balance of payment are about one third of GDP. This makes the 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).



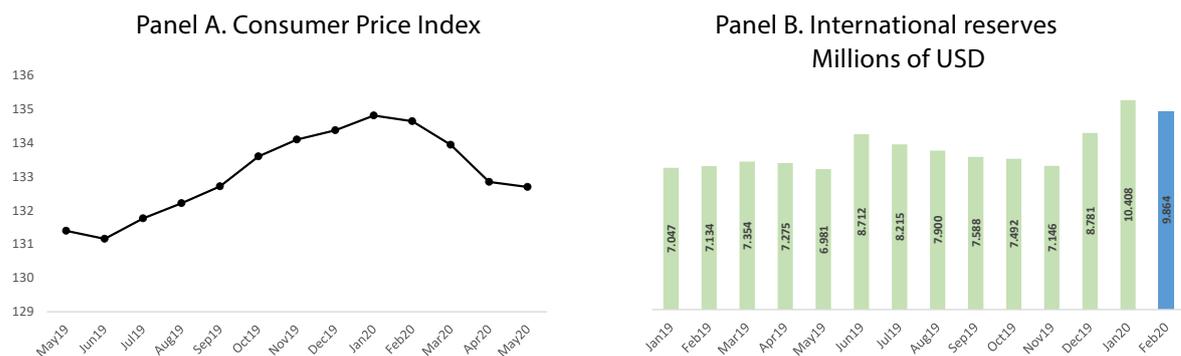
Foreign trade. Of the export activities, the most important are the manufacturing of the import substitution industry, mining, and agricultural industries. The free trade zones employ 3.8% of the labor force and demand relatively low skill labor, which is mainly provided by the poor segment of the population. 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



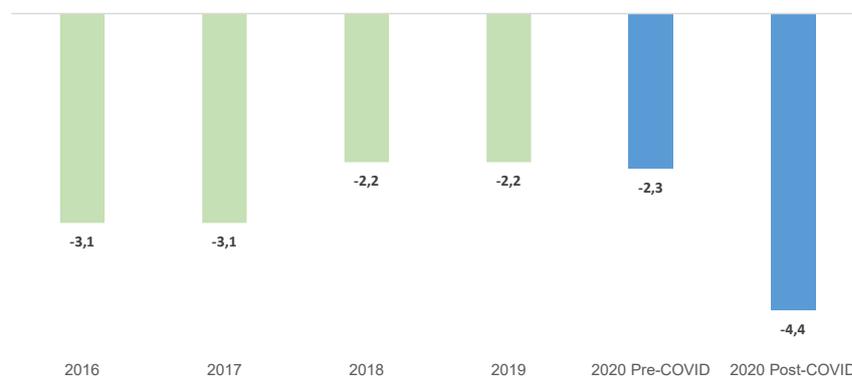
Source: Central Bank of the Dominican Republic (2020c; 2020d).



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).

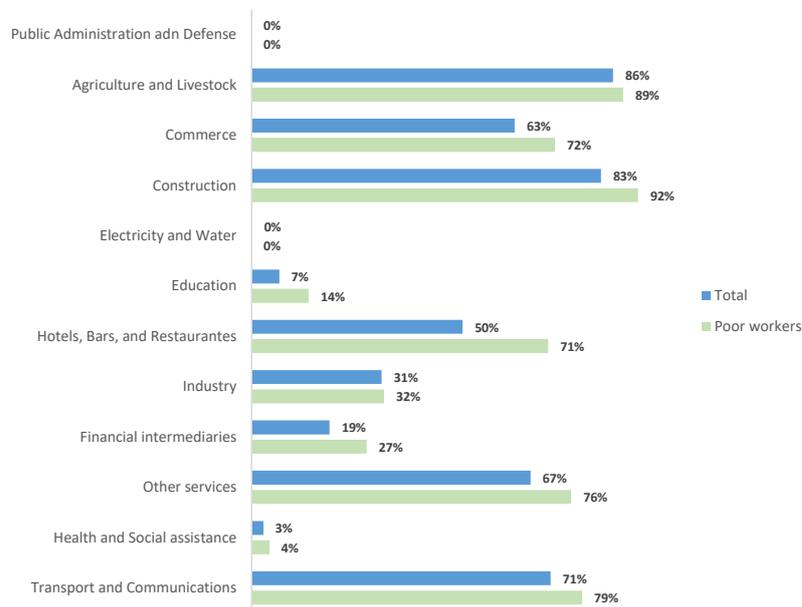
Where are informal workers employed? Data on the informality rate by economic sector shows significant heterogeneity. In those sectors linked to the public sector, the informality rate is very low (public administration and defense, education, electricity and water, health and social assistance). In 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.

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.



■ **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%
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.

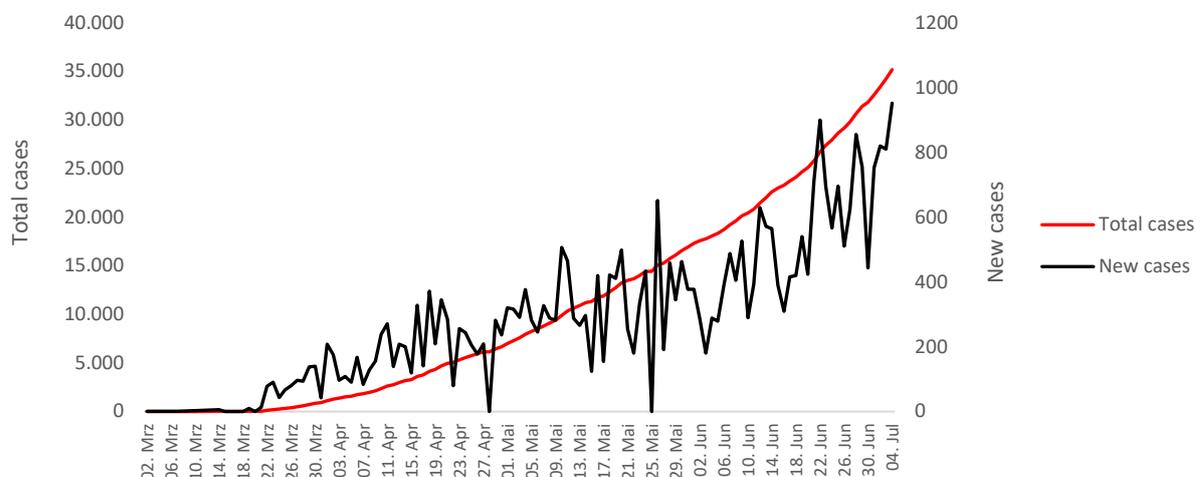
Second, the public finance situation brings a major challenge in terms of being able to provide an effective response to the population to sustain consumption levels and demand in general, while at the same time trying to strengthen the capacity of the health system. The central government has recorded 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).

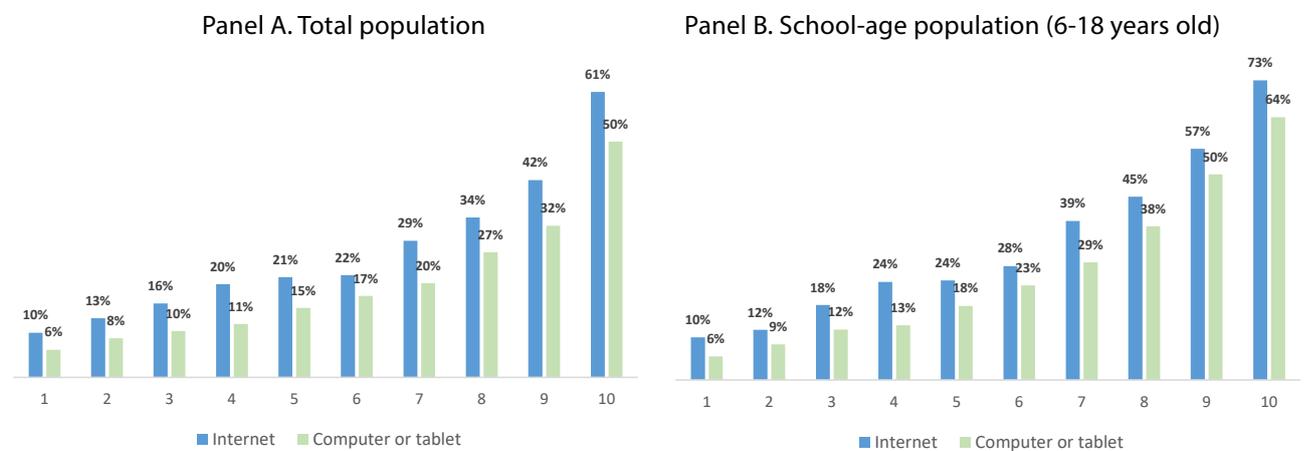
Two health interventions were carried out in the most affected provinces in May and June. The interventions included disinfection, rapid testing in key areas previously identified by the regional health authorities, active search for suspicious cases, and registration, control, and follow-up of positive 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

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.



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.

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.

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.



■ **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).

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%

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.



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 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.

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.



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).

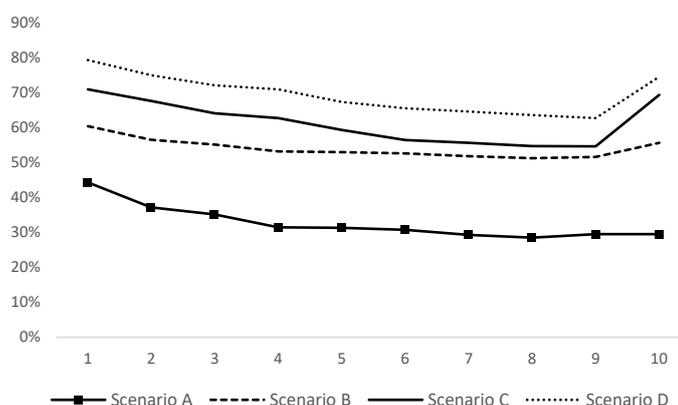
Notes: The poverty rates were obtained comparing the per capita household income observed (initial situation) or simulated (scenarios A to D) with the official poverty line.

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.

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.



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 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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