

Humanity in the face of Global Challenges: COVID-19

An Analysis from a Socioeconomic Perspective



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Abstract: The COVID-19 pandemic represents a serious threat to humanity in multiple dimensions, especially the socioeconomic aspect. The rapid spread of the virus and containment strategies have produced simultaneous supply and demand shocks that may lead to more precarious social conditions. This essay demonstrates the usefulness of economic science to identify the impact channels on the aggregate economy and the wellbeing of society, which in turn allows to provide policymakers and decision-makers with tools to address the health, economic, and social urgency derived from COVID-19.

Introduction

Coronavirus disease 2019 (COVID-19) has emerged as a major challenge to the world population on an unprecedented scale. Declared a pandemic by the World Health Organization (WHO) on March 11, more than 1.4 million people have been infected and more than 80,000 deaths have been reported internationally, with mortality and recovery rates of 5.7% and 21.0%, respectively.¹ This health and humanitarian crisis is putting increasing pressure on the limited capacity response of health systems to work in the short term, as well as on their resilience in the most affected countries. Lacking appropriate public health policies, the number of people demanding health services without effective access may grow at an overwhelming pace, thus increasing the risk of lethality and the human cost (Gourinchas, 2020).

The majority of countries with confirmed COVID-19 cases have implemented several measures in order to slow down the transmission rate and guarantee the sustainable supply of health services. Such is the case with containment and suppression measures aimed at social distancing, physical isolation, and quarantine. Notwithstanding, these interventions have led to substantial supply shocks stemming from the interruption of productive activities in the hardest-hit countries² and the effects on global value chains. Simultaneously, they have triggered demand-side shocks due to the reluctance of households and

¹According to the Johns Hopkins University Coronavirus Resource Center's update for April 7, 2020. The paper uses this same cut-off date for all the referenced pandemic-related data.

²As per data published by the Johns Hopkins University Coronavirus Resource Center, the United States, Spain, Italy,

businesses to spend and invest (Baldwin & Weder di Mauro, 2020a). In addition, reinforced uncertainty has led to a worsening of financial conditions (Barro, Ursúa, & Weng, 2020).

Although economists agree on the high economic cost of the new reality in the short and long term, estimates of the size of the downturn vary widely. Indeed, the International Monetary Fund (IMF, 2020) and the World Bank (2020a) predicted a contraction of 3.0% and 2.1% of the global Gross Domestic Product (GDP) for the current year, respectively. For its part, the Economic Commission for Latin America and the Caribbean (ECLAC, 2020) reduced its global expansion forecasts to 1.0% and estimated a drop of at least 1.8% for the Latin American region. As far as Nicaragua is concerned, the IMF (2020) anticipated a 6.0% decline in GDP by 2020.

The deterioration of macroeconomic conditions due to the pandemic gives way to severe social repercussions, with a higher incidence in low-income countries. Rising unemployment, limited access to basic goods, and falling incomes are leading to higher levels of scarcity while increasing the vulnerability of at-risk groups and multidimensionally poor households (Alkire, Dirksen, Nogales, & Oldiges, 2020). Moreover, provided the fragility of health systems in these economies, the human cost might become comparatively higher (Barnett-Howell & Mushfiq, 2020). In view of this, the situation calls for rapid and effective action from policymakers and decision-makers to address the health crisis without neglecting the macroeconomic context and social protection.

In this sense, the purpose of this essay is to analyze how economic science can contribute to cushioning the impact of COVID-19 by identifying the main transmission mechanisms of supply and demand shocks, together with the design of appropriate prescriptions. To this end, this paper lays out a series of policies and measures based on a thorough review of recommendations provided by various international organizations. With this introduction as the starting point, the remainder of the document is structured as follows. The second section analyzes the development and current circumstances of COVID-19. Subsequently, the third section consists of a discussion on the pandemic effects on macroeconomic and social conditions. In the fourth section, the author proposes some policies and measures to mitigate the crisis. Finally, the fifth section comprises the concluding remarks.

Development and current status of the COVID-19 pandemic

In December 2019, the health authority of Wuhan, China, identified several cases of pneumonia with unknown etiology, afterward associated with a novel *betacoronavirus*.³ The pathogen was linked to a highly contagious viral infection⁴, now referred to as COVID-19 (Wu & McGoogan, 2020). Since then, the coronavirus disease has spread rapidly across the world. Thailand, Japan, and South Korea were the first economies in reporting imported cases of COVID-19. According to the WHO (2020), 19 nations (excluding China) totaled 106 confirmed cases on January 31. As of April 7, only 16 countries⁵ out of 193 members of the United Nations (UN), mostly island nations, have not recorded imported or locally transmitted COVID-19 cases.

The United States is the hardest-hit country, with a total of 396,223 diagnosed COVID-19 cases. Meanwhile, Italy registered the highest number of COVID-19 casualties (17,127). Up to April 7th, the

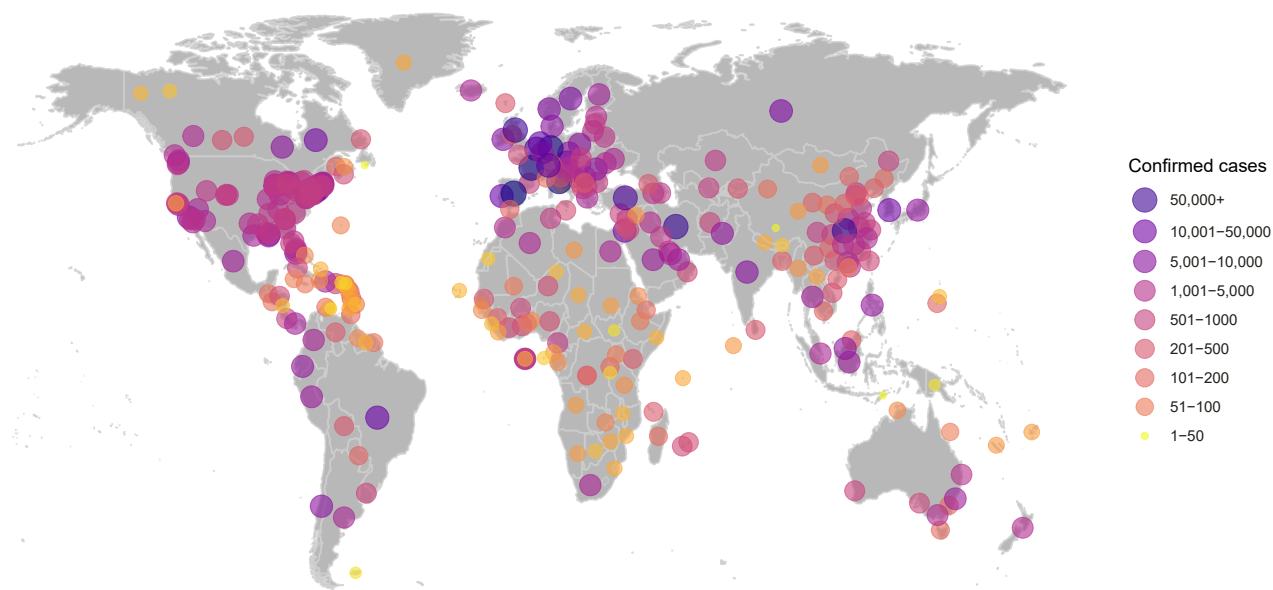
France, Germany, China, Iran, the United Kingdom, Turkey, and Switzerland are the ten countries with the highest number of confirmed cases. Together, these countries account for 80.6% of the total number of confirmed cases worldwide. Furthermore, they encompassed 53.5% of global GDP in 2018, as reported by the World Bank's Development Indicators.

³Officially named as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

⁴Estimates suggest the COVID-19 basic reproduction number (R_0) lies between 1.4 and 2.5, implying a high capacity for transmission and, therefore, the need for containment measures (Trilla, 2020).

⁵Comoros, Kiribati, Lesotho, Islas Marshall, Micronesia, Nauru, North Korea, Palau, Samoa, Solomon Islands, Tajikistan, Tonga, Turkmenistan, Tuvalu, Vanuatu, and Yemen.

FIGURE 1. Cumulative confirmed cases of COVID-19, as of April 7



Source. Based on data by the Johns Hopkins University Coronavirus Resource Center.

number of recovered people corresponded to 300,054, of which 25.8% were accounted for in China. By the same date, Latin America and the Caribbean accumulated 38,147 confirmed cases at a 3.9% fatality rate. For its part, Nicaragua reported 6 confirmed cases and 1 death, in line with official figures. A preliminary estimation reflects that, in the absence of mitigation strategies, at least 7 billion people would get infected in 2020, resulting in 40 million deaths (Walker et al., 2020). In Nicaragua, the lack of social distancing rules and a basic reproduction rate of $R_0 = 3$ imply that 90.8% of the population would contract the virus, with a death toll of 24,304, according to these authors.

Figure 2 depicts the COVID-19 confirmed cases and deaths trajectories by continent. The slight flattening of the explosive trend for North America and Europe suggests their pandemic curves have begun an apparent deceleration stage. The transmission rate in Latin America and the Caribbean is lower than in Europe and North America but higher than in Africa and Oceania; however, its rate of deaths is similar to those in Europe, North America, and, to some extent, Africa. Despite the control of the transmission activity in China, there has been an upturn in the cumulative number of infections and fatalities in Asia in recent days, mainly due to the expansion of outbreaks in Iran, Israel, India, Pakistan, and the United Arab Emirates.⁶

The contribution of economics in the face of the COVID-19 crisis

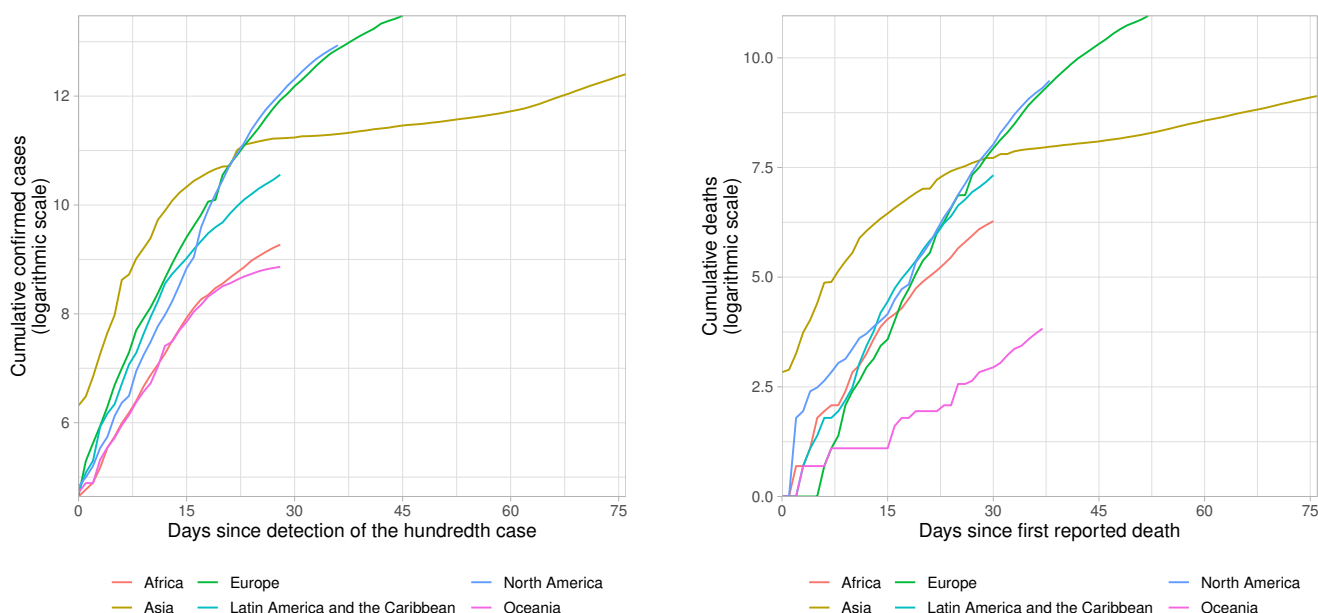
Socioeconomic impact of COVID-19 pandemic and containment strategies

The rapid proliferation of COVID-19 around the globe has influenced the aggregate economic performance through two major mechanisms: the initial effects on the confidence and stability of financial markets and, as a second instance, the direct impact of pandemic control measures.

The exponential COVID-19 outbreak has also exacerbated uncertainty and harmed economic agents' expectations. This has contributed to the deterioration of the global financial conditions. For

⁶Asian countries with the highest number of new cases confirmed up to April 7.

FIGURE 2. Confirmed cases and fatalities related to COVID-19, up to April 7th



Source. Based on data by the Johns Hopkins University Coronavirus Resource Center.

Note. For Asia, the graphs reflect case counts since January 21, 2020, when the WHO released the first Situation Report.

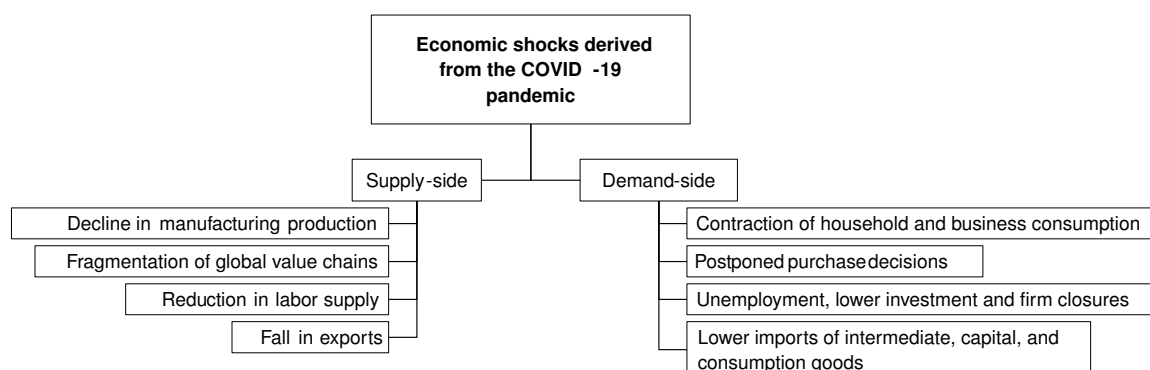
instance, the volatility index VIX for U.S. stock market increased about 500% between January 15 and March 31 as a consequence of expectations about COVID-19 (Baker, Bloom, Davis, & Terry, 2020). Similarly, stock market prices ranged predominantly downward between 5% and 10% per day during March (Baldwin & Weder di Mauro, 2020b). Most notably, the U.S. stock market lost 17% of its value on March 17 (Bisbee & Honig, 2020).

The events above take place in a context in which debt stock has reached historical levels: global debt amounted to \$253 trillion, equivalent to 322.0% of global GDP (ECLAC, 2020). Meanwhile, the WTI crude oil spot price per barrel declined by 67.2% between the end of 2019 and March 20 on the back of failed negotiations on production by members of the Organization of Petroleum Exporting Countries (OPEC) (Nuguer & Powell, 2020). In additionally, net portfolio flows from the major emerging economies reached US\$ 59 billion between February 21 and March 20, twice the figure corresponding to the immediate scene of the 2008 financial crisis, in line with the United Nations Conference on Trade and Development (UNCTAD, 2020). These developments put pressure on the exchange rate stability and constrained financing capacity of these economies to cope with the pandemic, as well as for Latin America and the Caribbean countries (Castellani et al., 2020).

Social distancing has been the basic underlying strategy for flattening and modifying the convexity of the pandemic curve. In principle, containment measures have varied according to the spread of the virus, ranging from nighttime curfews to more drastic measures, such as total border closures and the suspension of non-essential activities. While positive in slowing the transmission of COVID-19 and alleviating the pressure on health systems (Walker et al., 2020), the abrupt interruption of production and normal consumption and investment activities produces severe economic repercussions in the short, medium, and long term, driven by supply and demand shocks (Baldwin & Weder di Mauro, 2020a). The economic downturn in the world's largest economies (particularly the United States and China) translates into inexorable secondary shocks for the rest of the countries, given the reduction in manufacturing

and services trade,⁷ and the ceasing of the fabrication of products used as intermediate goods in other countries (World Bank, 2020a).

FIGURE 3. Supply and demand shocks due to the worldwide spread of COVID-19



Source. Based on Baldwin & Weder di Mauro (2020a), Baldwin & Weder di Mauro (2020b).

These shocks give rise to further adverse consequences. Delayed consumption and COVID-19 transmission control policies have led to the crash of the tourism industry,⁸ which is a major source of jobs and income in Latin America and the Caribbean (ECLAC, 2020). In addition, weaker external demand and the disruption of value chains translate into weaker international trade flows⁹ and a reduction in the prices of raw materials. Lower volumes of foreign direct investment and business closures lead to higher levels of unemployment, lower volumes of remittances, and, consequently, the wellbeing of households deteriorates. Taken together, these effects trigger a generalized slowdown in the economy, the intensity and persistence of which depends, in turn, on the transitory or permanent nature of COVID-19, the reopening of economic activities, the effectiveness of containment strategies, and policy prescriptions.

TABLE 1. Revised growth estimates for 2020, selected economies

| | World | Latin America and the Caribbean | Nicaragua |
|------------|-------|------------------------------------|-----------|
| World Bank | -2.1% | -4.6% | -4.3% |
| IMF | -3.0% | -5.2% | -6.0% |
| ECLAC | 1.0% | -1.8% | — |

Source. World Bank (2020b), IMF (2020), ECLAC (2020).

Similarly, COVID-19, confinement measures, and the economic downturn have an impact on other socioeconomic dynamics, such as labor markets, poverty and inequality. In the global scenario, a substantial increase in the levels of unemployment (between 5.3 and 24.7 million people in the global scenario)

⁷The ten countries with the highest number of contagions account for 47.1% of manufacturing exports worldwide, as well as 58.1% of the sector's added value, according to the World Bank's Development Indicators.

⁸The World Tourism Organization (WTO) estimates a 1 to 3 percent drop in global tourism flows and a loss of up to US\$ 50 billion by 2020.

⁹According to the World Trade Organization (WTO), the international economic disruption could result in a contraction of between 13% and 32% of world merchandise trade by 2020.

and underemployment is expected, together with a deterioration in the quality of work (ILO, 2020). Sumner, Hoy, & Ortiz (2020) predict that, with a 20 percent reduction in income or consumption due to COVID-19, the number of people living in poverty could increase by 420 to 580 million worldwide. Changes in labor circumstances toward informality and underemployment, as well as a greater incidence and intensity of poverty, are factors that exacerbate socioeconomic inequality.

On the other hand, the social repercussions of the pandemic are far from being proportional. The elderly; patients with pre-existing medical conditions and comorbidity factors; indigenous peoples; informal workers that lack adequate social protection; migrants and refugees subject to xenophobic attitudes, discrimination, and violation of their most basic rights, such as access to healthcare; women engaged in unpaid reproductive work and prone to suffer episodes of violence in their homes; as well as people experiencing multidimensional deprivation, constitute population segments for whom COVID-19 and confinement measures can produce a deeper deterioration in their life quality and wellbeing (Alkire et al., 2020; CEPAL, 2020).

How to tackle the socioeconomic and health effects of the pandemic?

The current health crisis and economics are doubtlessly linked. The adoption of appropriate measures to slow down and suppress the velocity of contagion is of utmost importance. However, given the unsettling forecasts, and the state of financial conditions, macroeconomic stability, and the social situation, the need to carry out various policy measures in order to mitigate risks, attenuate socioeconomic deterioration and minimize the human cost becomes evident. In other words, the application of macroeconomic and social policies to curtail the recession curve must complement the strategies into consideration to flatten the pandemic curve.

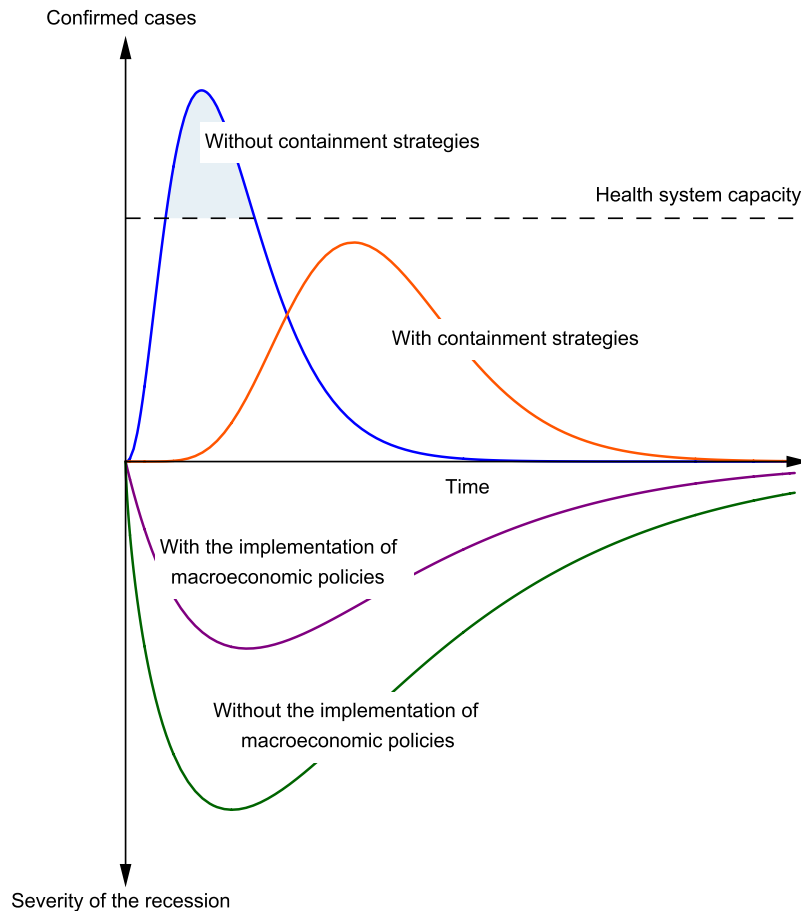
The willingness to self-isolate and discontinue daily activities is inherently contingent on the income situation of individuals and households. Specifically, countries with a significant percentage of individuals living in poverty and informal workers¹⁰ encounter less commitment to voluntary compliance with containment measures, as they intensify pre-existing socioeconomic vulnerability (Barnett-Howell & Mushfiq, 2020).

A fiscal policy framed to strengthen social protection would be effective in addressing the lack of social protection. The provision of subsidies and the expansion of safety-net programs would reduce socio-economic stress and foster containment measures (World Bank, 2020a). Initiatives such as direct cash transfers for workers in the informal economy, without access to unemployment insurance, or subject to a higher incidence of poverty can ensure the purchase of essential goods and meet basic needs while waiting for containment measures to be relaxed. Similarly, public spending policies should aim at a more aggressive investment in the health system, which can be made possible through additional budget allocations and the reinforcement of social security. Nonetheless, given the limited fiscal space in Latin American countries and Nicaragua (ECLAC, 2020) and financing problems as a result of capital outflows, support packages from multilateral agencies, suspension of debt service payments, and other relief actions will be crucial for redirecting spending to these lines.

Similarly, small, medium and large-scale enterprises also require economic measures to avoid bankruptcy. Monetary policy measures, such as the temporary reduction in legal reserve requirements, can provide adequate levels of liquidity in the financial system, alleviate transitory cash flow shortages in businesses and maintain credit access (OCDE, 2020). Tax deferrals and refunds could also provide

¹⁰In 2019, the percentage of people living in poverty equaled 30.3% in Latin America and the Caribbean, according to the ECLAC (2020). This figure equals 29.1% for 2014 in the case of Nicaragua, in line with the National Institute of Development Information (INIDE). In Latin America and the Caribbean, 53.1% of the labor force was working in the informal economy in 2014 (ECLAC, 2020).

FIGURE 4. Flattening the pandemic curve without steepening the recession curve



Source. Own elaboration based on Gourinchas (2020).

companies with needed liquidity (Castellani et al., 2020). Meanwhile, trade policy should focus on sustaining trade openness. Securing the free movement of manufactured and intermediate goods will help to lessen the impact of COVID-19 on global value chains and offset the fall in the value and volume of exports and imports (World Bank, 2020b).

On the other hand, containment measures are unsustainable in the medium and long term because of severe economic and social dislocations. Unlike in developed economies, the costs may outweigh the benefits even in the short term in developing countries since their population is comparatively younger, the limited health infrastructure is already overwhelmed and the population is less inclined to undertake economic sacrifices. (Barnett-Howell & Mushfiq, 2020). Systematic testing; targeted isolation and quarantines for the population at risk; strategies for monitoring and tracking the routes of contagion; provision of hygiene packages and the supply of drinking water are more effective alternatives for the containment and suppression of cases, and economically less harmful for developing countries.

Firm, responsible, and early action by governments and other stakeholders is vital to overcome the COVID-19 threat (Walker et al., 2020). Given the passivity of the authorities in Nicaragua, the outlook for the upcoming months is uncertain. To date, the promotion of public agglomerations, such as fairs and tourist activities, continues. Moreover, the macroeconomic policy response to the pandemic is non-existent (Castellani et al., 2020). Due to the serious weaknesses of the national health system in terms of human capital, infrastructure, and spending,¹¹ a faster rate of infection will overwhelm the

¹¹According to figures from the National Institute of Development Information (INIDE) and the Ministry of Finance and

response capacity in a short period and may result in a comparatively high number of fatalities,¹² despite the country's predominantly young age composition.¹³ In this context, compliance with the basic rules of social distancing and the suppression initiatives of other sectors of the country will be critical to mitigating the human, economic and social cost.

Concluding remarks

The COVID-19 pandemic has become the most urgent health challenge at present. As of April 7, more than 1.4 million confirmed cases and more than 80,000 fatalities have been reported worldwide. The applied containment strategies unveil the trade-off between macroeconomic outcomes and the urgency of flattening the pandemic curve to minimize the human cost. The fall in demand, the worsening of global financial conditions, and the sudden shutdown of productive activity in core countries such as China and the U.S. have resulted in considerable supply and demand shocks. The latter propagates to the rest of the countries also struggling against the consequences of local containment measures.

Mitigating the pandemic and strengthening the capacity of health systems is the top priority. Nevertheless, the uneven impact of COVID-19 on the population at risk calls for strong, early, and effective action by policymakers and decision-makers. In addition to allowing the identification of transmission channels and risks, economic science also provides various courses of action that would help cushion the socioeconomic implications of contention strategies. Fiscal and monetary policy tools, in particular, prove essential to ensure the provision of liquidity in the financial system, the survival of businesses, and the fulfillment of basic needs by the population, without incurring long-lasting internal and external imbalances.

The most rigorous social distancing rules, such as restrictions on economic activities and mandatory quarantine, are economically unfeasible in the medium and long term. Given this reality, better designed and targeted strategies are required to prevent the spread of the virus and new surges, accompanied by the implementation of coordinated economic policies to cushion and reactivate production. The responsible intervention of Nicaraguan governmental and health authorities, the commitment of citizens, and the support of other sectors are conditions to surpass this challenge at the national level. In conclusion, large-scale joint efforts and policy coordination are vital for humanity to overcome this global challenge.

Public Credit (MHCP), there are 9.9 physicians, 7.9 professional nurses, 7.6 auxiliary nurses, and 9.0 beds per 10,000 inhabitants. The health system includes 40 primary hospitals and 32 Ministry of Health hospitals. Investment in health per Nicaraguan amounted to US\$73.3. The data corresponds to 2017, the latest available to the public.

¹²The official projections of MINSA indicate 32,500 confirmed cases and 813 deaths in six months (Castellani et al., 2020).

¹³80.0% of the population is 45 years old or younger, as per the demographic projections of INIDE for 2018.

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