VULNERABILITY AFTER COVID-19 AND THE RESPONSE OF A DEVELOPING CITY: THE CASE OF BOGOTA, COLOMBIA

David Arboleda[3] **Andrés Zambrano**[4]

Universidad de los Andes

Abstract

This paper analyses the effect of Covid-19 on health and economic indicators of Bogota, the capital of Colombia, and the responses of the local government to ease the economic shock. We highlight the importance of designing policies that adapt to the local context and complement the existing strategies at the national level, and the implementation of ambitious local programs that would be too difficult to execute nationwide. We also emphasize on the benefits on having an ample fiscal space due to the good behavior of previous administrations, allowing the funding of these programs with sustainable debt.

Keywords: Vulnerability, Developing cities, Government expenditures, Fiscal sustainability, Covid.

JEL Codes: H12, H72, I18, I31, I38.

[3] Research Assistant, Universidad de los Andes. Email: de.arboleda@uniandes.edu.co.

[4] Associate Professor, Universidad de los Andes. Email: ja.zambrano@uniandes.edu.co

VULNERABILIDAD DESPUÉS DEL COVID-19 Y LA RESPUESTA DE UNA CIUDAD EN DESARROLLO: EL CASO DE BOGOTÁ, COLOMBIA

David Arboleda[1] **Andrés Zambrano**[2]

Universidad de los Andes

Resumen

Este artículo analiza el efecto del Covid-19 sobre los indicadores económicos y de salud de Bogotá, la capital de Colombia, y las respuestas del gobierno local para suavizar el choque económico. Destacamos la importancia de diseñar políticas que se adapten al contexto local y complementen las estrategias existentes a nivel nacional, y la implementación de programas locales ambiciosos que serían demasiado difíciles de ejecutar nacionalmente. También enfatizamos en los beneficios derivados de tener un amplio espacio fiscal debido al buen comportamiento de las administraciones previas, lo cual permite la financiación de estos programas con una deuda sostenible.

Palabras Claves: Vulnerabilidad, Ciudades en desarrollo, Gastos del gobierno, Sostenibilidad fiscal, Covid.

Códigos JEL: H12, H72, I18, I31, I38.

[1] Asistente de Investigación, Universidad de los Andes. Email: de.arboleda@uniandes.edu.co.

[2] Profesor Asociado, Universidad de los Andes. Email: ja.zambrano@uniandes.edu.co

Covid-19 has posed formidable challenges for societies. On the one hand, it has generated a health crisis that threatens to cause millions of deaths. On the other hand, it has produced an economic recession that is expected to be the greatest of modern history, endangering the improvements in livability achieved in the last decades. These challenges are even greater for developing economies since they have fewer resources to cope with the health and the economic crisis. Their effort to improve the health system capacities and to support vulnerable households most affected by the slowdown would be restricted by their fiscal capacity and the evolution of the pandemic within their territories.

Most societies have relied on lockdowns to ease the speed of transmission of the disease and to better prepare the health system for the contingency. Therefore, the mobility of most citizens was reduced within their city where they live, even after easing the confinement, thus increasing the importance of the measures taken by local governments. While national governments have created large welfare programs to cope with the economic crisis, local governments have a chance to complement them and adjust such policies to their context. Moreover, local governments have the chance to implement revolutionary policies that are harder to carry out at a national level. These measures become even more central when are taken by the government of the capital of a country, since they also serve as an example and set expectations over smaller municipalities. The purpose of this chapter is to study the economic consequences of the Covid-19 in the city of Bogotá, the capital of Colombia, and the responses taken by the local government to address these impacts. We will not only pay attention to the measures taken, but also to the fiscal sustainability of those policies and their potential effects over the future recovery.

This chapter is organized as follows. In section 1 we provide a context on how Bogota has fared in the last two decades in terms of socioeconomic indicators and the impact of the recent pandemic. The next section discusses the impact of Covid-19 on health outcomes, while the third section describes the fiscal stance of Bogotá. The fourth section will focus on the policies followed by the local government to cope with the crisis and how they have interacted with the policies at the national level. The final section concludes.

1. Bogotá's performance in the last two decades

Bogotá has 7.4 million inhabitants (10.2 million when considering the metropolitan area) and is responsible for almost a quarter of Colombia's GDP. From 2006 to 2019, its local economy has grown at a general real annual rate of 3.87%, which has been remarkably steady throughout these years, indicating that the city has been characterized by a healthy and stable growth dynamic. For 2019, its per capita GPD (PPP) was 22,879. Table 1 shows a comparison with the main Latin American cities. Bogotá ranks over Lima and Ciudad de México, but below Montevideo and is considerably behind Santiago. For 2020, initial forecasts predicted a 3.5% increment of the GDP. Data suggests that a considerable part of this growth would have derived from commerce, real estate, and financial activities. These sectors represent on average 19.7%, 13.5% and 8.2% of the product and have grown at a 3.08%, 2.7% and 5.45% rate since 2014, respectively. But previously growth predictions now lay on a contraction between -4.2% and -8% due to the economic crisis arising from the pandemic itself and the measures to counteract it.

Table 1.GDP per capita (PPP) in 2019 for the main LAC cities.

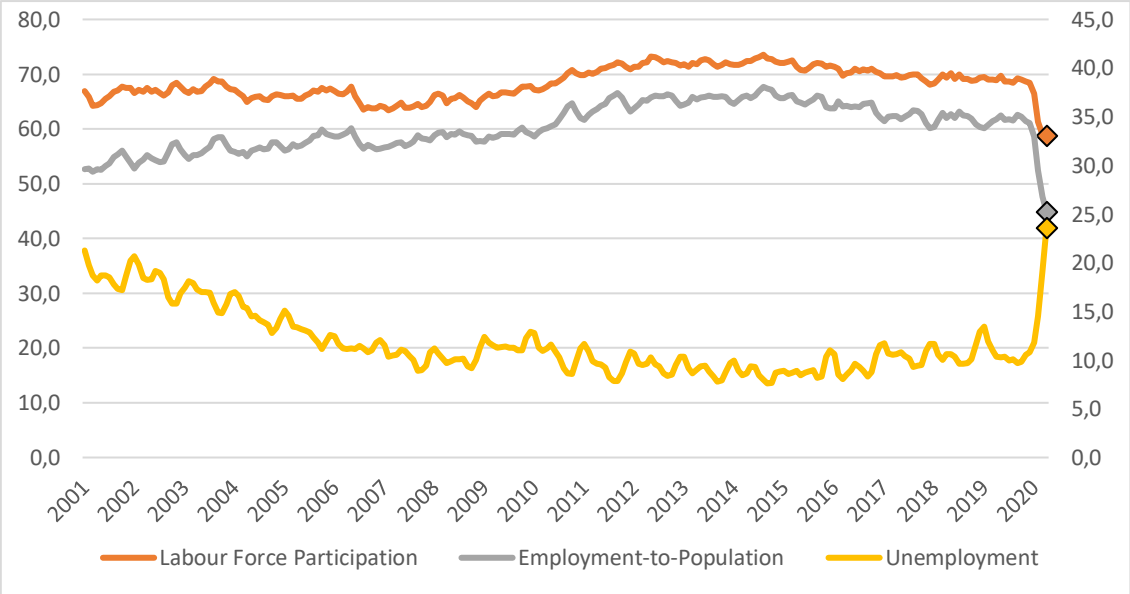
City	GDP per capita (PPP)
Ciudad de México	17,961.03
Santiago de Chile	34,030.18
Lima	21,351.97
Montevideo	23,584.15
Bogotá	22,879.94

Source: Own calculations based on World Bank, INE, INEGI, INEI.

Regarding the labour market, Bogotá was also exhibiting a positive performance. Throughout the last two decades, unemployment describes an overall downward trend with a considerable flattening during recent years (see Graph 1). At the beginning of the sampled

period, the city's unemployment rate was over 30%, a clear repercussion of the 1999 financial crisis. Nonetheless, this number decreased persistently until 2011, and the second-quarter unemployment rate has orbited towards 10% (with a mean value of 9.98%) ever since. Similarly, both the labour force participation rate and the employment to population ratio have been deemed stable, with a respective average of 68.5% and 60.5%, respectively. Nevertheless, the crisis unravelled by Covid-19 has triggered an unprecedented increase in unemployment. Data for the March-May trimester shows a 7.3 p.p. increase in the unemployment rate, peaking to 19.2%, which implies a return to unemployment levels unseen since the beginning of the century. The workers most affected by the crisis were laborers and self-employed, who stood for nearly 288,400 of the 515,000 lost jobs. This negative effect has only deepened: the latest labour market report available by the time this chapter was written recorded a 23.6% unemployment rate and a sharp drop of both the Labour Force Participation and the Employment-to-Population ratio.

Graph 1. Labour Market Indicators for Bogotá.



Source: DANE. Latest observation corresponds to the 2020 April-June trimester. Unemployment rate on secondary axis.

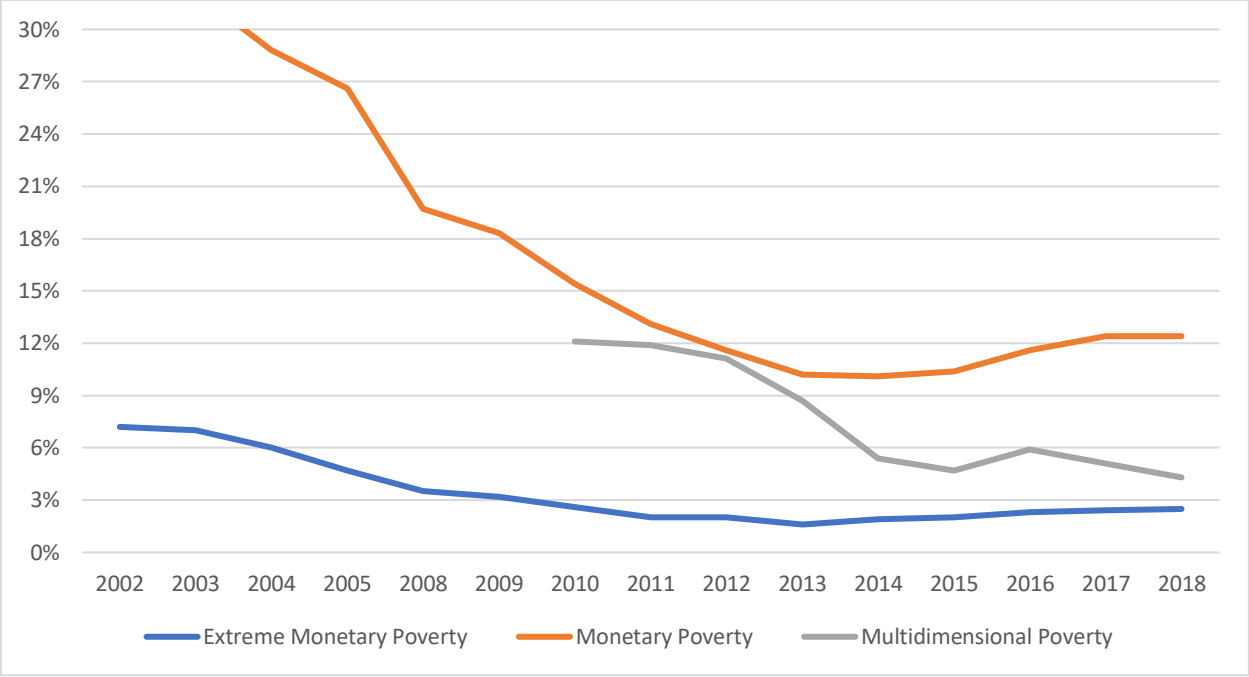
In terms of poverty and inequality, Bogotá's indicators evidence a stagnant behaviour for the past five years (see Graph 2). In 2002, the city's extreme monetary poverty rate was estimated at 7.2%. It then showed a decreasing trend until 2013 when it reached a minimum of 1.6%. Nonetheless, from this point forward, the poverty rate has stalled and even increased slightly,

resulting in a 2.5% rate in 2018. Furthermore, the multidimensional poverty rate presents an analogous pattern: in 2010, it was 12.1%, then continuously lessened to 4.7% in 2015 and remained approximately constant thenceforward.

Above all, Bogotá's accomplishments in alleviating poverty have derived in a substantial re-composition of the population's distribution among the various social classes, as depicted in Graph 3. Two facts stand out: on the one hand, the percentage of the population categorized as poor diminished notably, passing from 48% in 2008 to 12% in 2017. On the other hand, there has been a notable expansion of the middle-class population, which previously stood for 15% of Bogotá's citizens, but by 2017 represented nearly 42% of them. However, most of the population remains vulnerable (43%), and the impact of a shock like Covid-19 threatens them to fall in poverty.

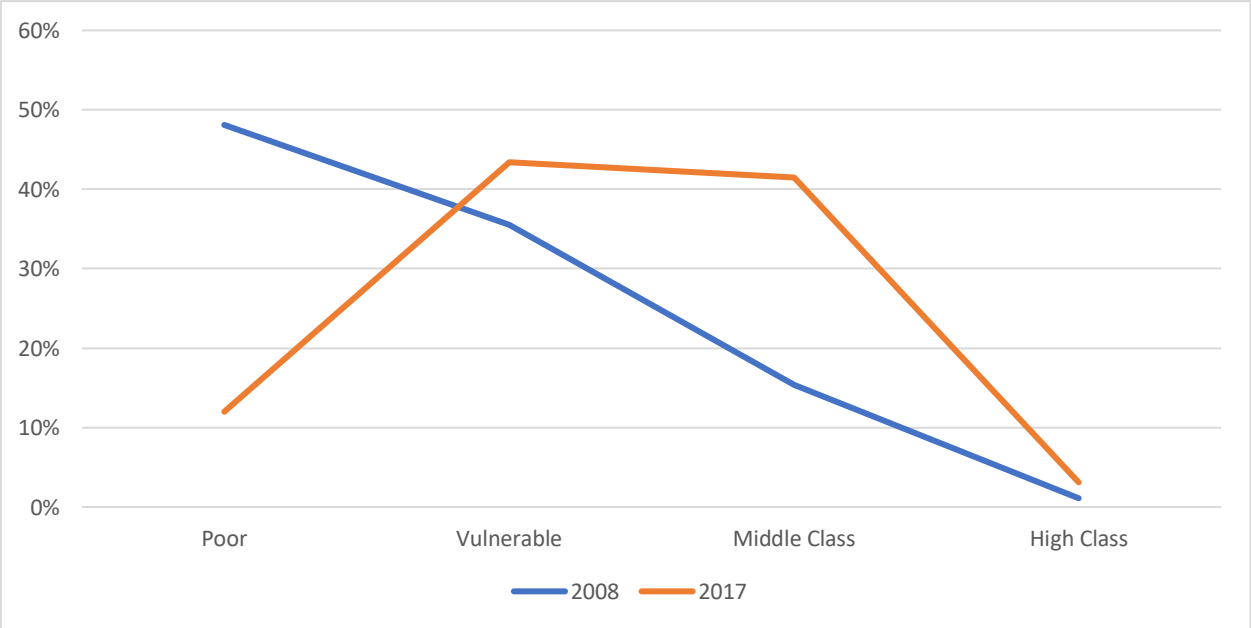
In terms of inequality, the Gini coefficient has decreased from 0.572 in 2002 to a minimum of 0.497 in 2012. From then on, inequality remained rather invariant, with the Gini coefficient taking a value of 0.498 in 2018. The stagnation of these indicators reveals that both poverty and inequality are time-persistent phenomena that stand key challenges to the city's economic progress.

Graph 2. Poverty Rates.



Source: SALUDATA.

Graph 3. Bogotá's Social Class Composition.



Source: Puche y Villa (n.d.).

In sum, the COVID-19 pandemic both jeopardizes the healthy economic behaviour of the city in terms of growth and unemployment and threatens, due to its higher impact over the poor and vulnerable, to obliterate the progress obtained in a matter of inequality and poverty reduction. Thus, given the insufficient progress in reducing inequality and poverty in recent years, it becomes of utmost importance to study the repercussions of the pandemic over the living conditions of Bogotá's inhabitants.

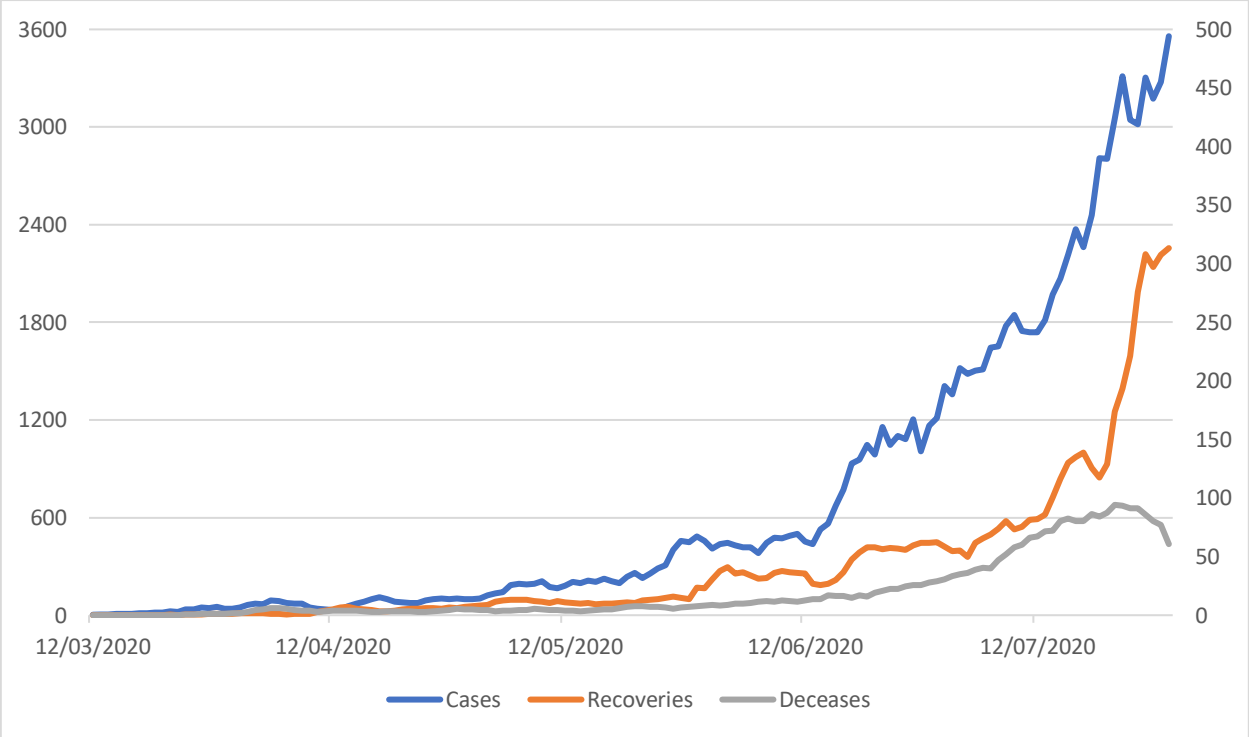
2. The Health Panorama in Bogotá

On March 6th, a 19-year-old female was confirmed as the first case of COVID-19 in Bogotá and the national territory. Thirteen days after, Bogotá's mayor, Claudia López, announced the city would carry out a 3-day lockdown simulation to contain the virus spread, but that ended up being extended until March 22nd, when Bogotá's District, following the mandates of the national government, decreed 23 days of compulsory isolation. Only essential workers (those involved in medical, pharmaceutical, and financial services, transportation, food production, etc.) were allowed to go outside. Although some modifications and relaxations have been introduced since then, several restrictions over mobility and working conditions remain active. As a result, the local economy has experienced a large negative shock, with a considerable proportion of the economic apparatus partially or entirely halting. By the time of the early simulation (March 19th), Bogotá reported a total of 55 confirmed cases, 2 deaths, and a 5-day moving average of 14 cases per day.

Despite the quarantine measures, the disease continued to spread and by the beginning of July the 5-day average daily variation of confirmed cases and deaths escalated up to 1058 and 24, respectively. Accordingly, the accumulated number of cases went up to 36,532, with a total of 786 deceases and 13,484 recoveries, as reported on July 4th. Nearly a month later, the moving averages for cases and deceases were 3,558 and 61, and the city reported a total of 106,168 cases. However, the marked augmentation of COVID-19 patients pictured on Graph 4 does not provide concluding evidence regarding the effectiveness of the quarantine. On one hand, a larger number of cases reported is also partially due to a more aggressive testing policy. In only 2 months the city multiplied its testing by a factor of 6, and in 3 months by a factor of 12, thus achieving an accumulate of closely 7,200 processed tests per 100,000 people, and over 10,000

daily tests. On the other hand, the quarantine measures have been eased progressively, with the latter easing on June 14th, allowing 80% of the working force to move freely within the city, which corresponds with the biggest jump in the number of cases hitherto.

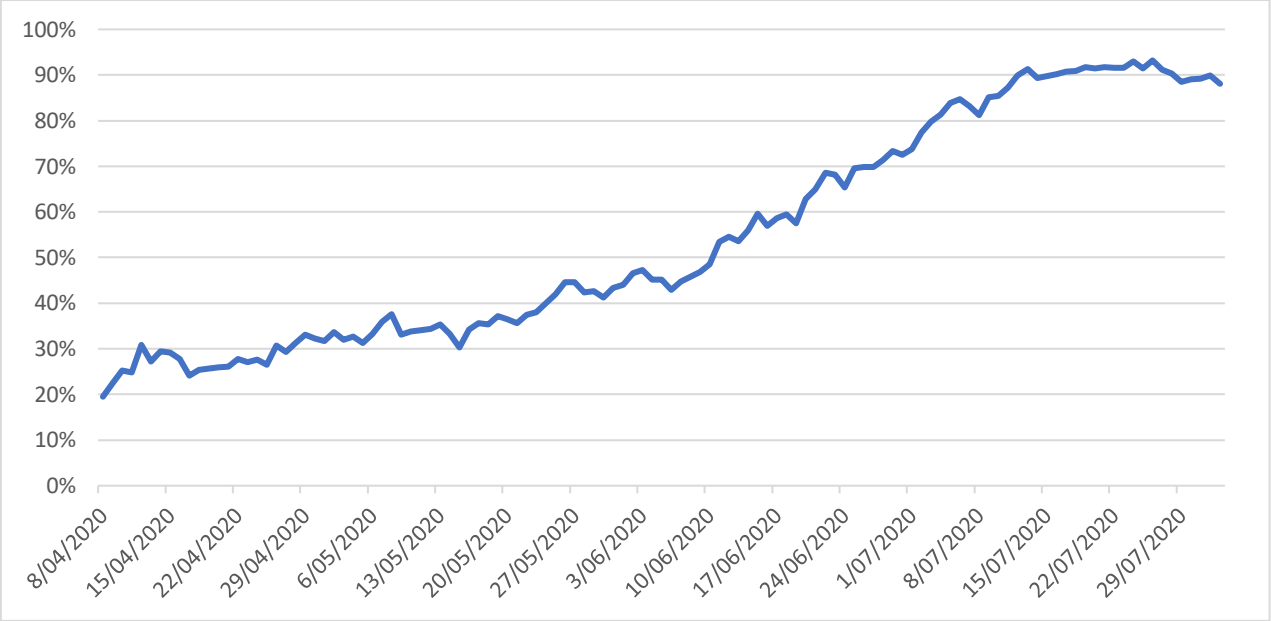
Graph 4. 5-day Moving Average Daily Variation Indicators.



Source: INS. Deceases graphed on secondary axis.

As exemplified by the evolution of the availability of ICUs, the sharp increase in the number of cases posed a major challenge to the city's health system. On April 8th, the city disposed of around 8 ICUs per 100,000 people. At the time, only 19.5% of these were in use. As the city prepared to face the peak of COVID-19 cases, the local government made large efforts to broaden its ICU stock, therefore reaching a level of 23 ICUs per 100,000 people by early July; notwithstanding, the attempts to guaranteed a sufficient supply of intensive care units was proven dangerously scant at best. As pictured on Graph 5, by July 5th 83.5% of the COVID-19 ICUs were already in use; consequently, the city hall declared a red alert on the healthcare system, thus bestowing the District the control of all available ICUs, public or private. A subsequent strengthening of the isolation measures, in the form of localized quarantines, managed to slow down the progression of the occupation rate and stabilize it around 90%.

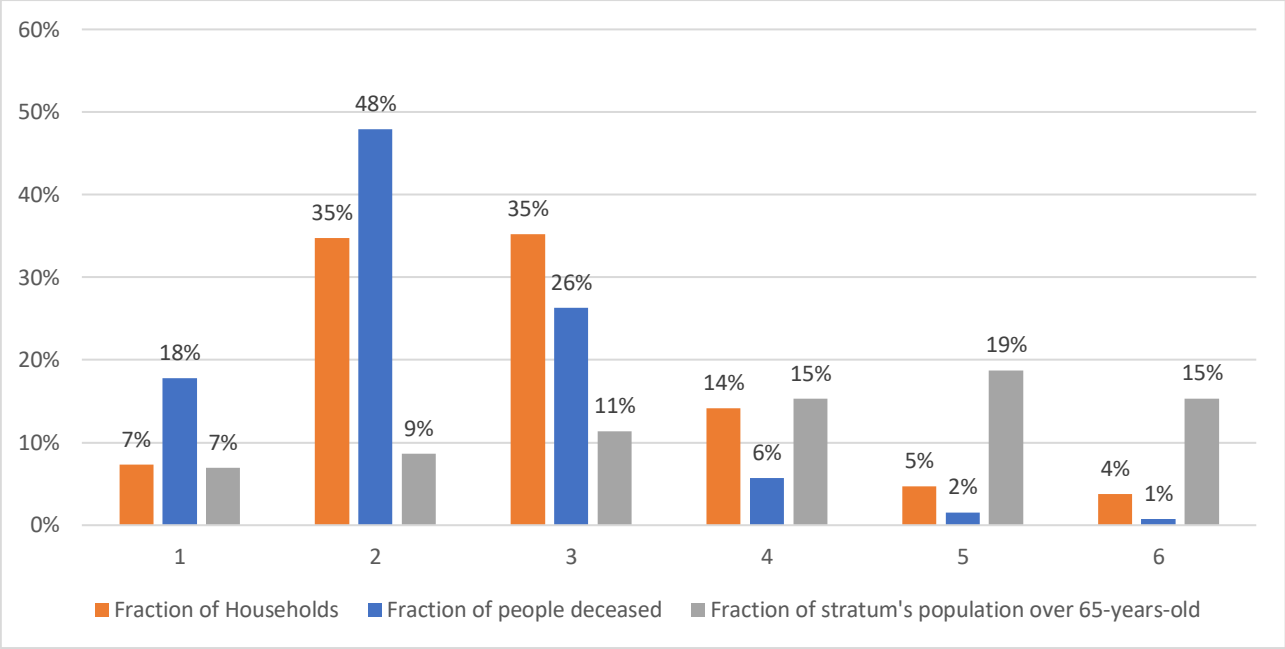
Graph 5. COVID-19 ICUs Occupation (%).



Source: SALUDATA.

Furthermore, the severity of COVID-19 cases has been heterogenous amongst socioeconomic strata. While the bottom 3 stand for 77% of Bogotá's households, they represent 94% of patients hospitalized due to complications and 92% of the COVID-19 cases remitted to an ICU. Even more disquieting, 92% of the deceased individuals belonged to these lower strata, with the greater affectation posed on the stratum 2 (48% of deaths), see Graph 6. Such findings become even more alarming when considering that within the bottom-half strata the percentage of the population over 65-years-old, that considered to be particularly endangered by the virus, is systematically lower than that within the upper-half strata. Therefore, despite compounded by a proportionally less risky population, stratum 1, 2, and 3 seem to suffer more and have greater losses due to the virus.

Graph 6. Bogotá: Fraction of Households vs. Deceased people by stratum.



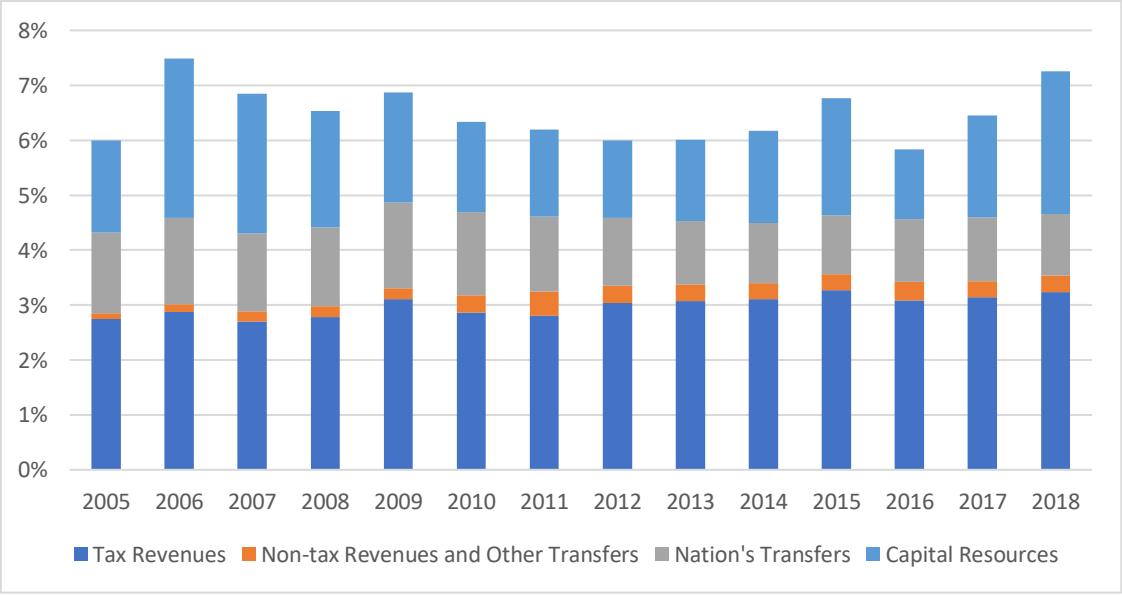
Hence, some conjectures come in place. As stratum 1 and 2 persistently present affectation percentages far larger than their household fraction, data indicates that there must exist other structural factors besides the number of inhabitants that explain the heterogenous impact of the virus. Two main, interrelated hypotheses come to mind. First, it is possible that the contagion rate is greater for the low-income population. If a family does not count with sufficient savings nor possess a job that may be executed remotely, it would be quixotic to expect its member to stay at home; necessarily, their contagion risk will be higher. Second, low-income population has fewer resources to take care of their health. Not only this is manifested in a lesser access to medicine and medical services, but in the inability to procure self-care as the opportunity cost of taking a resting-day or going to a hospital may be extremely constraining. Thus, public policy must consider that economic vulnerability and health risks are reciprocal.

3. The Fiscal Stance of Bogotá

In this section we examine the fiscal space that Bogota has to implement programs to alleviate the effects of the crisis. Since most of the social assistance policies are funded and implemented by Bogotá's Central Administration (BCA), the focus will be placed on the Central Administration's fiscal indicators.

Initially, consider the Central Administration's income. In 2018, the latest reported year, BCA's income was 7.26% of local GDP, which represents a 0.81 p.p. increase with respect 2017. Additionally, Graph 7 pictures the evolution of income and its disaggregated components as percentages of Bogota's GDP since 2005. Some facts jump to sight. First, most of the Central Administration's resources come from tax revenues, nation's transfers, and capital resources, in that order. Non-tax revenues and other types of transfers have relatively low relevance in the budget. Second, the overall income to GDP ratio has been remarkably stable. It averaged 6.48%, and most of the observations fall considerably proximate from this mean. While most of the variability derives from capital resources and nation's transfers, tax revenues remain nearly constant around 3% of the GDP. However, the pandemic has changed this panorama. Initial estimates calculate a decrease of 38% of the current income that the local government is expected to compensate with debt.

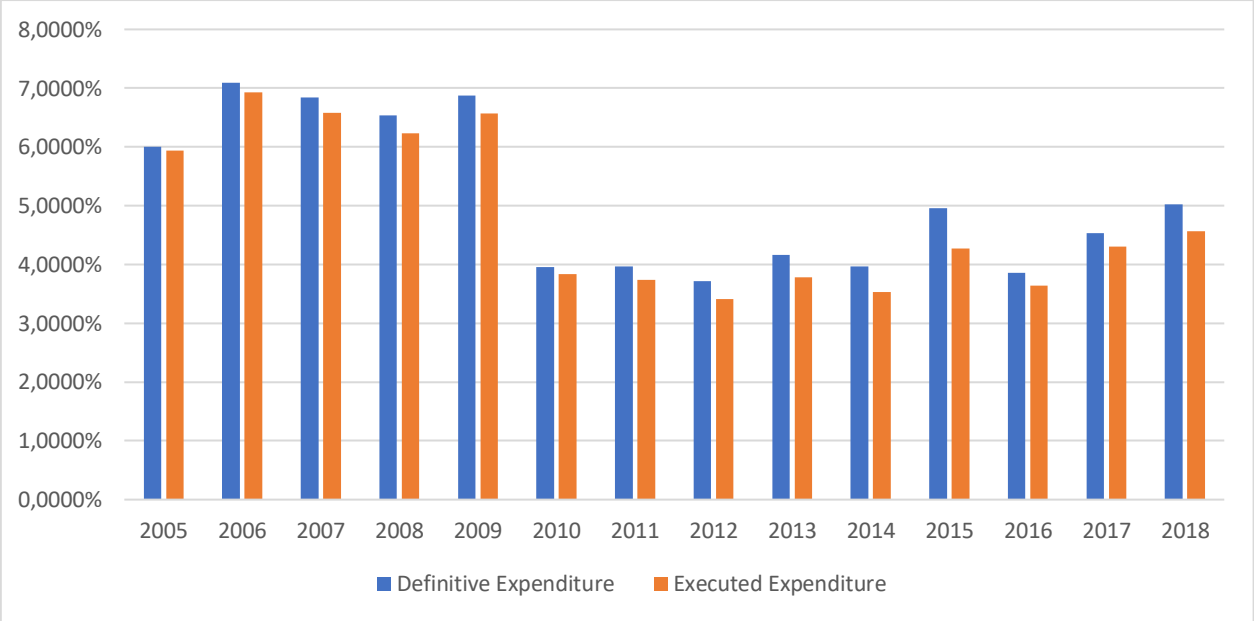
Graph 7. Income Composition.



Source: Contraloría de Bogotá (2020).

On behalf of the expenditure, a different dynamic is observed. On the one hand, Graph 8 shows that executed expenditure has been systematically lower than definitive expenditure, thus suggesting that the Central Administration strictly attains itself to its planned budget and presents no over-expending tendency. On the other hand, albeit until 2009 expenditure was calculated in over 6% of the local GDP, in 2010 this percentage went down to 3.84% and did not recover afterwards, even though, as previously discussed, income did not suffer great disturbances and only slightly decreased during the 2010-2013 period. From then on, expenditure averaged 4% of the GDP.

Graph 8. Expenditure.



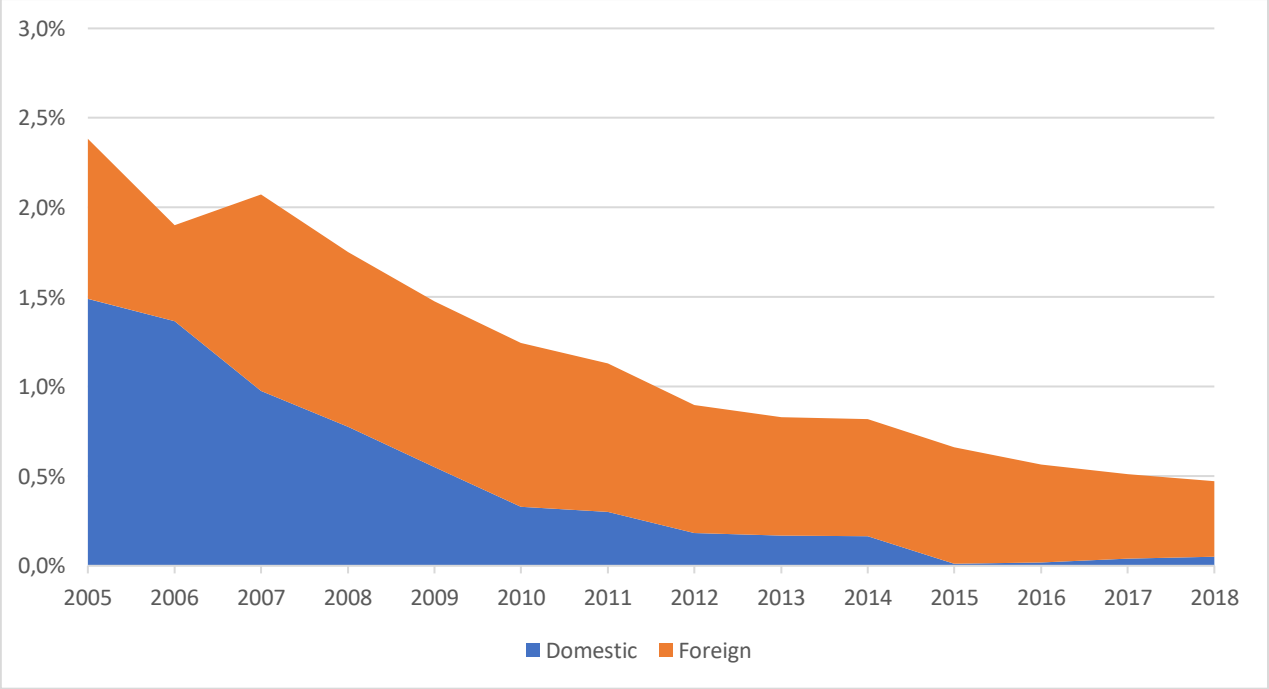
Source: Contraloría de Bogotá (2020).

Disaggregated data corroborates that such reduction in expenditure was mainly achieved through cut-offs on investment. While in 2009 investment represented circa 5.1% of Bogota's GDP, in 2010 it was only 3% and, despite it has progressively increased in recent years, by 2018 it reached only 4% of the GDP. Simultaneously to the investment reduction, the Central Administration also lowered its functioning expenses and the amount spent on debt service. This behavior may be a sign of improved efficiency in expenditure. Certainly, as the sudden drop in expenditure was not accompanied by a lesser income, the Central Administration managed to

accumulate significant resources that allowed it to increment its surplus as a percentage of the GDP by a factor of 5. Before 2010, the Central Administration's surplus was inferior to 0.5% of the GDP. Nonetheless, the dynamics of income and expenditure described above resulted in a surplus equal to 2.5% of the GDP that has held up to recent years.

To conclude, it is proper to examine the composition of the Central Administration's debt and its tendency (Graph 9). In 2005, total debt equaled somewhat less than 2.5% of the GDP, and closely two-thirds of that amount stood for domestic debt. Nevertheless, the domestic portion of the debt decreased steadily and became virtually null since 2015. Foreign debt, however, presented only a subtle reduction. By 2018, total debt, mainly compounded by foreign debt, was under 0.5% of the local GDP, meaning that the Central Administration is capable of fully paying its financial responsibilities and yet preserve a surplus. Thus, it seems that BCA's finances are healthy, sturdy, and bestow the District with an ample response margin in case of an economic emergency as the COVID-19 crisis.

Graph 9. Debt Composition.



Source: Contraloría de Bogotá (2020).

4. The Implemented Policies

4.1 National Government Policies

The national government strategy to face the crisis has had to balance its policies to attend both the health and economic costs of the pandemic: while the virus has taken approximately 10,000 lives, the shock to economic activity (due both to the pandemic and the measures undertaken to prevent the spread of the virus) lowered growth forecast down to -7.8% . Therefore, once the initial lockdown was announced, the national government stepped up with a wide variety of economic measures to soften the impact of the quarantine over poor and vulnerable individuals, and formal businesses.[5]

Like most countries, Colombia confronted COVID-19 with a mix of contact tracing, health system reinforcement, greater testing capacity, and compulsory lockdowns. On the initial period after the introduction of the virus, lockdowns were viewed as appropriate to reduce the spread rate of the virus and provide the health system with sufficient time to prepare for the pandemic. For instance, the increase in ICU capacity permitted that the national ICU occupancy rate to remain under 75%, even through the peak of contagions. However, now that compliance with the quarantine has weakened significantly as the national government seems to repeatedly extend the lockdown, questions have risen regarding the effectiveness of the mandatory isolation and the pertinence of its rather early implementation. The largely informal population of the country lacks the means to remain indefinitely locked. Moreover, were they allow to resume work, the economic halt still implies that their income would diminish substantially. Therefore, Colombia's national government was forced to accompany health-related policies with a vast social expense.

The emblem of the social assistance policies has been the Solidarity Income: a 160,000 pesos (around 40 US dollars) monthly transfer aimed at 3 million households that are not beneficiaries of other, previously established social programs, as Families in Action, Youngs in Action, or "Colombia Mayor". The Solidarity Income initiated in April and is expected to be extended to June 2021.

[5] For a complete revision of the measures taken by the national government see Alvarez et al. (2020).

Furthermore, for families that are included in the previously established social programs, the government stipulated a supplementary cycle of transfers, which required an additional expense of over 4.9 trillion pesos. Finally, the government also implemented a novel tax return program: a million of the most vulnerable households of the country, identified through the SISBEN and the databases of other social programs, will receive a transfer of 75,000 every two months as a compensation for the burden imposed by the VAT (Value Added Tax). The amount of resources destined for each program and the number of beneficiaries is summarized in Table 2. Other poverty alleviation policies include direct subsidies to public services in rural areas and the opportunity for individuals catalogued as stratum 4 or less to defer public services payments with no cost; grace periods and renegotiations for loan payments for over 10.9 million debtors with no interests charged over possible deferments; and goods baskets donations to vulnerable communities.

Table 2. National Government Social Programs

Program	**Transfer**	**Beneficiaries**	**Total Cost in millions**
Families in Action	145,000	2,600,000	377,000
Youngs in Action	356,000	276,000	98,256
Colombia Mayor	80,000	1,700,000	136,000
Solidarity Income	1,440,000	3,000,000	4,320,000
VAT Return	75,000	1,000,000	75,000
Total			**5,006,256**

Source: Own calculations.

Complementarily, the national government launched a series of financial aid programs directed to safeguard employment and protect vulnerable firms from bankruptcy. On one hand, for firms that report a 20% or greater fall in income respecting 2019, the government agreed to

grant a 220,000 pesos (a fourth of the minimum wage) contribution to the work premium payment of workers with wages between the minimum wage and 1 million pesos. On the other hand, to help formal workers whose contracts were suspended, the national government created the Support to Formal Employment Program: a monthly 160,000 pesos grant for the time the worker was in contractual suspension during April, May, and June. Moreover, with this program the national government also committed to co-finance micro, small and mean firms' payrolls for initially 3 months, granting 351,000 pesos per formal worker, conditional on the firm retaining all personnel (this transfer is also exclusive for firms reporting a 20% or greater decrease in income).

To provide micro, small, and medium firms with liquidity, the government also stepped up credit guarantees for loans required for payrolls (90% guaranteed by the government), working capital (80%) and independent workers (80%). To the date, almost 100,000 firms have been benefited by the Support to Formal Employment Program and closely 2.4 million formal jobs were protected. Additionally, pension funds contributions were suspended for 3 months; income tax payment was postponed to the end of the year; employers were allowed to concede paid vacations without previous notice; and the government injected 70 trillion pesos to the National Guarantees Fund to enhance firms' access to loans. The total emergency expense of this policies sums up to 2.7% of the national GDP and is expected to increase the government's deficit to 8.2% of the GDP.

4.2 Local Government Policies

The pandemic obliged the District to implement policies to alleviate the foreseeable consequences of the shock over income and consumption. For this purpose, on March 25th the "Sistema Distrital Bogotá Solidaria en Casa" was established with an overall budget of 5.9 trillion pesos financed through the District's general budget, nation's contributions, and private's donations. This policy was intended to aid poor and vulnerable population –especially those whose wellbeing and living quality were particularly imperilled by the pandemic– using monetary transfers, redeemable bonds, and food subsidies. The "Sistema Distrital Bogotá Solidaria en Casa" (SBSC hereafter) was later developed with the establishment of the Solidary Lease program on April 25th; and accompanied with the creation of the District System for the Mitigation of the Economic Impact, the Economic Foment and Reactivation (SMEIEFR from

this point forward) on April 8th. The former measure was aimed to preserve jobs and save small companies by granting credits and transfers. The latter sought to protect the vulnerable population living under leases from getting evicted and/or losing access to public services. Both SBSC and SMEIEFR were posteriorly subscribed as constitutive parts of the scheme of subsidies and contributions of a broader, more ambitious policy: The Strategy of Guaranteed Minimum Income (SGMI).

The SGMI, formally constituted on the 2020-2024 District Development Plan as a part of "Purpose 1: Make a new social contract with equality of opportunities for social, productive and political inclusion", is a public policy that seeks to progressively ensure a minimum income for households residing in Bogotá. Such income may be given in the form of monetary transfers (both conditioned and unconditioned), redeemable bonds, and a variety of subsidies. The minimum income is calculated taking into account the District's tributes, the donations destined to the SGMI, and other contributions. The District Development Plan contemplates a total budget of 9,989,923 million pesos for the SGMI, around a 9% of the total cost of the Development Plan. These resources proceed from various social programs that are considered to contribute to softening welfare and life quality losses due to the contention measures against the virus and the pandemic.

Table 3. Guaranteed Minimum Income Funding.

Program	Value (Million Pesos)
Education for All Program: access and permanence with equity and rural education enfasis	2,628,927.00
Efective Public Management Program	539,686.00
Young with Capacities Program: Life projects for citizenship, innovation, and XXI century work	48,005.00
Integral Social Mobility Program	1,284,297.00
Exclusion for ethnical, religious, social, political, and sexual orientation Prevention Program	22,081.00
District Care System Program	3,792,999.00
Subsides and Transfers for Equity Program	1,373,928.00
Total	**9,689,923.00**

Source: Alcaldía Mayor de Bogotá D.C.

Subsequently, it is adequate to elaborate on the two previously mentioned branches of the SGMI. On the one hand, the SMEIEFR is a production-oriented approach to the crisis. Its main goal is to preserve jobs and business tissue in the District, focusing primarily on micro, small and medium-sized companies. This system, funded by the same sources than the SBSC plus resources from the union and private sectors, consists of 3 strategic axes: potentializing opportunity sectors, mitigating the impact of the pandemic and reactivating the economy, and sectorial protocol for the operation of the economy given the different degrees of confinement. Additionally, the SMEIEFR includes actions that allow the city's productive apparatus to access credit and liquidity, dialog with unions and the private sector, and fiscal policies that ensure the system's sustainability.

On the other hand, the SBSC appears as a more consumption-oriented strategy compounded by two main programs: The Solidarity Lease and the Guaranteed Minimum Income. The Solidarity Lease was a social assistance program commanded by the District Secretariat of Habitat with the purpose of attending the dwelling needs of the population. Specifically, the Solidarity Lease was steered towards a low-income population living under a daily/weekly/monthly lease modality. It intended to relieve these citizens from the burden of lease's expense by granting monthly non-conditional monetary transfers for up to 3 months. The selection of the beneficiaries prioritized households under especially fragile economic conditions as heads of households over 60 years old; female heads of household; households with members under 18 years old, over 60 years old, or with some sort of disability; amongst others. Similarly, the District forbade evictions of users under vulnerability conditions due to nonpayment of lodging costs for as long the compulsory precautionary isolation measures remain active; and ensured asylum for the population at risk of becoming homeless.

Simultaneously, the Solidarity Lease was complemented by subsidies to public services. In this case, all households classified as stratum 4 or less living in the urban, peri-urban, or rural perimeter of Bogotá were targeted. Four subsidies were implemented: (1) the Additional Basic Unit of Consumption, consisting of 1.41 free cubic meters of water per month for up to 3 months; (2) the Reduction over the Value of the Bill, which implies a 10% discount on the monthly electricity bill; (3) the Cubic Meter Relief, working as a 10% discount over the non-subsidized value of gas; and (4) the Relief over the Value of the Bill for cleaning public service, that grants a 10% discount on the total value of the bill once all subsidies have been applied.

Parallelly, the SBSC also includes a minimum income program, more closely related to the SGMI presented in the District Development Plan. This policy, first implemented on early April, intended to aid all the 350,000 poor households and around 150,000 vulnerable households (while the assistance provided to the poor population was funded using the District's budget, that for the vulnerable relies on transfers from the national government and private's donations). The monetary and in-kind transfers aimed to benefit inactive or informal workers classified as poor or vulnerable by the 2018 population census, the SISBEN IV, and the Multipurpose Poll. The District's identification process also appealed to social cartography and other specialized sources to include the poor population not registered in official databases. Finally, in case that a needed household were to be omitted by all the previous sources, the City Hall habilitated an

online platform called "Bogotá Cuidadora", where citizens can subscribe and voluntarily ask for assistance.

The transferred amounts were stipulated as follows. Each poor household was to receive a total worth of 423,000 pesos in the form of monetary transfers, redeemable bonds or in-kind-subsidies, equivalent to 65% of a Bogotá's poor household expense for 23 days (this was the expected duration of the lockdown at the time). In the case of the vulnerable, the worth of the transfers descended to 178,000 pesos, corresponding to a minimum food basket for a low-income household for the same 23 days. However, were the household, poor or vulnerable, already a beneficiary of any of the transfer programs of the national government, the District only transferred the extra amount required to complete the corresponding minimum income's transfer worth. Moreover, the benefits of the guaranteed minimum income were only subject to two conditions: the household must obey the quarantine and remain free of domestic violence complains.

Furthermore, since July 13th, the guaranteed minimum income began its second phase (third cycle of the overall District's transfers), now under the name of guaranteed basic rent. As the city entered in a novel phase of the quarantine measures, this time characterized by alternating, localized lockdowns, the District decided to provide financial assistance to nearly 550,000 poor and vulnerable families selected using the same identification strategy as for the first round of transfers. While households with bank accounts are to receive 240,000 pesos transfers, those without it will get the equivalent worth in kind (approximately 150,000 families).

Currently, 577,842 families have received monetary transfers either from the District or the national government. The District provided the transfers in 3 cycles: the first cycle took place from March 29th to May 22nd and involved a 72,033 million pesos transferred to 309,990 households; the second went from May 21st to July 12th, with 309,719 beneficiaries where 79,657 did not receive transfers in the first cycle, and a total value of 44,525 million pesos. Finally, to the present 251,397 households have received transfers in the third cycle, for a total cycle value of 35,794 million pesos. Although it would be desirable to quantify the total expected social expense of the District disaggregated by program, such calculation is implausible for two reasons. First, the transfers of the Basic Rent program are not homogenous among families. Since the District only transfers the amount needed to make the total income that a given household receives in the form of social programs' transfers (whether provided by the local or

the national government) reach a certain threshold, there is no way to estimate the final per-household expense of the Basic Rent. Second, a similar case occurs with the public services subsidies: not only this vary with the total consumption of each household, but many only apply over the value of the bill after subtracting national subsidies. Nonetheless, Table 3 does provide a helpful summary of the expense of the Minimum Income program per transfer's cycle, and the resources assigned to the Solidarity Lease policy will be soon examined.

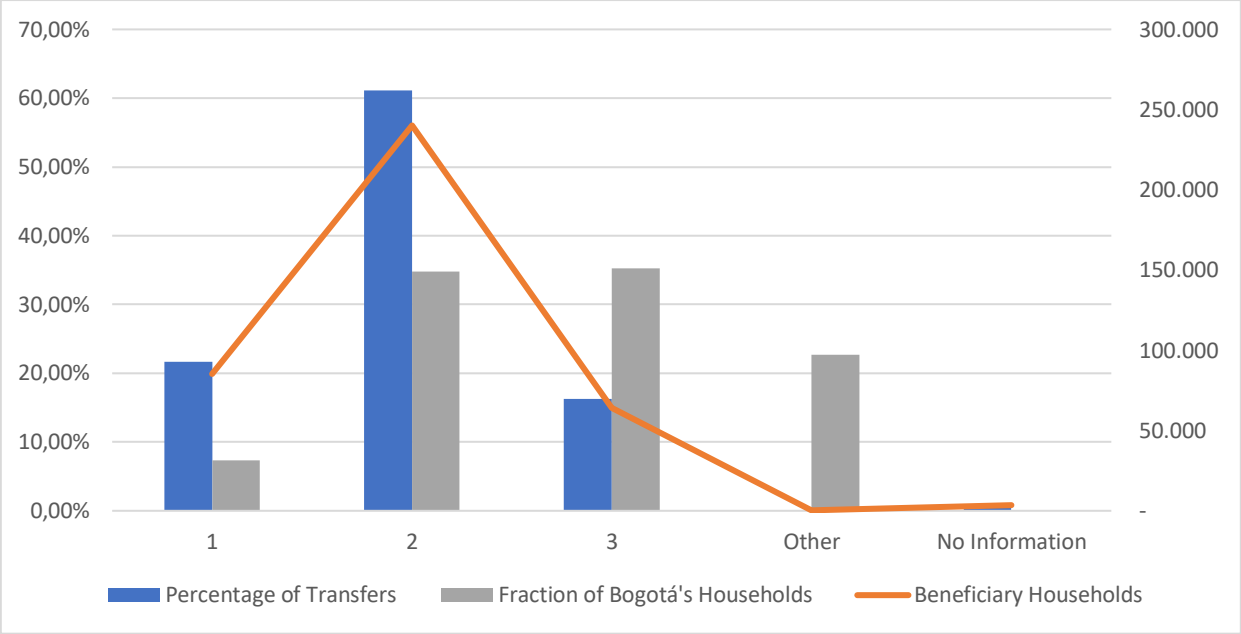
Table 3. Minimum Income: Transfers to Households (Million Pesos)

Cycle		Households	Value (Million Pesos)
1st Cycle	Total	309,990.00	72,033.00
2nd Cycle	1st Trans. in 2nd Cycle	79,657.00	
	2nd Trans. in 2nd Cycle	230,062.00	
	Total	309,719.00	44,525.00
3rd Cycle	1st Trans. in 3rd Cycle	2,378.00	
	2nd Trans. in 3rd Cycle	249,019.00	
	Total	251,397.00	35,794.00
Total		**871,106.00**	**152,352.00**

Source: Bogotá Solidaria en Casa (2020).

The distribution of transfers suggests at first sight that the District's household identification strategy was mostly adequate (Graph 10). Individuals catalogued in the top 3 strata only received 0.1% of the transfers; stratum 2 families (a total of 240,145 households) received 61.1% of the transferred resources; stratum 1 families (85,453), 21.8%; and just stratum 3 families (63,942), 16.2%. Moreover, 0.9% of the resources were received by non-classified families, thus suggesting that the District effectively used the alternative identification methods mentioned before.

Graph 18. District's transfers distribution by strata.



Source: Bogotá Solidaria en Casa (2020). Strata's percentages graphed on secondary axis.

A more detailed look at the District's social assistance programs reveals that by July 25th, 3,117 households were beneficiaries of the Solidarity Lease transfers, which implied an overall expense of 614 million pesos. Additionally, over 55,492 public services had been reconnected or their disconnection had been overruled. Parallelly, by the same date, a total of 487,670 good's baskets were delivered.

Finally, in mid-August the District presented a new strategy summarized in what the city major referred as the "Marshall Plan" for economic reactivation (clearly, alluding to the original Marshall Plan executed by the United States during the postwar period). Bogota's Marshall Plan consists of a compilation of tax incentives, new taxation schemes, incentives for formalization and wider options for tax payments bestowed to both consumers and firms. Overall, with this proposal, the District seeks to relief the tax burden of households and firms that have experienced a decrease in their income due to the pandemic, favor the recovery of employment, grant liquidity to the economic agents that allows them to continue their basic activities, reduce informality, and increase the aggregate demand and investment. Some of the undertaken measures are: the implementation of a novel monotax that simplifies taxation and enhances

formalization and employment by reducing the transaction costs of the former; discounts and subsides on firm's registration costs; no-interest deferred payments on property taxes; and discounts on the industry and commerce tax proportional to the income lost during the pandemic, along with a temporary transition to a progressive scheme over the tariffs charged by such tax that will last up until 2028. As the implementation of Bogotá's Marshall Plan entails a fiscal expense that adds to the expense required by the social assistance programs that have been extensively addressed during this section, the District plans to request in the following days an additional debt budget for 11 trillion pesos. Moreover, it has been mentioned by the local authorities that these resources will also be used to finance large public investments in infrastructure to fuel Bogotá's economy.

5. Final Discussion

The analyzed case of Bogota is useful to provide a good example on how policies at the municipal level can successfully complement those policies implemented at the national level to ease the effects of the Covid pandemic. On one hand, these local policies can be adapted to the particular context of the city, in this case to the rampant informality of its labor market and the identification of poor and vulnerable households that are not in national databases. On the other hand, the designed policies can be more ambitious and revolutionary, since helping informal firms and establishing a basic income program would be too difficult to implement at a national level, both politically and financially. Trying such policies in a smaller context can allow posterior evaluations for their implementation at a national level. Finally, Bogota also provides an excellent case of the benefits of having a good fiscal stance previous to the pandemic, since it allows large scale programs without having consequences for medium term fiscal sustainability.

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