

# Covid-19 : An Economic Catastrophe



## Highlights

- We forecast a double-digit drop in GDP across most South-American economies for 2020
- Covid-19 continues its rampage across South America and is unlikely to be contained anytime soon
- Healthcare systems are unable to cope and so economic activity is likely to be subdued for most of 2020

## Estimating the Economic Damage

As some countries start to emerge from the Covid-19 induced crisis and adapt to a new economic reality, Mosoj ESG tried to make sense of the economic impact of Covid-19 to South American economies by looking at a range of scenarios that include drops in economic activity induced by lockdown.

Our base case results predict unprecedented drops in GDP across all South American countries, with a 13% average drop in GDP compared to 2019, representing an economic cost of ca. US\$400 billion for the sub-continent (excluding Venezuela). Our current worst-case scenario points to an average GDP drop of ca. 22%. More worryingly every day that goes by in a subdued environment of economic activity, the more likely this latter scenario becomes. In short, countries need to get back to work as soon as possible.

Our methodology is based on (i) duration of lockdowns, (ii) their severity (full, partial, recommended), (iii) a range of drop in economic activity – based on researches in other countries and (iv) an estimated phasing out of lockdowns as announced by governments. To measure the severity of lockdown, we took both a qualitative estimate based on governments' policy responses and a quantitative approach based on Google Mobility data.

Importantly, we did not dare to venture into epidemiological modelling to estimate how the virus plays out, as we believe that the longer it lingers the more likely any government decision would be overridden by the economic reality at individual levels of needing to work. That said, we do believe that economic activity will not be fully restored until there are clear signs that the pandemic is over. Hence a recovery to pre-Covid times is likely to take years.

Countries	GDP 2019 [1]	GDP 2019 / day [1]	Population [1]	No of days in lockdown equivalent [2]	Labor force [1]	Economic activity drop during lockdown [2]	Est. GDP 2020 drop [3]
	\$ bn	\$ bn	Mn	days	Mn	%	%
Brazil	1,840	5	211	59	107	25.0%	-10.7%
Argentina	450	1	45	83	21	25.0%	-13.5%
Colombia	324	1	49	82	27	25.0%	-13.2%
Chile	282	1	19	88	10	25.0%	-14.3%
Peru	227	1	33	100	19	25.0%	-15.5%
Ecuador	107	0	17	86	9	25.0%	-14.5%
Uruguay	56	0	3	57	19	25.0%	-8.8%
Bolivia	41	0	12	101	6	25.0%	-16.0%
Paraguay	38	0	7	76	4	25.0%	-12.9%
<b>South America [4]</b>	<b>3,365</b>	<b>9</b>	<b>396</b>	<b>731</b>	<b>219</b>		<b>-13.3%</b>

[1] World Bank data 2019 and Company's calculation

[2] For illustration purpose. This is a variable based on Google Mobility data, Oxford University government response tracker, and Company's own calculation

[3] Central scenario based on a simulation estimating % loss in GDP as a function of: (No of days in lockdown) x (GDP/day) x (% economic activity drop)

[4] Excluding Venezuela, Guyana, Suriname

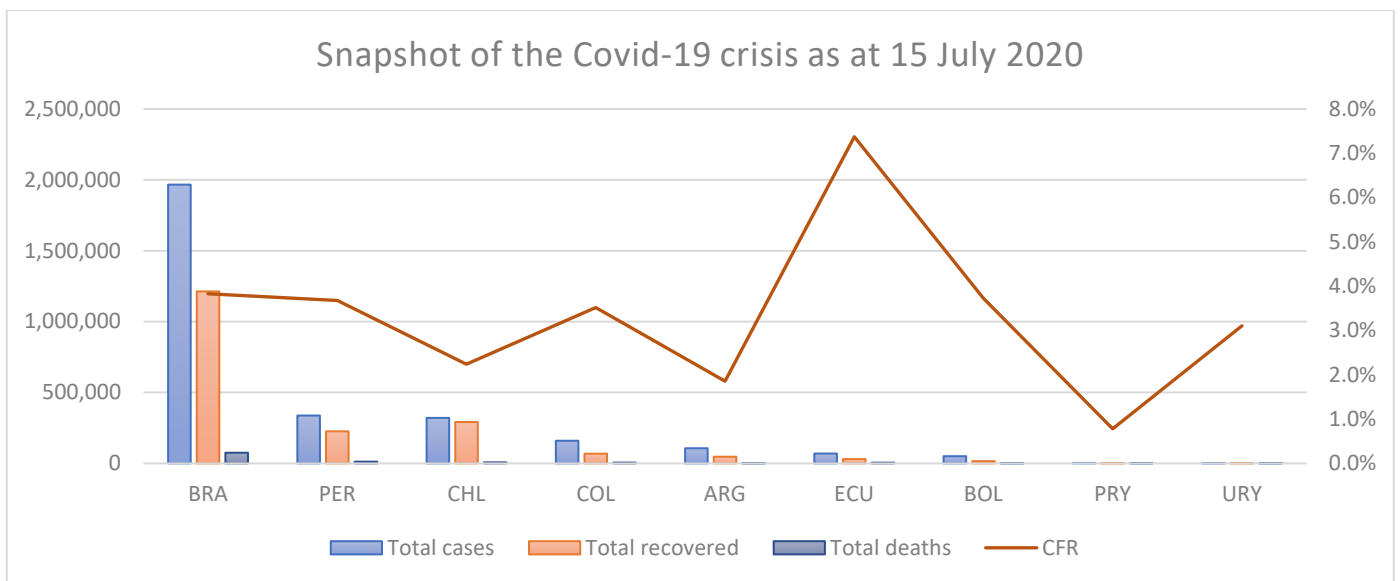


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## Covid-19: Where Are We Now?

South America has become the new epicenter of the covid-19 crisis, accounting for a growing number of new cases and deaths, which represented over 20% of worldwide total according to the European Centre for Disease Prevention and Control (ECDC). As at 16 July 2020, the sub-continent had over 3 million of confirmed cases, of which 2 million had recovered, while the case-fatality-rate (CFR) stood at 3.6%. This compares to a population of around 400 million (excl. Venezuela).

### Exhibit 1: Snapshot of the Covid-19 crisis

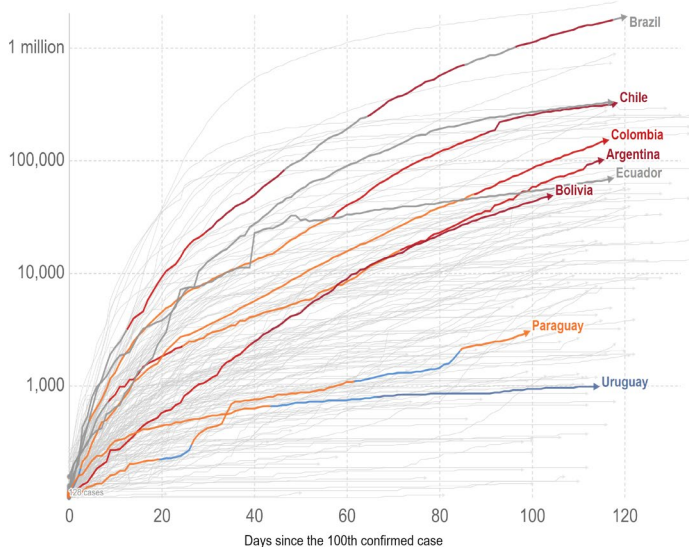


Source: <https://www.worldometers.info/coronavirus/>

### Exhibit 2: Covid-19 trend

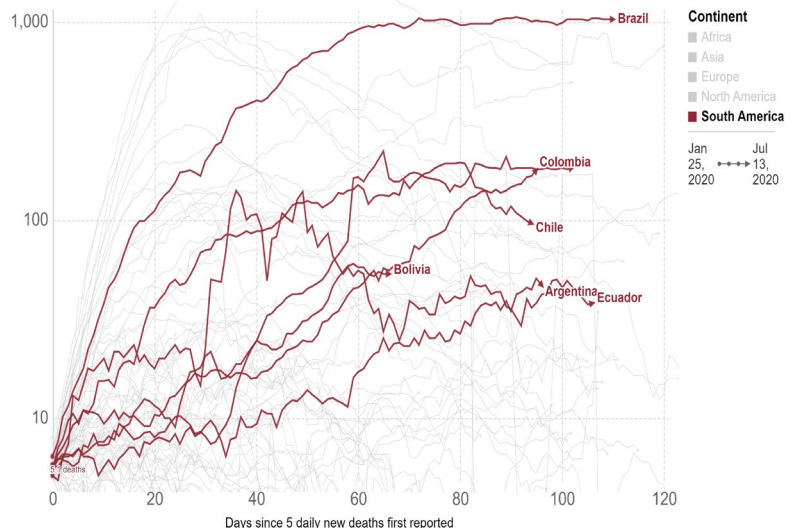
#### Cumulative confirmed COVID-19 cases

The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing



#### Daily new confirmed COVID-19 deaths

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: European CDC – Situation Update Worldwide – Last updated 13 July, 10:40 (London time), Official data collated by Our World in Data

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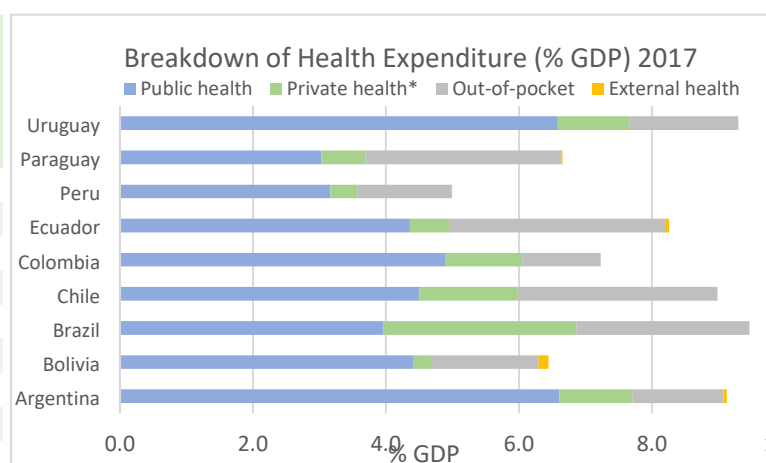


## Brief Overview of Healthcare Systems

As can be seen in Exhibit 3, countries in South America were vastly unprepared to face a pandemic, and there was little governments could do aside from taking extreme lockdown measures. Indeed, health infrastructure (buildings, machinery, IT) and stocks of vaccines for emergency or outbreaks (c.f. Capital Health Expenditure) were clearly underfunded, even though healthcare expenditure as a percentage of GDP compared well with the rest of the world.

### Exhibit 3 : Investment in healthcare system

	Capital Health Expenditure per Capita* current international \$ (2017)	Current Health Expenditure per Capita, PPP current international \$ (2017)	Current Health expenditure % GDP (2017)
<b>Argentina</b>	1	1,917	9.1
<b>Bolivia</b>	20	492	6.4
<b>Brazil</b>	43	1,472	9.5
<b>Chile</b>	40	2,229	9.0
<b>Colombia</b>	44	1,039	7.2
<b>Ecuador</b>	17	959	8.3
<b>Peru</b>	22	681	5.0
<b>Paraguay</b>	12	867	6.7
<b>Uruguay</b>	33	2,102	9.3



Source: World Bank data, and Company's estimate/calculation (\*)

To understand further the adequacy of healthcare capacity, we simulated a 10% hospitalization rate of confirmed active cases. The results were dramatic, particularly for Peru and Bolivia (exhibit 5) where a third of all hospital beds would be occupied by Covid-19 patients.

Healthcare systems in South America are thus generally unable to cope with rapidly rising cases. As such, governments will have to rely on their own population to take the adequate safeguard measures. The social consequences of this will be dire once the virus situation abates.

### Exhibit 4: Healthcare Capacity 2019

	Hospitals	Hospital beds	Operating rooms	CT Scanners
<b>Argentina</b>	2,361	102,341	2,818	508
<b>Bolivia</b>	214	10,866	472	68
<b>Brazil</b>	6,161	374,518	29,807	2037
<b>Chile</b>	381	38,387	910	115
<b>Colombia</b>	2,623	81,622	3,125	343
<b>Ecuador</b>	633	24,054	n.a	n.a
<b>Peru</b>	813	30,040	1,058	185
<b>Paraguay</b>	105	7,565	183	56
<b>Uruguay</b>	92	4,043	95	16

Source: Global Health Intelligence, INEC (Ecuador)

### Exhibit 5: Covid-19 stats at 16/07/20

	Total Active covid-19 cases	Daily new covid-19 cases	Serious, Critical Cases	Scenario analysis	
				Hospitalisation based on 10% rate	% hospital beds for Covid patients based on 10%
<b>Argentina</b>	63,551	3,637	752	6,355	6.2%
<b>Bolivia</b>	33,919	1,351	71	3,392	31.2%
<b>Brazil</b>	571,141	43,829	8,318	57,114	15.3%
<b>Chile</b>	21,107	2,493	1,821	2,111	5.5%
<b>Colombia</b>	91,013	8,037	1,027	9,101	11.2%
<b>Ecuador</b>	34,898	1,036	71	3,490	14.5%
<b>Peru</b>	97,977	3,862	1,302	9,798	32.6%
<b>Paraguay</b>	1,936	144	12	194	2.6%
<b>Uruguay</b>	78	17	3	8	0.2%

Source: worldometers.info/coronavirus/ and Company's calculations

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## Governments' Response – Lockdowns

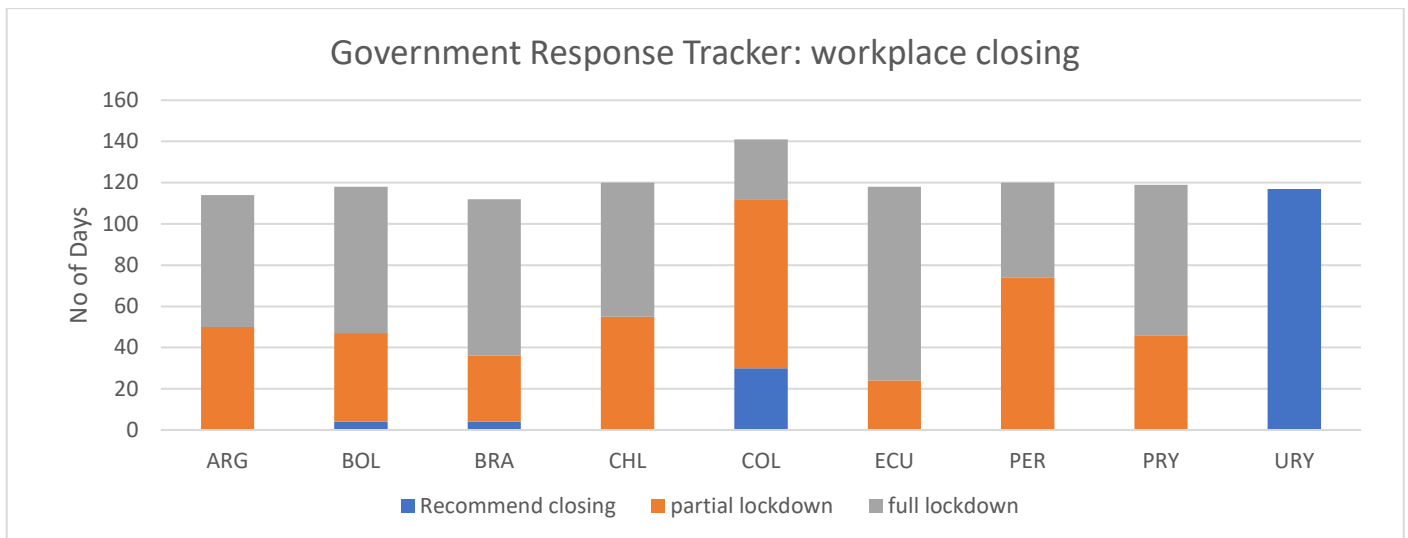
The first known coronavirus patient in South America landed in São Paulo (Brazil) on February 21<sup>st</sup> coming back from Italy (Lombardia region). Since then, national governments across the region have successively declared national health emergencies and have taken an array of measures to contain the spread of COVID-19. These measures were drastic from the onset and by 19 March 2020 most countries in South America had gone into full lockdown (exhibit 6). Although the severity of lockdowns did evolve over time, most countries continue to require some degree of lockdowns, which has a direct impact on activity as can be seen with Google Mobility data (exhibit 8).

### Exhibit 6: Lockdown in South America



Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last Updated 13th July.  
 Note: There may be sub-national or regional differences in policies on workplace closures. The policy categories shown may not apply at all sub-national levels. A country is coded as 'required closures' if at least some sub-national regions have required closures.  
 OurWorldInData.org/coronavirus • CC BY

### Exhibit 7

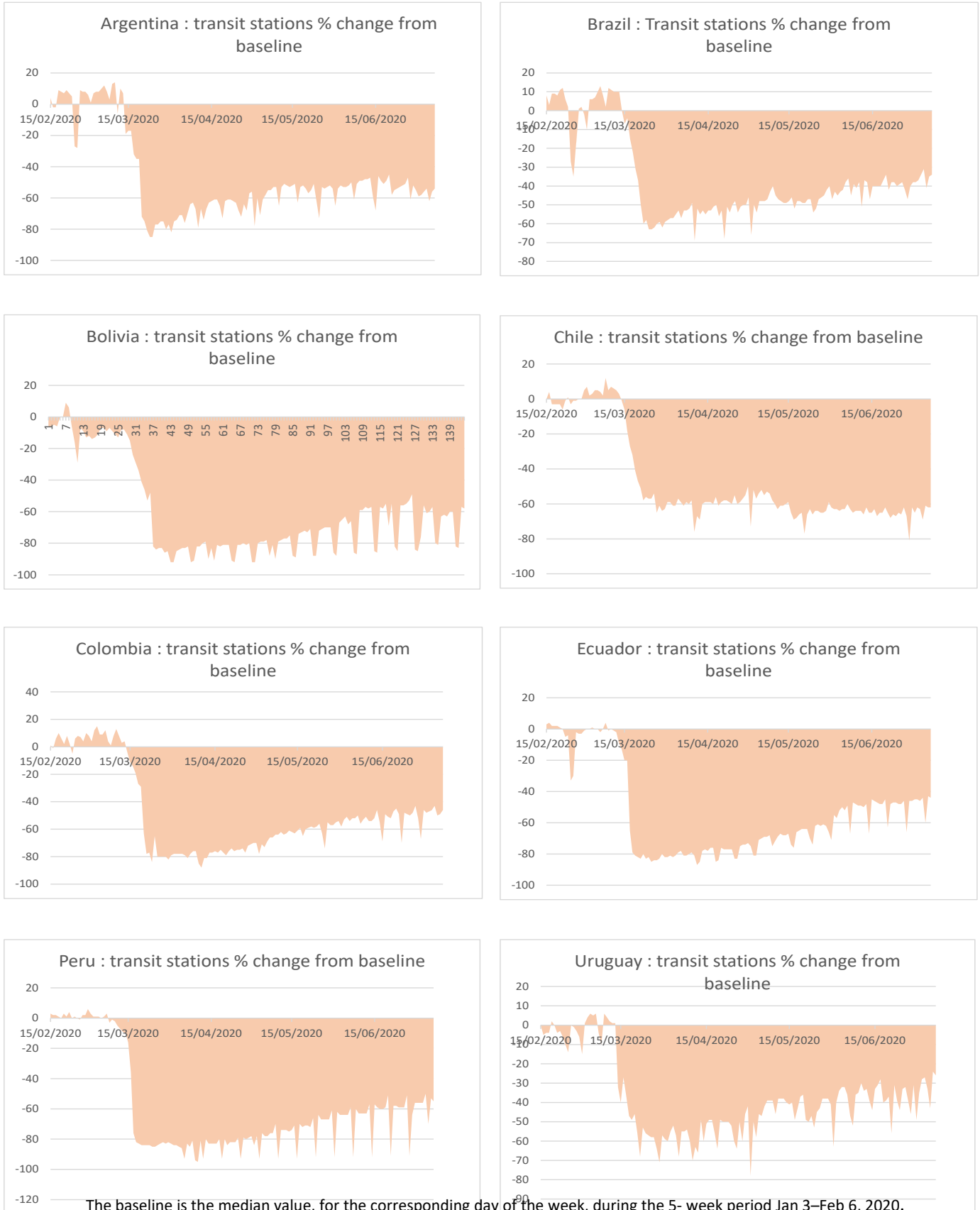


Source: Oxford Covid-19 Government Response Tracker



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Exhibit 8: Selected Google Mobility data – Public Transport Stations



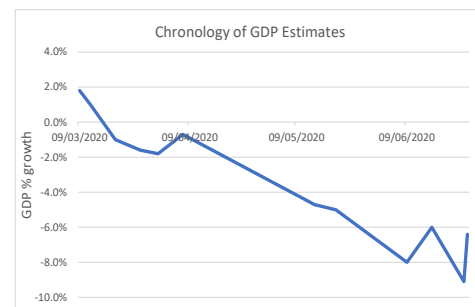


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## Press articles – chronology of GDP estimates

### Brazil

26/06/2020	<a href="#">Central Bank projects 6.4% drop in Brazil's GDP</a>
25/06/2020	<a href="#">IMF projected a 9.1% contraction of Brazil's GDP</a>
23/06/2020	<a href="#">Brazil registers 9.3% record GDP contraction</a>
16/06/2020	<a href="#">Mourão says Brazilian GDP should shrink 5% to 6% this year</a>
09/06/2020	<a href="#">World Bank projects 8.0% drop in Brazil's GDP</a>
20/05/2020	<a href="#">GDP contraction may be greater than 5% in 2020</a>
14/05/2020	<a href="#">Government revises estimate for GDP in 2020 to fall 4.7%</a>
12/05/2020	<a href="#">Financial market reduces again GDP prediction for 2020</a>
07/04/2020	<a href="#">S&amp;P Global predicts negative Brazilian GDP at 0.7%</a>
31/03/2020	<a href="#">Ipea estimates a 1.8% drop in GDP</a>
26/03/2020	<a href="#">Brazil's GDP is to contract 1.6% in 2020, says Moody's</a>
19/03/2020	<a href="#">JP Morgan projects a 1% GDP contraction in 2020</a>
12/03/2020	<a href="#">Brazil's GDP growth could be only 1% due to Covid-19</a>
09/03/2020	<a href="#">Moody's cuts Brazil's GDP to 1.8% in 2020</a>



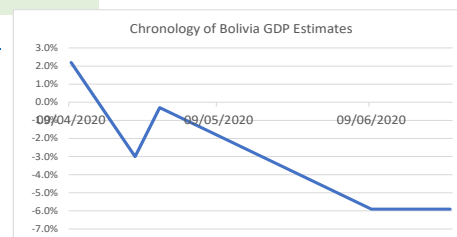
### Argentina

15/07/2020	<a href="#">Projections: 11% drop in GDP and 42.2% inflation</a>
30/06/2020	<a href="#">GDP dropped 26.4% in April, the worst in 120 years</a>
24/06/2020	<a href="#">Argentina's GDP fell 5.4% in the first quarter</a>
17/06/2020	<a href="#">Moody's projects GDP fall of 8% in 2020</a>
10/06/2020	<a href="#">OECD expects Argentina's GDP to collapse to 10.1%</a>
22/05/2020	<a href="#">Focus Economics forecasts 6.9% fall in GDP in 2020</a>
15/04/2020	<a href="#">IMF projects a 5.7% drop in Argentina's GDP</a>
14/04/2020	<a href="#">GDP is forecast to fall by 6.5% in 2020</a>
07/04/2020	<a href="#">The market expects a 4.3% drop in GDP by 2020</a>
23/03/2020	<a href="#">Argentine government says GDP could fall 2.5% to 5%.</a>



### Bolivia

25/06/2020	<a href="#">Government sees GDP contraction of 5.9%, its lowest level ever</a>
09/06/2020	<a href="#">World Bank projects a 5.9% drop in Bolivian GDP by 2020</a>
27/04/2020	<a href="#">Bolivia's GDP will contract 0.3%</a>
22/04/2020	<a href="#">ECLAC lowers GDP projection for Bolivia to -3%</a>
09/04/2020	<a href="#">Real GDP growth in Bolivia will contract in the coming quarters</a>
09/04/2020	<a href="#">The EIU forecast an average 2.6% GDP for Bolivia in 2020-2024</a>



### Chile

18/06/2020	<a href="#">Central Bank of Chile projects GDP could fall to 7.5%</a>
10/06/2020	<a href="#">Market experts estimate Chile's GDP will fall 4.8% in 2020</a>
19/05/2020	<a href="#">Chile's GDP rises 0.4% in the first quarter</a>
22/04/2020	<a href="#">ECLAC projects that Chile's GDP will fall by 4%</a>
15/04/2020	<a href="#">IMF projects 4.5% drop in Chile's GDP</a>
14/04/2020	<a href="#">World Bank forecasts 3% contraction in Chile's GDP by 2020</a>
06/04/2020	<a href="#">Financial institutions foresee a drop in GDP of 1.9% to 3%</a>
18/03/2020	<a href="#">Chile's GDP shrinks by 2.1% in Q4-2019</a>



Source: <https://brasileconomico.net/> ; <https://argentinaeconomica.net/> ; <https://chileeconomico.net/> ; <https://boliviaeconomica.net/>

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## References

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<https://boliviaeconomica.net/>  
<https://mosoj.io/>  
<https://data.worldbank.org/>

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- Promoting responsible cross-border trade & investment
- Optimising open data & information flows in and across audiences, issues & themes
- Providing reliable and accurate insights to those interested to invest, live or create a better future for the continent.

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