LatAm Economics

# Covid-19 Crisis: Measuring the Fiscal Hole

**Juan Cerruti***
+5411 4341 1096
jcerruti@santander.com.ar

**Ana Paula Vescovi***
+5511 3553 5404
anavescovi@santander.com.br

**Juan Pablo Cabrera***
+562-2320-3778
jcabrera@santander.cl

**Guillermo Aboumrad***
+5255-5257-8170
gjaboumrad@santander.com.mx

Santander
Corporate & Investment Banking

# Themes

### **Budget Deficits:** Fast Reaction, Large Holes

Early this year, governments in the region in general were looking for some fiscal consolidation, and even so we expected relatively elevated deficits, averaging 4%/GDP in 2020. The Covid-19 outbreak shelved these plans, and fiscal gaps should double, to 8.0%-8.5%/GDP as per our latest estimates.

### **Fiscal Packages:** Focus Is on Direct Transfers

We measure the impact of the Covid-19 crisis on fiscal accounts at ~4.0%-4.5%/GDP in LatAm this year. Two-thirds of this will likely be intentional, as governments reacted by increasing expenditures mainly through direct transfers to workers and households. But the other third should result from large declines in tax collections, in part due to lower commodity prices.

### **Funding Strategies:** Local Markets, Not The IMF

Roughly two thirds of 2020 public sector borrowing needs in LatAm should be covered by local debt issuance, reflecting reasonably deep domestic capital markets and resilient local investor confidence. External debt and the usage of fiscal savings should also play a role, which means that there’s still ample room to call for multilateral help if needed.

### **Public Debt:** Up It Goes…but Does Anyone Care?

It should be another year of rising public debt ratios. In low-debt countries, the increase should be proportionally significant, and the most heavily-indebted governments may reach critical levels. DM countries can afford sky-high public debt levels at practically no marginal credit punishment. It remains to be seen whether the same applies for LatAm Treasuries.

# Countries

### **Brazil:** Largest Direct Transfers in The Region

Despite frictions among different government levels, the fiscal policy response was quick and ambitious. As usual, the largest source of financing will be domestic debt markets. Direct transfers to workers/households should reach a sizeable 2.8%/GDP, as per our numbers: this is good for the economy but adds concerns on public debt levels.

### **Mexico:** Is Austerity The Answer?

The government continues to stick to the concept of fiscal austerity, leaving the biggest part of the virus-triggered economic adjustment to the private sector. The size of fiscal measures is among the smallest in LatAm, but we expect oil-related revenue losses to be large. The resulting 4%-5%/GDP deficit should be mostly covered via local bond debt issuance.

### **Argentina:** Money Printer to Run Faster

The virus crisis caught the government struggling with a long-lasting recession and in the middle of external debt negotiations. Tough lockdowns are containing the virus spread, at the cost of a large economic hit. The fiscal package looks small by LatAm standards, but reasonable considering that central bank loans will be the largest funding source.

### **Chile:** Sovereign Wealth Funds Make The Difference

On top of the high deficit originally set by the 2020 budget, the crisis measures will send the gap to 8%/GDP (i.e. the largest primary deficit in LatAm), mainly on tax cuts and direct transfers. Capital injections to unemployment fund and state-owned bank will also play a role. The good news is that previous savings should cover a big chunk of financing needs.

### **Colombia:** Fiscal Package Has Room to Grow

The government has announced several measures, but we expect more fiscal stimulus in upcoming weeks. The fiscal deficit should increase to c.5%/GDP, in part due to persistently low oil prices. The medium-term fiscal rule guidelines will have to be adjusted, which implies a public debt ratio well north of 50%/GDP for some years.

### **Peru:** Still The Lowest Debt Ratio in LatAm

Low debt levels give the government a large fiscal space to contain the virus-related damage to the real economy. Emergency aid should mainly come via tax breaks, subsidies to the private sector, and direct transfers. The funding strategy comprises a balanced mix of varied sources: local/external debt, previous savings and multilateral loans.

## Fiscal Results in LatAm

# Virus Crisis Pushes Fiscal Deficits North of 8% of GDP

### Fiscal Balances Before & After Covid-19-Related Impact (US$ bn, %/GDP)

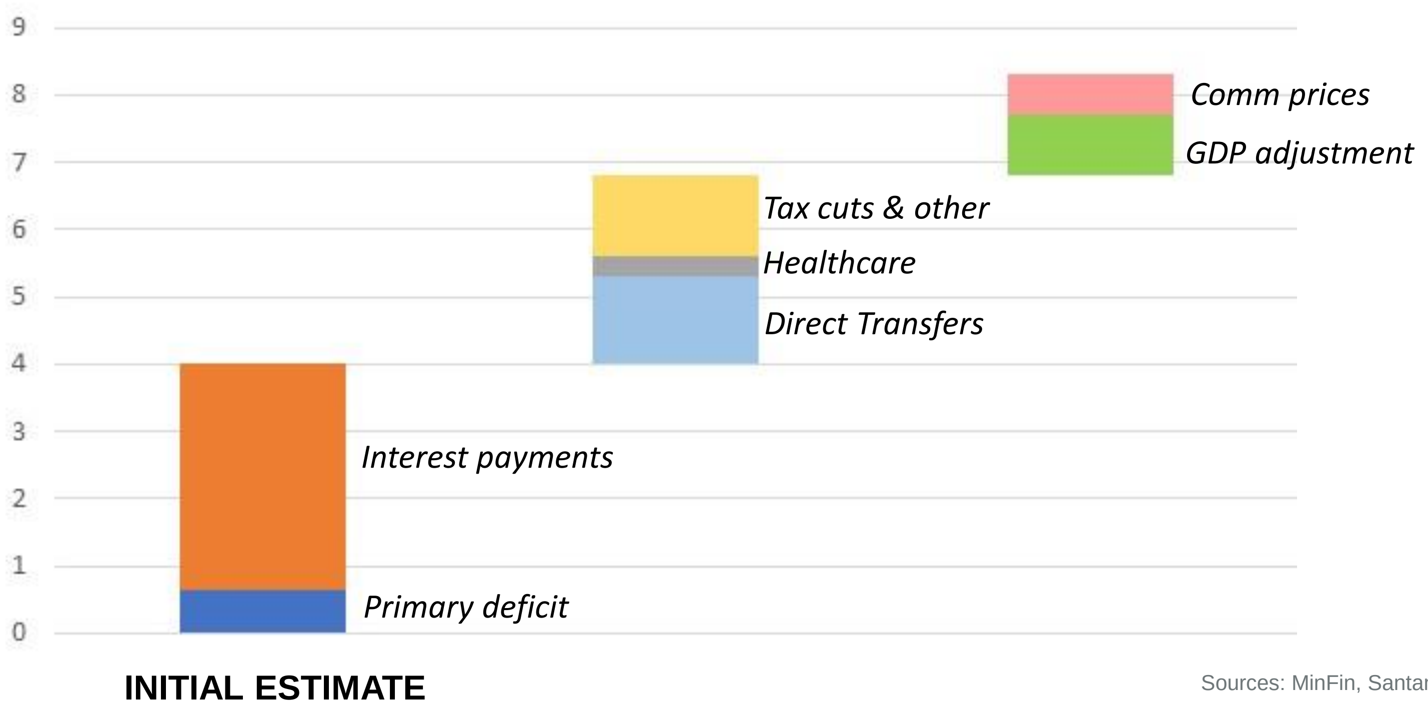
| | ARGENTINA | | BRAZIL | | CHILE | | COLOMBIA | | MEXICO | | PERU | | LATAM | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP |
| **2020 original budget deficit estimate (a)** | **9.8** | **2.9** | **84.0** | **6.0** | **11.8** | **4.5** | **6.2** | **2.2** | **23.9** | **2.3** | **5.5** | **2.1** | **141.2** | **4.0** |
| -- Primary deficit | *1.3* | *0.4* | *20.2* | *1.4* | *9.3* | *3.5* | *-2.1* | *-0.8* | *-7.9* | *-0.8* | *2.1* | *0.8* | ***22.9*** | ***0.6*** |
| -- Interest payments | *8.5* | *2.5* | *63.9* | *4.6* | *2.5* | *1.0* | *8.3* | *2.9* | *31.8* | *3.1* | *3.4* | *1.3* | ***118.4*** | ***3.3*** |
| **Extra spending measures (b)** | **3.8** | **1.1** | **64.4** | **4.6** | **4.4** | **1.7** | **2.8** | **1.0** | **1.7** | **0.2** | **6.2** | **2.4** | **83.3** | **2.3** |
| -- Direct transfers* | *1.5* | *0.4* | *39.3* | *2.8* | *2.7* | *1.0* | *1.1* | *0.4* | *0.0* | *0.0* | *1.7* | *0.6* | ***46.2*** | ***1.3*** |
| -- Healthcare system | *0.2* | *0.0* | *5.0* | *0.4* | *1.3* | *0.5* | *1.1* | *0.4* | *2.0* | *0.2* | *1.5* | *0.6* | ***11.1*** | ***0.3*** |
| -- Other** | *2.2* | *0.7* | *20.1* | *1.4* | *0.4* | *0.1* | *0.6* | *0.2* | *-0.3* | *0.0* | *3.0* | *1.2* | ***26.0*** | ***0.7*** |
| **Revenue losses (c)** | **6.0** | **1.8** | **27.5** | **2.0** | **4.8** | **1.8** | **4.8** | **1.7** | **19.9** | **1.9** | **7.8** | **3.0** | **70.8** | **2.0** |
| -- Tax cuts | *0.6* | *0.2* | *5.8* | *0.4* | *2.5* | *0.9* | *0.8* | *0.3* | *0.0* | *0.0* | *3.0* | *1.2* | ***12.7*** | ***0.4*** |
| -- GDP adjustment | *4.4* | *1.3* | *15.9* | *1.1* | *1.2* | *0.5* | *1.1* | *0.4* | *7.1* | *0.7* | *3.0* | *1.1* | ***32.8*** | ***0.9*** |
| -- Comm prices *** | *1.0* | *0.3* | *3.1* | *0.2* | *1.1* | *0.4* | *2.5* | *0.9* | *12.1* | *1.2* | *1.2* | *0.5* | ***21.0*** | ***0.6*** |
| -- Other**** | *0.0* | *0.0* | *2.7* | *0.2* | *0.0* | *0.0* | *0.3* | *0.1* | *0.7* | *0.1* | *0.6* | *0.2* | ***4.3*** | ***0.1*** |
| **New 2020 budget deficit estimate (a+b+c)** | **19.6** | **5.8** | **175.9** | **12.6** | **21.0** | **8.0** | **13.8** | **4.9** | **45.5** | **4.4** | **19.6** | **7.4** | **295.4** | **8.3** |
| ***Memo: Fiscal Impact Covid-19 crisis (b+c)*** | ***9.8*** | ***2.9*** | ***91.9*** | ***6.6*** | ***9.2*** | ***3.5*** | ***7.6*** | ***2.7*** | ***21.6*** | ***2.1*** | ***14.0*** | ***5.3*** | ***154.1*** | ***4.3*** |

* Includes transfers to workers, households. ** Includes subsidies to private companies and public works. *** Copper-related income in Chile, oil-related in Colombia, Brazil and Mexico, grain-related in Argentina. **** Includes loss in dividend payments, deferral in social security contributions, etc. Sources: MinFin, Santander.

Before the onset of the Covid-19 crisis in the region, we estimated the aggregated fiscal deficit at 4% of GDP, equivalent to ~US$140 billion. For different reasons, the largest gaps were Brazil's (mainly due to the heavy burden of public debt), and Chile's (due to extra social spending after social unrest in 2019). With the Covid-19 spread, though, fiscal deficits will likely shoot up in 2020, to 8.3% of Latam GDP as per our latest estimates. We have to be very careful when analyzing the fiscal impact of the packages recently launched by authorities, as many initiatives are not actually fiscal spending but capital transfers. That said, we estimate the deficit impact of the Covid-19 crisis to be between 2.1%-6.6% of GDP, with Mexico and Brazil at the extremes of the range, respectively.

# Deficits to Widen Sharply on Direct Transfers & Revenue Losses

**2020 Aggregate LatAm Fiscal Deficit, before & after crisis, % GDP**



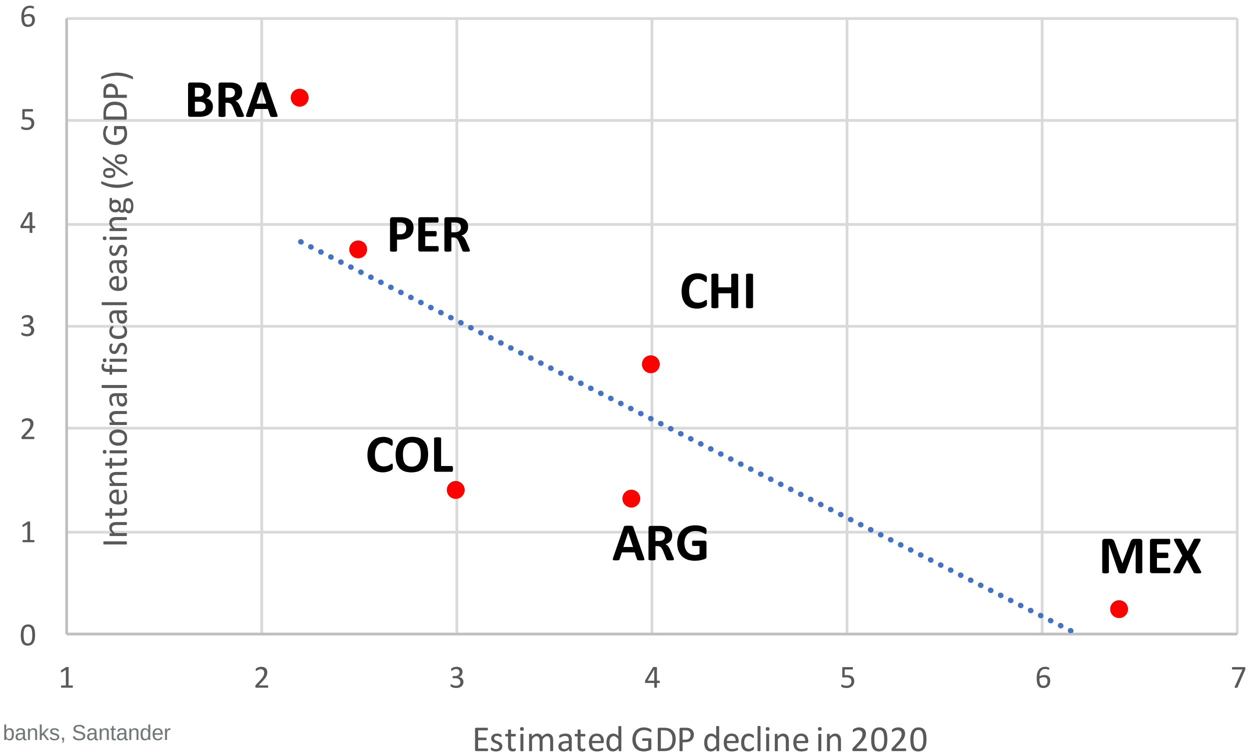

Sources: MinFin, Santander

In general, fiscal deficits in Latin America should widen significantly this year. Part of the larger gap is intentional, as governments launched sizeable fiscal packages to counter the outbreak's effects on the real economy, mainly in the form of direct transfers to households (1.0%-1.5% of GDP). Extra spending in healthcare (0.3% of GDP) and tax cuts or deferrals (0.4% of GDP) add to the final numbers, but so far are playing a secondary role. Brazil and Peru stand out in this dimension, with intentional fiscal relaxation of 4%-5% of GDP in both.

Another aspect is the inevitable result of much lower economic activity levels (almost 1% of GDP) and depressed commodity price levels (0.6% of GDP, while oil futures prices pierce through negative levels for the first time in history as this report goes to press). This is particularly the case in Mexico, Peru and Argentina (1.5%-2.0% of GDP). In any case, these fiscal packages will likely be fine-tuned in upcoming weeks, as authorities get a better grasp of the extent of the virus spread and its potential economic consequences.

# Inverse Relationship Between GDP Losses & Fiscal Stimulus

## Fiscal Impact of the Crisis (%/GDP) vs. Estimated GDP Declines




Sources: MinFin, central banks, Santander

Our general sense in the region is that large fiscal stimuli will contribute to minimize GDP losses in 2020. Of course there are other key elements at play, as the intensity of the lockdowns, but to some extent mild GDP contractions in Brazil and Peru are related to intentional fiscal easing close to 4%-5% of GDP (i.e. widening in the fiscal deficit not due to the recession or commodity price losses). At the other extreme, Mexico stands out because of a big economic hit, partially due to the lack of significant emergency aid measures for the private sector.

Colombia's position in this chart is interesting, as our expected GDP contraction there looks relatively mild given the size of its fiscal package: this mainly reflects the assumption that the virus curve is behaving better there, so the lockdown measures should be relatively less damaging for the economy. In Argentina, the reason of the small fiscal package is the fragile situation of public accounts since mid-2019, including the "re-profiling" of the domestic debt. In Chile, fiscal easing mainly aims at promoting a faster recovery rather than minimizing the initial hit on the economy.

# Where Will The Money Come from?

## Government Financing Needs – 2020 Estimates (US$ bn, %/GDP)

| | ARGENTINA | | BRAZIL | | CHILE | | COLOMBIA | | MEXICO | | PERU | | LATAM | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP | US$ bn | %/GDP |
| **Financing needs** | **41.5** | **12.4** | **301.6** | **21.6** | **30.4** | **11.6** | **22.7** | **8.0** | **95.9** | **9.3** | **22.0** | **8.4** | **514.0** | **14.4** |
| -- New 2020 fiscal deficit | 19.6 | 5.8 | 175.9 | 12.6 | 21.0 | 8.0 | 13.8 | 4.9 | 45.5 | 4.4 | 19.6 | 7.4 | **295.4** | **8.3** |
| -- Debt amortizations* | 21.9 | 6.5 | 121.1 | 8.7 | 1.5 | 0.6 | 3.6 | 1.3 | 50.4 | 4.9 | 2.1 | 0.8 | **200.6** | **5.6** |
| -- Other net payments | 0.0 | 0.0 | 4.6 | 0.3 | 7.9 | 3.0 | 5.2 | 1.8 | 0.0 | 0.0 | 0.3 | 0.1 | **18.0** | **0.5** |
| *-- Original budget* | *0.0* | *0.0* | *2.3* | *0.2* | *3.4* | *1.3* | *4.0* | *1.4* | *0.0* | *0.0* | *0.0* | *0.0* | ***9.7*** | ***0.3*** |
| *-- New measures*** | *0.0* | *0.0* | *2.3* | *0.2* | *4.5* | *1.7* | *1.2* | *0.4* | *0.0* | *0.0* | *0.3* | *0.1* | ***8.3*** | ***0.2*** |
| **Sources of funding** | **41.5** | **12.4** | **301.6** | **21.6** | **30.4** | **11.6** | **22.7** | **8.0** | **95.9** | **9.3** | **22.0** | **8.4** | **514.0** | **14.4** |
| -- External debt | 0.0 | 0.0 | 7.6 | 0.5 | 5.7 | 2.2 | 3.9 | 1.4 | 15.2 | 1.5 | 5.0 | 1.9 | **37.4** | **1.0** |
| -- Local debt | 16.9 | 5.0 | 246.2 | 17.6 | 8.9 | 3.4 | 9.0 | 3.2 | 69.8 | 6.7 | 4.7 | 1.8 | **355.5** | **9.9** |
| -- Stabilization funds | 0.0 | 0.0 | 0.0 | 0.0 | 15.8 | 6.0 | 3.9 | 1.4 | 10.9 | 1.1 | 6.3 | 2.4 | **36.9** | **1.0** |
| -- Multilateral loans | 1.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.9 | 0.0 | 0.0 | 2.5 | 1.0 | **6.6** | **0.2** |
| -- Central bank *** | 20.0 | 6.0 | 30.8 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **50.8** | **1.4** |
| -- Other**** | 3.0 | 0.9 | 17.0 | 1.2 | 0.0 | 0.0 | 3.4 | 1.2 | 0.0 | 0.0 | 3.5 | 1.3 | **26.9** | **0.8** |

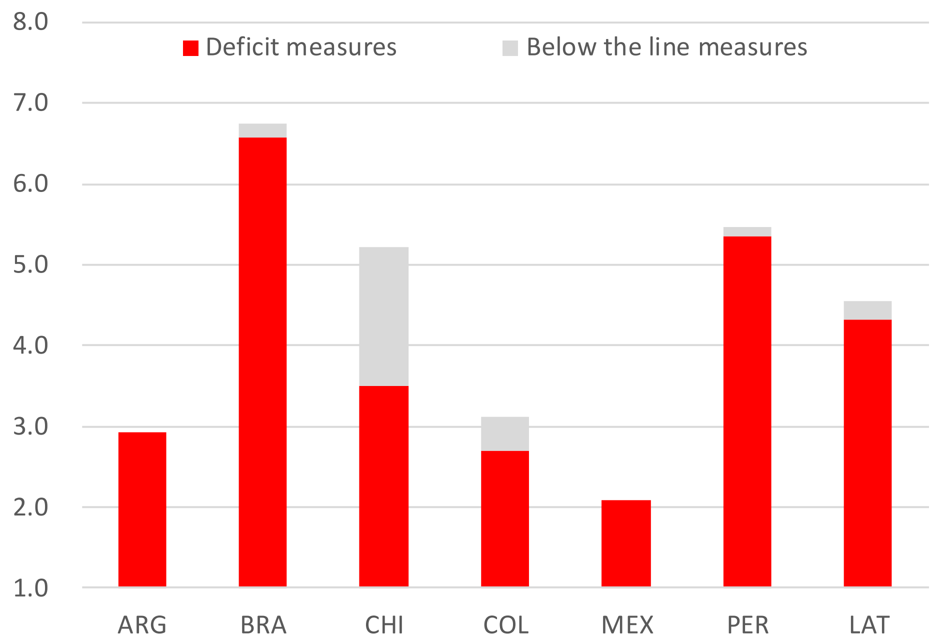
* Excluding short term debt amortizations. ** Including capital transfers to state-owned entities or funds. *** Includes profit transfers in Brazil, and loans in Argentina. **** Includes intra-public sector transfers. Sources: MinFin, central banks, Santander

Combined, major LatAm countries should now face government financing needs of ~US$515 billion, or 14% of GDP. On top of the fiscal deficit, these governments will likely have to roll over debt principal of 5.6% of GDP and pay another 0.5% of GDP in below-the-line expenses. Financing needs go from Peru's 8% (thanks to the low public debt service) to Brazil's 22% (as a result of both sizable deficit and amortization payments), with Argentina and Chile also in double-digit territory.

Where will the money come from? The lion's share of funding should be domestic: local debt issuance should cover 70% of financing needs. The remaining 30% would come from stabilization funds (very large in Chile and Peru), external debt issuance (as in Mexico and Colombia), and different forms of central bank resources (Argentina and Brazil). Interestingly, we estimate that multilateral help should play a negligible role. This probably means that if the economic crisis related to the virus deepens further, there's still room to call for IMF-World Bank help.

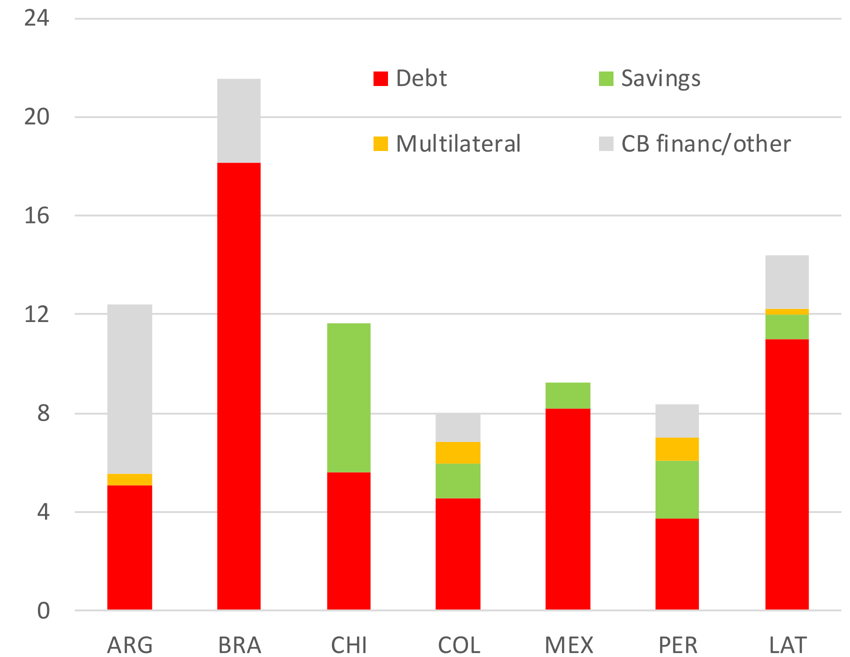
# 2020 Govt Financing Needs of ~15% of GDP Due to Covid-19 Crisis

## Impact of Covid-19 crisis on Overall Financing Needs, % of GDP*




## 2020 Financing Needs & Funding

*New estimate, %/GDP*




Sources for both charts: MinFin, central banks, Santander

As we measure it, overall public sector borrowing requirements in LatAm would increase by ~US$160 billion in 2020, just as a result of the Covid-19-related government measures and revenue losses. This is equivalent to 4.5% of GDP, which added to the pre-crisis estimates makes a total amount of financing needs closer to 14%-15% of GDP, an historical high. The range goes from the low gaps of Peru and Colombia (well into single-digit territory) to the eye-popping 22% of Brazil (which, nonetheless, is not really that high vs. its historical standards).

Roughly 70% of estimated 2020 public sector borrowing needs in LatAm should be covered by local debt issuance, reflecting reasonably deep domestic capital markets and resilient local investor confidence. External debt and the usage of fiscal savings will also play a role, which means that there's still ample room to call for multilateral help if needed. Central banks could also provide funds to some governments, as in Argentina (via advances) and Brazil (via profit monetization).

# Public Debt Ratios, Another Step Upward…Will Anyone Care?

## Net Public Debt Levels – 2020 Original & Current Estimates (US$ bn, %/GDP)

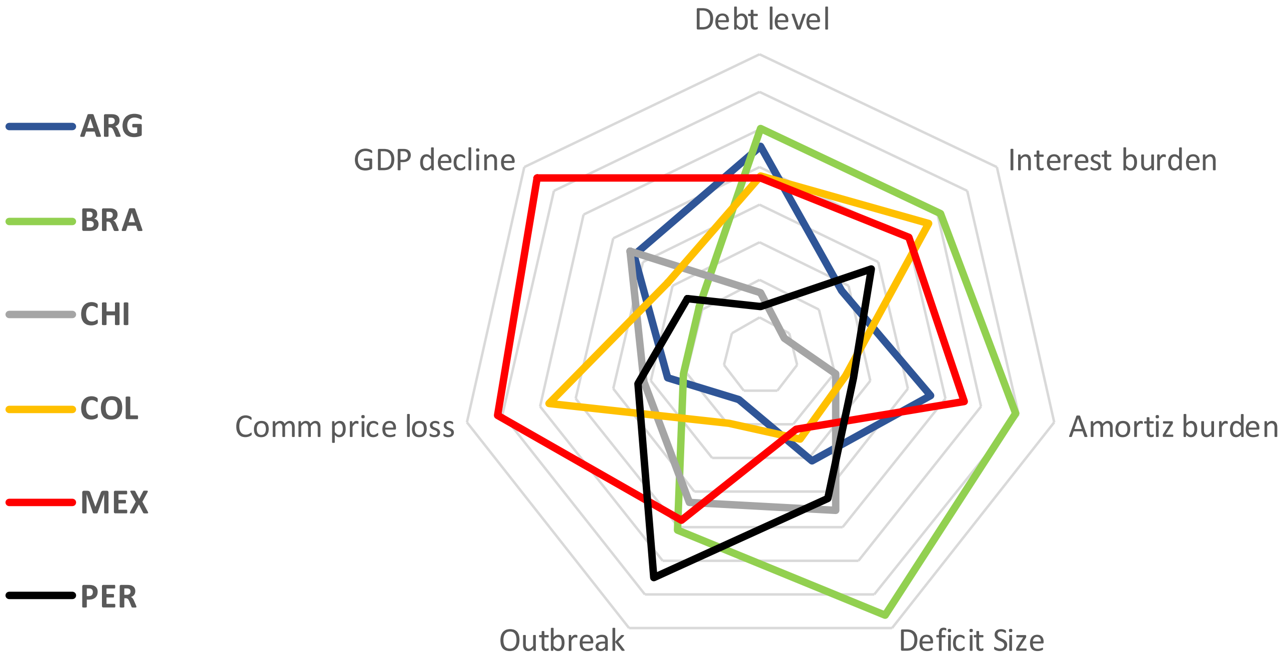
| | | Initial estimate - Net (a) | Gross debt | Deductions* | Impact of fiscal measures (b) | New estimate - Net (c=a+b) |
|---|---|---|---|---|---|---|
| **ARGENTINA** | US$ bn | 192.0 | 320.0 | 128.0 | 9.8 | 201.8 |
| | %/GDP | 57.3 | 95.5 | 38.2 | 2.9 | 60.2 |
| **BRAZIL** | US$ bn | 807.9 | 1084.0 | 276.1 | 94.3 | 902.2 |
| | %/GDP | 57.8 | 77.6 | 19.8 | 6.7 | 64.6 |
| **CHILE** | US$ bn | 51.8 | 77.5 | 25.7 | 13.7 | 65.5 |
| | %/GDP | 19.8 | 29.6 | 9.8 | 2.9 | 22.7 |
| **COLOMBIA** | US$ bn | 141.6 | 145.9 | 4.2 | 8.8 | 150.5 |
| | %/GDP | 50.1 | 51.6 | 1.5 | 3.1 | 53.2 |
| **MEXICO** | US$ bn | 522.8 | 593.9 | 71.1 | 21.6 | 544.4 |
| | %/GDP | 50.5 | 57.3 | 6.9 | 2.1 | 52.5 |
| **PERU** | US$ bn | 42.6 | 72.6 | 30.0 | 14.3 | 56.9 |
| | %/GDP | 16.2 | 27.6 | 11.4 | 5.5 | 21.6 |
| **LATAM** | **US$ bn** | **1758.7** | **2293.8** | **535.1** | **162.5** | **1921.2** |
| | **%/GDP** | **49.2** | **64.1** | **15.0** | **4.5** | **53.7** |

Intra public sector debt holdings in Argentina, Brazil; liquid financial assets in hands of the Treasury in Peru and Colombia; Stabilization/sovereign wealth funds in Chile and Mexico.
Sources: MinFin, central banks, Santander

Before the Covid-19 crisis, we estimated net public debt in the region of close to 50%/GDP (~65% in gross terms). In general, public debt ratios have been on the rise in recent years, in the wake of sluggish growth and increasing social demands, despite falling interest rates. Now, the large fiscal impact stemming from the virus crisis will likely lead to another increase in public indebtedness. As per our latest estimates, the aggregate gross debt should reach 68%/GDP by end-2020, almost 4 p.p. higher than previous estimates. The net public debt, though, would increase more, by 5 p.p. to 54%, as some countries will likely be depleting their stabilization funds to foot the extra bills, in a wide range between Peru's 22% and Brazil's 65% (numbers in Argentina can be tricky in the middle of the ongoing external debt negotiation process).

# Strengths & Weaknesses In Each Country

## LatAm-6 – Crisis Indicators Radar (standard deviation from regional average)




Outbreak indicator based on Covid-19 cases and deaths (levels and growth rates). Sources: Santander

**Argentina**'s high debt level (a big part of which is US dollar-denominated) led the country to another external debt restructuring process. The extent of the virus outbreak is proving to be fairly well contained.

**Brazil**'s focus on fiscal reform is precisely in order to reduce the burden of debt and the large fiscal deficit. The expected decline in GDP is among the mildest ones in the region.

**Chile**'s low debt levels allow the country to have a light interest burden, but this may worsen if the sizeable 2020 deficit cannot be reduced and the public debt continues to grow fast.

In **Colombia,** virus-related figures look favorable vs the region, so lockdowns should be less damaging. The public debt ratio should exceed 50% of GDP and may become a problem if there's no cap to that in following years.

In **Mexico**, the trade off is fairly evident: Its main positive is the small fiscal deficit expected for this year, given the massive red ink everywhere else. In contrast, the recession is likely to be much deeper than average.

**Peru**'s main positive is its low debt ratio, which paves the way for aggressive action to support the real economy. The main problem is the progress of the virus outbreak, whose curves are still far from showing any flattening.

## Annex: Santander GDP Estimates - Update

# Estimating the Size & Duration of the Recession

| | ARG | BRA | CHI | COL | MEX | PER |
|---|---|---|---|---|---|---|
| **2020 Forecast, Basecase** | **-3.9%** | **-2.2%** | **-4.0%** | **-3.0%** | **-6.4%** | **-2.5%** |
| ***- Worst case (long lockdown period)*** | *-6.1%* | *-6.0%* | *-5.5%* | *-5.0%* | *-7.4%* | -4.0% |
| ***- Best case (short lockdown period)*** | *-2.5%* | *-0.4%* | *-2.5%* | *-1.5%* | *-5.4%* | -1.2% |
| **2021 Forecast, Basecase** | **+3.0%** | **+1.7%** | **+3.0%** | **3.5%** | **+2.5%** | **3.2%** |
| ***- Worst case (long lockdown period)*** | *+2.6%* | *+2.8%* | *+2.5%* | *3.2%* | *+2.0%* | 3.0% |
| ***- Best case (short lockdown period)*** | *+3.5%* | *+3.4%* | *+3.5%* | *3.9%* | *+3.0%* | 4.0% |
| **2Q20 vs 1Q20, chg, s.a., basecase** | **-4.5%** | **-5.6%** | **-8.9%** | **-4.9%** | **-7.9%** | **-5.2%** |
| **2Q20 vs 2Q19, chg, n.s.a, basecase** | **-5.0%** | **-5.8%** | **-8.3%** | **-4.4%** | **-9.4%** | **-4.2%** |
| **Return to 1Q20 GDP s.a. level, basecase** | **2Q21** | **1Q22** | **1Q22** | **2Q21** | **1Q22** | **2Q21** |

Sources: MinFin, central banks, Santander.

# As of April 20, 81k Coronavirus Cases Growing at Around 7% Daily

| | ARG | BRA | CHI | MEX | COL | PER | LATAM |
|---|---|---|---|---|---|---|---|
| **Confirmed cases** | **2,941** | **39,548** | **10,507** | **8,261** | **3,792** | **16,325** | **81,374** |
| ***-- Per million inhabitants*** | 65.4 | 188.3 | 618.1 | 64.0 | 75.8 | 510.2 | **168.5** |
| ***-- Avg daily growth (last 7d)*** | 5% | 8% | 5% | 9% | 5% | 8% | **7%** |
| **Confirmed deaths** | **136** | **2507** | **139** | **686** | **179** | **445** | **4,092** |
| ***-- Per million inhabitants*** | 3.0 | 11.9 | 8.2 | 5.3 | 3.6 | 13.9 | **8.5** |
| ***-- Avg daily growth (last 7d)*** | 5% | 10% | 8% | 13% | 7% | 11% | **10%** |
| **Date of 100th case** | 19-mar | 13-mar | 16-mar | 19-mar | 19-mar | 17-mar | |
| **Date of 1st death** | 8-mar | 17-mar | 22-mar | 18-mar | 22-mar | 19-mar | |

As of April 20, 2020. Sources: Worldometers, Santander.

We estimate the total number of cases in the region is growing around 7% daily, a pace that China experienced around the 31st day of the outbreak there, just two days before the “slowdown point” on the 33rd day (when the average daily growth rate fell below 4%).

In Chile, cases as a % of population is 4x the regional average, likely as a result of more massive testing (reported mortality is only 1% vs 5% in LatAm). Reported cases remain low in Mexico, Argentina, and Colombia. In terms of deaths, the most worrying numbers are in Brazil and Peru (12-13 per million of inhabitants, vs 9 in LatAm).

Regarding the pace of the outbreak, we find two clearly separated groups: Mexico, Peru and Brazil are showing fast-increasing numbers of cases and deaths, while Argentina, Colombia and Chile seem to be experiencing flatter curves.

# Slowdown Points: Up To 5 Days to Go in Cases, 3-12 Days in Deaths

| | ARG | BRA | CHI | COL | MEX | PER |
|---|---|---|---|---|---|---|
| **Cases - Recent growth (last 7d)** | **5%** | **8%** | **5%** | **9%** | **5%** | **8%** |
| **Day number in the cycle*** | 32 | 38 | 35 | 32 | 32 | 34 |
| **Day of similar pace in China** | 19-feb | 17-feb | 19-feb | 15-feb | 19-feb | 17-feb |
| **Days to the peak as per China cycle**** | 1 | 3 | 1 | 5 | 1 | 3 |
| **Date of peak as per China cycle** | 21-abr | 23-abr | 21-abr | 25-abr | 21-abr | 23-abr |
| | | | | | | |
| **Deaths - Recent growth (last 7d)** | **5%** | **10%** | **8%** | **13%** | **7%** | **11%** |
| **Day number in the cycle*** | 43 | 34 | 29 | 33 | 29 | 32 |
| **Day of similar pace in China** | 23-feb | 16-feb | 20-feb | 10-feb | 20-feb | 14-feb |
| **Days to the peak as per China cycle**** | 3 | 10 | 6 | 16 | 6 | 12 |
| **Date of peak as per China cycle** | 23-abr | 30-abr | 26-abr | 6-may | 26-abr | 2-may |
| | | | | | | |
| **Quarantine valid until…** | 26-Apr | 30-Apr (RJ) / 10-May (SP)* | Night curfew (ufn); 23-Apr (Sgo) | 26-Apr | 30-May | 26-Apr |

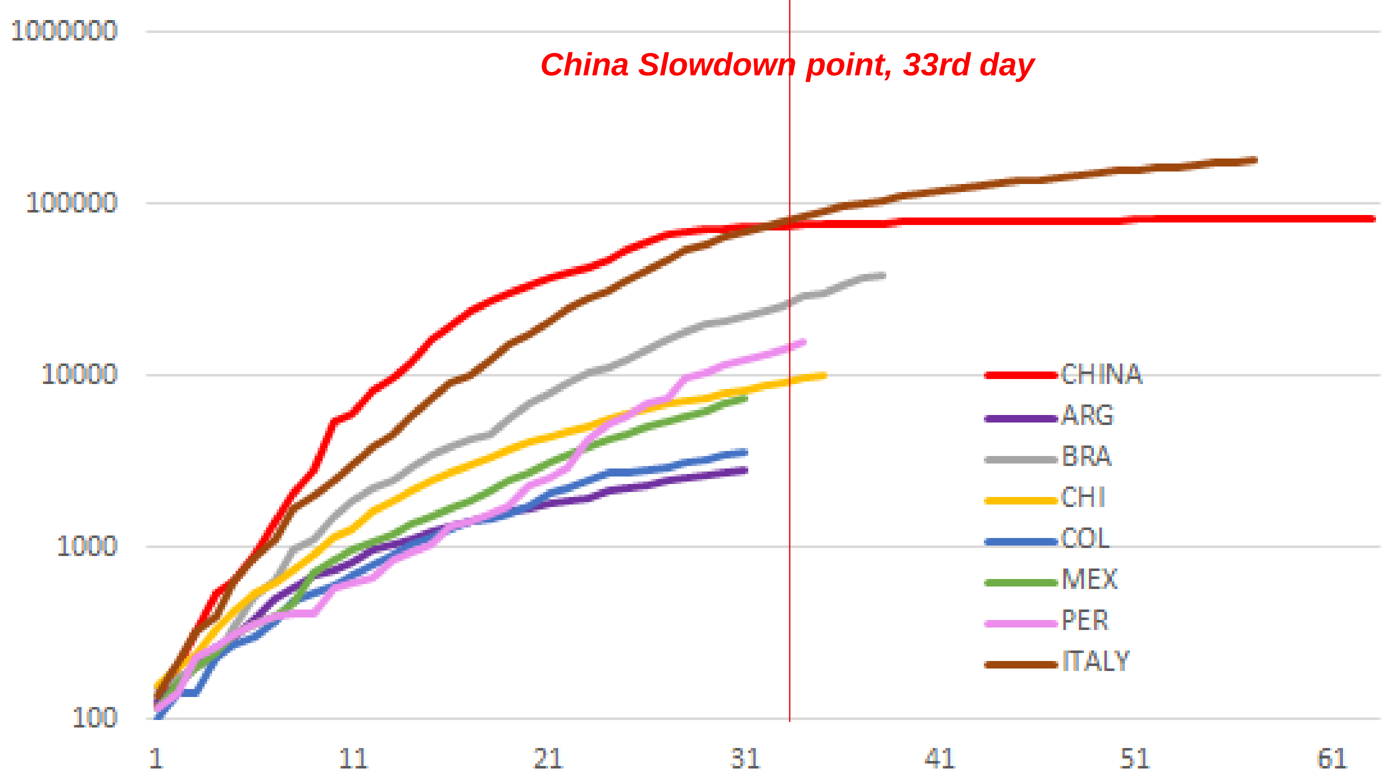
As of April 20, 2020. * Since 100th case and 1st death. ** Peak in China cycle is defined when the average daily growth in the previous week falls below 4%. Sources: Worldometers, Santander.

Extrapolating the virus cycle in China to Latin American countries seems to be a tricky exercise, but there is not much more we can do in order to assess the potential timing of effective containment, and therefore a sustainable easing of social distancing and quarantine measures by the different governments.

If China's experience is of any help, the growth rate of cases should slow significantly in upcoming days (between April 21-25), while the growth rate of deaths due to coronavirus would come roughly a week later.

# The LatAm Cycle: Only Argentina, Colombia Replicate China's Benchmark

**Total Cases in Latam – Day 0=100th case, log scale**




Data through April 19, 2020. Sources: Worldometer, Santander

The virus cycle in China started to significantly slow 33 days after the day of the 100th case of Covid-19 (defined as when the daily growth rate over the past week fell below 4%).

In Latam, the countries most advanced in the cycle (Brazil, Chile and Peru) are around Day 34-38 after the 100th case, and the daily growth rate is still elevated, especially in Brazil and Peru. In Argentina and Colombia, the virus cycle resembles the China experience most, which suggests that the slowdown point may be right around the corner.

## CONTACTS / IMPORTANT DISCLOSURES


| Macro Research | | | |
|---|---|---|---|
| Maciej Reluga* | Head Macro, Rates & FX Strategy – CEE | maciej.reluga@santander.pl | 48-22-534-1888 |
| Juan Cerruti * | Senior Economist – Argentina | jcerruti@santander.com.ar | 54 11 4341 1272 |
| Ana Paula Vescovi* | Economist – Brazil | anavescovi@santander.com.br | 5511-3553-8567 |
| Juan Pablo Cabrera* | Economist – Chile | jcabrera@santander.cl | 562-2320-3778 |
| Guillermo Aboumrad* | Economist – Mexico | gjaboumrad@santander.com.mx | 5255-5257-8170 |
| Piotr Bielski* | Economist – Poland | piotr.bielski@santander.pl | 48-22-534-1888 |
| Marcela Bensión* | Economist – Uruguay | mbension@santander.com.uy | 598-1747-6805 |
| **Fixed Income Research** | | | |
| Juan Arranz* | Chief Rates & FX Strategist – Argentina | jarranz@santanderrio.com.ar | 5411-4341-1065 |
| Luciano Sobral* | Senior Economist/Strategist – Brazil | lusobral@santander.com.br | 5511-3012-6209 |
| Juan Pablo Cabrera* | Chief Rates & FX Strategist – Chile | jcabrera@santander.cl | 562-2320-3778 |
| **Equity Research** | | | |
| Miguel Machado* | Head Equity Research Americas | mmachado@santander.com.mx | 5255 5269 2228 |
| Christian Audi | Head LatAm Equity Research | caudi@santander.us | 212-350-3991 |
| Andres Soto | Head, Andean | asoto@santander.us | 212-407-0976 |
| Claudia Benavente* | Head, Chile | claudia.benavente@santander.cl | 562-2336-3361 |
| Walter Chiarvesio* | Head, Argentina | wchiarvesio@santanderrio.com.ar | 5411-4341-1564 |
| Daniel Gewehr* | Head, Brazil | dhgewehr@santander.com.br | 5511-3012-5787 |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