

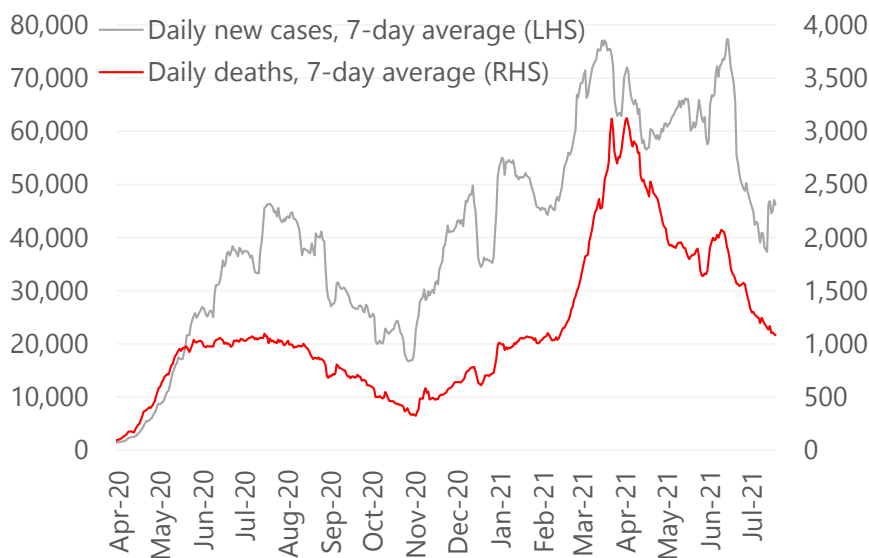
COVID MONITOR

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- The vaccination rate continues to hold up at around 1.3-1.4 million/day on average, reaffirming a positive outlook for the control of the pandemic and the reopening of the economy in 2H21, in our view.
- Our proxy for a nationwide average of ICU occupancy continues to decline, now close to 57%, the lowest level since this data began being tracked (in late January).
- On Tuesday (July 27), Brazil's Health Ministry affirmed it will hold the guidance of 90 days interval between doses until all the adult population is vaccinated with the first dose.
- As the pandemic gradually eases, local governments will probably continue to lift restrictions further. That is the case for the state of São Paulo, where businesses will be allowed to operate until midnight (effective August 1) and all restrictions will come to an end by August 17.
- Data from Brazil's Health Ministry showed an average of 46k new daily cases (7-day moving average) as of Wednesday (July 28), up 22% from last week (driven by an one-off revision in Rio Grande do Sul state), while daily casualties (7-day moving average) stood at 1,082, down 7% in the same period.

Figure 1 – Daily New Cases and Deaths (July 28)



Sources: Brazilian Ministry of Health, Santander.

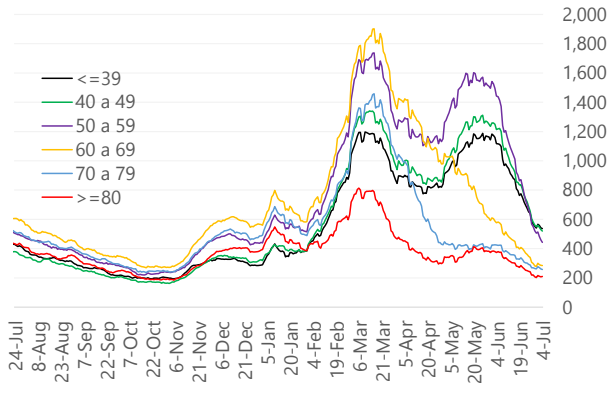
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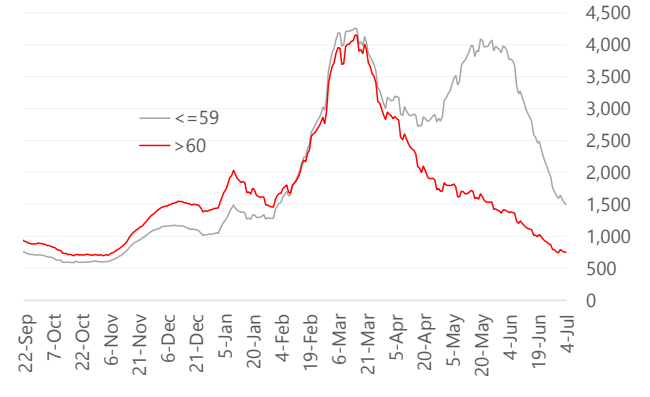


Figure 2 – New Hospital Admissions by Age (July 4)



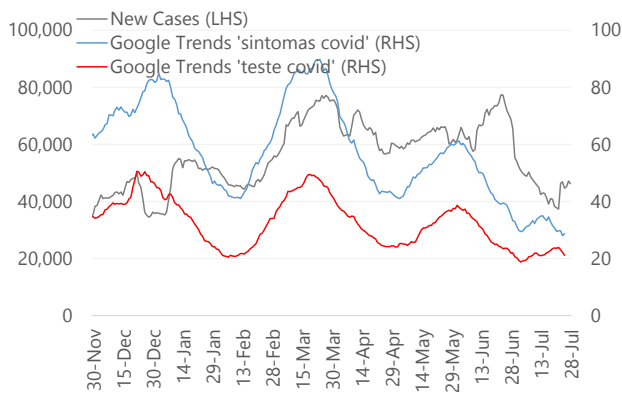
Sources: openDataSUS, Santander.

Figure 3 – New Hospital Admissions by Age (July 4)



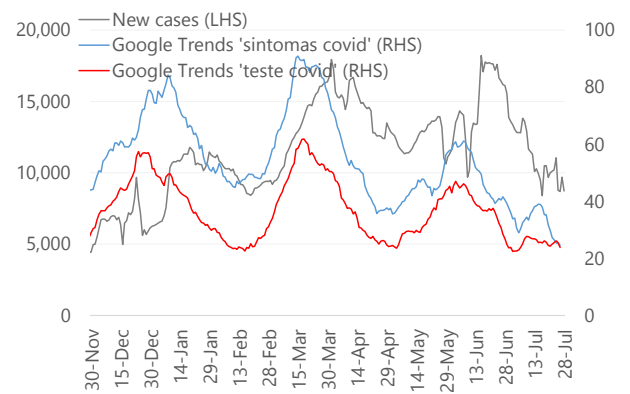
Sources: openDataSUS, Santander.

Figure 4 – Google Trends – Brazil (July 28)



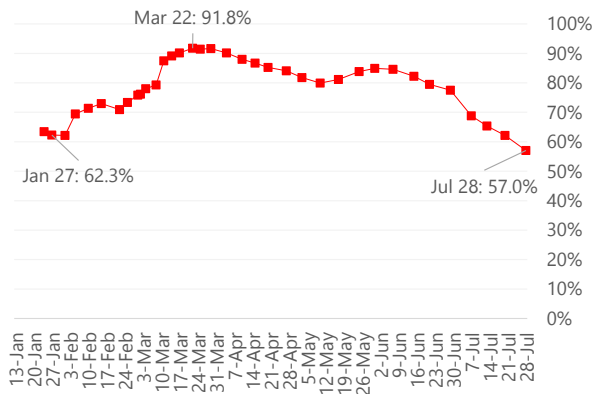
Sources: Brazilian Ministry of Health, Google Trends, Santander.

Figure 5 – Google Trends - São Paulo (July 28)



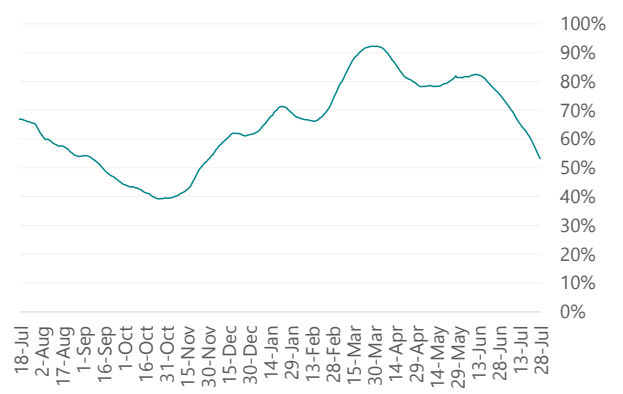
Sources: Brazilian Ministry of Health, Google Trends, Santander.

Figure 6 – Nation-wide Average ICU Occupancy: (%)



Sources: @coronavirusbra1, Santander.

Figure 7 – ICU Occupancy – São Paulo (July 28)

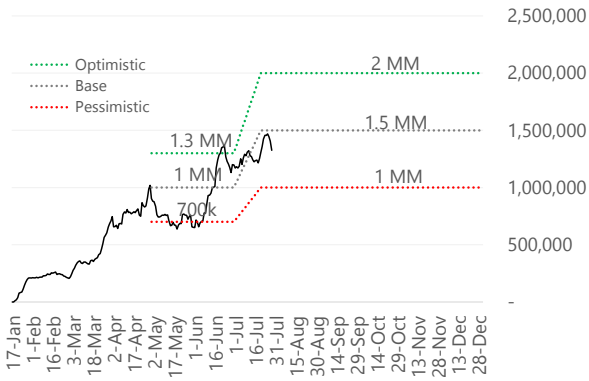


Sources: São Paulo Government, Santander.

¹ The nation-wide average is a weighted average (by state population) of state ICU occupancy rates. Hence it does not reflect the actual national occupancy rate = Total beds occupied in Brazil / Total beds available in Brazil.

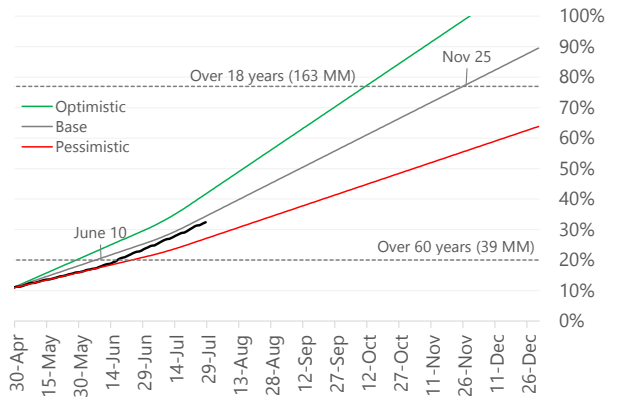


Figure 8 – Vaccination Pace (Daily Shots 7dma)



Sources: Brazilian Ministry of Health, Santander.

Figure 9 – Population Fully Vaccinated (%)



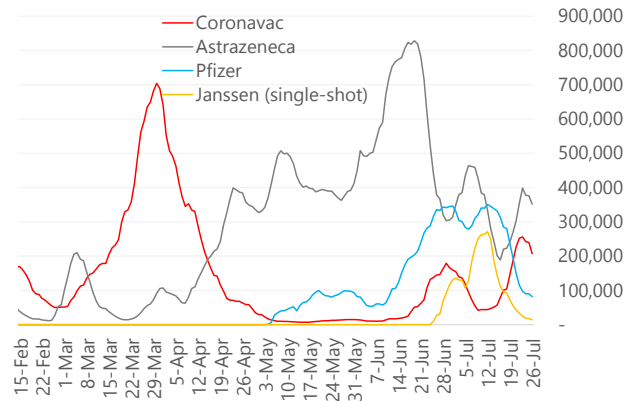
Sources: Brazilian Ministry of Health, Santander.

Figure 10 – Vaccination by Age and Gender (July 28)



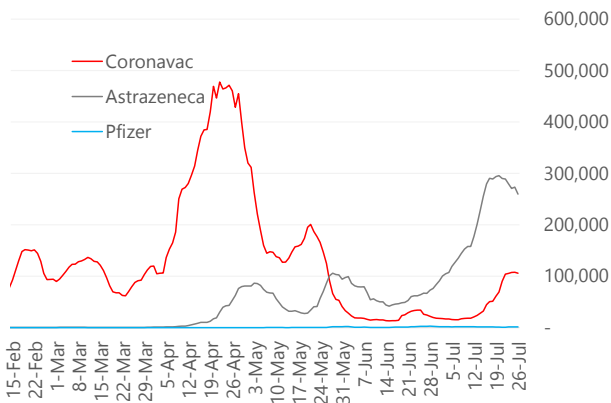
Sources: openDataSUS, Santander.

Figure 11 – Daily shots (1st dose) by Vaccine (July 26)



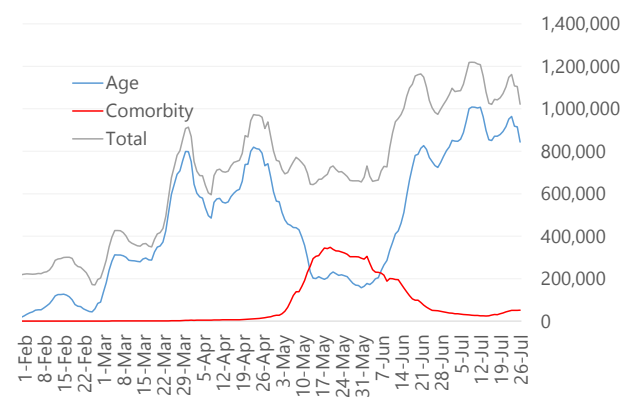
Sources: openDataSUS, Santander.

Figure 12 – Daily shots (2nd dose) by Vaccine (July 26)



Sources: openDataSUS, Santander.

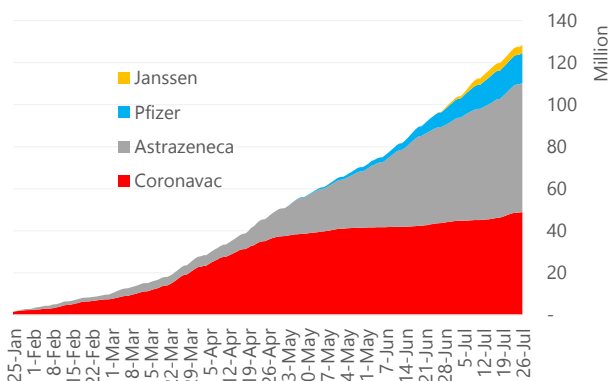
Figure 13 – Daily shots by Criteria (July 26)



Sources: openDataSUS, Santander.

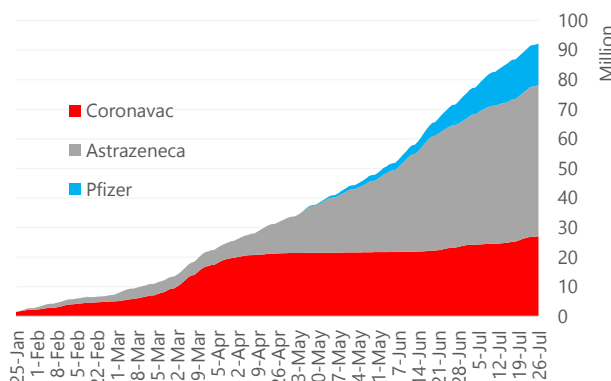


Figure 14 – Accumulated Doses Administered (Total) by Vaccine (July 26)



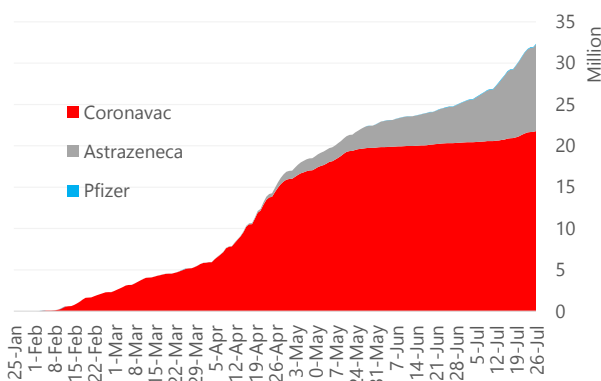
Sources: openDataSUS, Santander.

Figure 15 – Accumulated Doses Administered (1st dose) by Vaccine (July 26)



Sources: openDataSUS, Santander.

Figure 16 – Accumulated Doses Administered (2nd dose) by Vaccine (July 26)



Sources: openDataSUS, Santander.

Figure 17 - Vaccination Schedule (July 28)

	AstraZeneca		CoronaVac		Covax		Pfizer		Sputnik V	Covaxin	Janssen	Moderna	Accum. Doses		Accum. IFA	Accum. Doses + IFA
	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual					Expected	Actual		
Jan-21	2,000,000	2,000,000	8,702,348	8,702,348	-	-	-	-	-	-	-	-	10,702,348	10,702,348	-	10,702,348
Feb-21	1,999,600	1,999,600	4,853,000	4,853,000	-	-	-	-	-	-	-	-	17,554,948	17,554,948	-	17,554,948
Mar-21	2,822,000	2,822,000	22,758,970	22,758,970	1,022,400	1,022,400	-	-	-	-	-	-	44,158,318	44,158,318	-	44,158,318
Apr-21	19,186,750	19,186,750	5,800,000	5,800,000	-	-	1,000,000	1,000,000	-	-	-	-	70,145,068	70,145,068	-	70,145,068
May-21	21,677,750	21,677,750	5,116,010	5,116,010	4,051,200	4,051,200	2,500,000	2,500,000	-	-	-	-	103,490,028	103,490,028	-	103,490,028
Jun-21	18,258,000	18,041,000	5,000,000	5,000,000	842,000	842,000	11,065,000	11,066,000	-	-	4,800,000	-	138,655,028	143,239,028	-	143,239,028
Jul-21	12,000,000	12,400,000	10,000,000	9,400,000	4,048,000	1,000,000	14,386,320	11,660,200	-	-	-	1,000,000	180,089,348	177,699,228	30,600,000	208,299,228
Aug-21	10,000,000	10,000,000	20,000,000	20,600,000	-	-	33,300,000	-	-	-	-	1,000,000	244,389,348	-	-	-
Sep-21	16,136,250	-	17,784,836	-	-	-	34,741,680	-	-	-	-	1,000,000	314,052,114	-	-	-
Oct-21	39,333,333	-	10,000,000	-	10,845,333	-	34,333,333	-	-	-	12,066,667	-	408,564,114	-	-	-
Nov-21	39,333,333	-	10,000,000	-	10,845,333	-	34,333,333	-	-	-	12,066,667	10,000,000	525,142,781	-	-	-
Dec-21	39,333,333	-	10,000,000	-	10,845,333	-	34,333,333	-	-	-	12,066,667	-	608,809,447	-	-	-
Total	222,080,350	-	130,015,164	-	42,499,600	-	199,993,000	-	47,000,000	20,000,000	41,000,000	13,000,000	-	-	-	-

Available doses
In production (API in the country)

Sources: Brazilian Ministry of Health, Santander.

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