Macroeconomics Research

9 NOVEMBER 2020

Brazil Macro: Sectoral Analysis

Everton Gomes* everton.gomes@santander.com.br (+55 11) 3553 2677

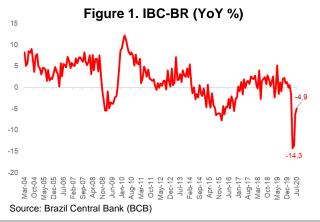
The Pandemic's Sectoral Impact in Brazil

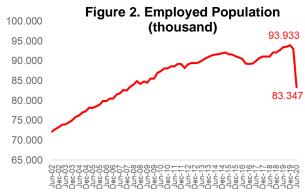
- The impact of the pandemic on economic activity has been quite severe; however, already released data has been better than what was expected a few months ago. Nonetheless, this recovery has been quite heterogeneous from a sectorial point of view.
- Some segments have suffered significantly more either due to lockdown measures that restrict movement or falling confidence. Other sectors have, from the beginning, shown resilience or even a positive response; among these we highlight agriculture and supermarket retailers.
- In contrast, sectors like food services, accommodations, cultural/recreational activities and personal services, in
 addition to being severely affected by the aforementioned restrictions have seen only a tepid recovery thus far.
 Moreover, these sectors have accounted for 40% of total dismissals in the period in June compared to the same
 period last year. More cyclical and credit-dependent sectors appear to be recovering faster.
- This sectoral dynamic suggests that the Brazil Central Bank's (BCB) liquidation and risk reduction measures have
 — thus far not only prevented an explosion in defaults but have also allowed banks to cushion the negative
 impacts of the crisis, with credit playing an important anti-cyclical role.
- In the long run, to consolidate this recovery, we believe that stringent fiscal discipline is needed to limit the fiscal legacy of emergency measures.

Introduction

The global spread of Covid-19 has led to a severe contractionary impact on GDP and employment worldwide. In Brazil, GDP fell 11.4% YoY in 2Q20, with job losses at ~10 million. However, the "short-term" recovery has been a surprise: the IBC-BR (monthly GDP proxy), which in April/May dropped 14% YoY, in July it was already down 5% YoY.

Additionally, leading indicators suggest that this recovery has continued into the third quarter: third quarter projections, based on the indicators available so far, range between -3.0% and -4.5% (equivalent to a sequential improvement of nearly 10% s.a.).





Source: Institute for Applied Economic Research (Ipea)

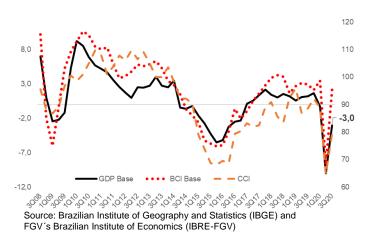
IMPORTANT DISCLOSURES/CERTIFICATIONS ARE IN THE "IMPORTANT DISCLOSURES" SECTION OF THIS REPORT.

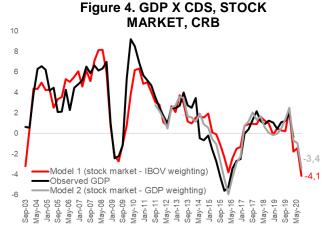
U.S. investors' inquiries should be directed to Santander Investment at (212) 350-0707.

* Employed by a non-US affiliate of Santander Investment Securities Inc. and is not registered/qualified as a research analyst under FINRA rules, is not an associated person of the member firm, and therefore may not be subject to FINRA Rules 2241 and 2242 and incorporated NYSE Rule 472 restrictions.



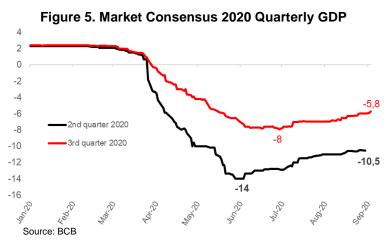
Figure 3. GDP X Confidence





Source: IBGE and Santander

If these leading indicators prove to be accurate, both 2Q20 and 3Q20 will post results that are significantly better than what was expected a few months ago: The 2Q20 decline fall of 11.4% YoY was slightly worse than recent consensus projections, but the market's more pessimistic projections reached -14%; and our 3Q20 projections are ~4%, whereas a few months ago the market projected an 8% YoY decline for 3Q20.



Post-Covid Onset Scenarios

Although a common shock sparked this current crisis, its effects have differed among economic sectors. The sectors most affected have been: (i) those that require a physical presence for consumption or use of the service; (ii) those considered "non-essential"; and (iii) those involved in global value chains.

Some sectors hurt more than others. Within expanded retail, for example, we see some consumer products are suffering more than others. Among sectors that have been hurt the most, we highlight accessories, clothing and footwear. Meanwhile, furniture and home appliances have been less affected. In addition, some products have performed better than what had been predicted in pre-Covid scenarios; among these we highlight pharmaceuticals and personal hygiene products.



Figure 6. Coronavirus Impact

| Sectors | Share in GDP | %YoY - 2Q2020 | %YoY - 3Q2020 | Employed Population - 2T2020 | Δ% Employment - 2Q2020 |
|---|--------------|---------------|---------------|---------------------------------|------------------------|
| COVID IMPACT - "Structural" | 25,17 | -22,96 | -19,05 | 32.290.333 | -11,94 |
| ND - Apparel Manufacturing | 0,28 | -57,86 | -37,78 | 1.275.676 | -21,99 |
| ND - Leather and Allied Product Manufacturing | 0,20 | -53,04 | -34,13 | 366.975 | -17,72 |
| RET - Clothing, Furs, Shoes, Leather and Textile Goods | 1,00 | -62,14 | -31,15 | 1.852.352 | -18,29 |
| RET - Stationery Products, Books, Newspapers and Magazines | 0,24 | -59,54 | -26,19 | 174.750 | -5,96 |
| SERV - Accommodation and Food Services | 3,91 | -60,62 | -51,61 | 4.001.778 | -26,25 |
| SERV - Arts, Entertainment, and Recreation / Other Personal Services | 1,14 | -48,06 | -41,63 | 7.776.382 | -23,36 |
| SERV - Air Transportation | 0,38 | -70,66 | -51,49 | 48.930 | -34,17 |
| SERV - Public Administration, Health Care and Public Educational Services | 18,00 | -8,62 | -8,62 | 16.793.489 | 2,00 |
| COVID IMPACT - "Cyclic" | 33,15 | -22,56 | -8,51 | 26.118.157 | -12,09 |
| ND - Beverage Manufacturing | 0,41 | -20,24 | 16,39 | 138.053 | -15,58 |
| ND - Plastics and Rubber Products Manufacturing | 0,44 | -24,62 | -3,23 | 401.925 | -9,88 |
| ND - Nonmetallic Mineral Product Manufacturing | 0,44 | -22,36 | 0,41 | 401.925 | -22,75 |
| ND - Primary Metal Manufacturing | 0,68 | -28,99 | -10,20 | 227.175 | -7,39 |
| ND - Machinery Manufacturing | 0,61 | -32,07 | -8,71 | 314.550 | 4,49 |
| ND - Repair and Installation of Machinery and Equipment | 0,16 | -73,46 | -19,33 | 227.175 | -17,40 |
| ND - Vehicles and Transport Equipment Manufacturing | 1,25 | -19,38 | -34,45 | 471.825 | -9,32 |
| ND - Others | 2,74 | -24,70 | -0,20 | 3.337.728 | -10,19 |
| ND - Construction | 3,71 | -19,17 | 3,44 | 5.329.880 | -19,43 |
| ND - Electricity, Gas and Water Supply | 3,19 | -9,44 | 0,02 | 768.901 | -13,80 |
| RET - Gasoline Stations | 2,32 | -40,98 | -14,76 | 2.429.027 | -11,68 |
| RET - Furniture and Electronics | 2,08 | -20,97 | -9,63 | 594.151 | -5,96 |
| RET - Computer and Telecommunication Equipment | 0,75 | -6,18 | 25,40 | 751.426 | -15,76 |
| RET - Other Personal and Domestic Products | 0,14 | -31,94 | -5,23 | 174.750 | -12,93 |
| RET - Motor Vehicle and Parts Dealers | 0,59 | -19,54 | 5,54 | 174.750 | -26,53 |
| SERV - Administrative, Professional, Scientific, and Technical Services | 11,03 | -17,74 | -15,27 | 6.990.006 | -5,49 |
| SERV - Transit and Ground Passenger Transportation | 2,61 | -23,23 | -15.48 | 3.384.910 | |
| SMALL/POSITIVE IMPACT | 41,68 | 1,14 | 3,12 | 21.564.169 | |
| AGRICULTURE AND ANIMAL PRODUCTION | 5,18 | 2,60 | 2,50 | 7.968.607 | -7,98 |
| ND - Mining Extraction | 3,01 | 0,91 | -3,17 | 436.875 | 6,86 |
| ND - Food Manufacturing | 1,73 | 5,83 | 8,35 | 1.607.701 | -3,87 |
| ND - Paper Manufacturing | 0,37 | -2,36 | -0,80 | 159.023 | -14,42 |
| ND - Coke and Refined Petroleum Products Manufacturing | 1,28 | -2,68 | 1,49 | 115.335 | -8,73 |
| ND - Soap and Detergents, Cleaning and Polishing Preparations, Perfumes and Toilet Preparations Manufacturi | 0,16 | 5,45 | 8,61 | 152.033 | -0,23 |
| ND - Pharmaceutical Products and Pharmaceutical Preparations Manufacturing | 0,29 | -4,12 | -7,90 | 192.225 | 26,15 |
| RET - Health and Personal Care Stores | 1,01 | 1,79 | 12,62 | 1.363.051 | -8,31 |
| RET - Building Material | 0,82 | -2,64 | 21,10 | 908.701 | , |
| RET - Food and Beverage Stores | 4,73 | 6,93 | 7,82 | 4.788.154 | -11,15 |
| SERV - Information and Communication Services | 3,42 | -5,52 | -2,39 | 1.310.626 | |
| SERV - Water Transportation | 0,20 | 12,19 | 7,55 | 62.910 | |
| SERV - Warehousing, Storage and Postal Service | 1,12 | -0,53 | 1,77 | 838.801 | , |
| SERV - Other Services | 8,43 | -0,39 | 4,21 | 1.118.401 | |
| SERV - Real Estate and Rental and Leasing | 9,93 | 1,36 | 1,36 | 541.725 | -8,90 |

Source: IBGE

Historically, those sectors that are recovering quickly or have not been affected by the pandemic account for 75% of GDP. In addition, education and healthcare have historically accounted for 18% of GDP, and we expect the former to improve once schools reopen.

Thus, the more structural impact is concentrated on those sectors that account for about 7% of GDP; among these, we highlight air transport, accommodations, food service and drinking establishments, leisure, clothing and accessories. In addition to having intensely contracted, these have been recovering tepidly compared to other sectors and are not expected to accelerate growth until a successful vaccine is widely available. In an international comparison, the fact that these sectors have a lower weight in Brazil than in other countries (see Figure 10 on the following page, which illustrates this point) may explain part of the positive surprise regarding the impact on Brazil.

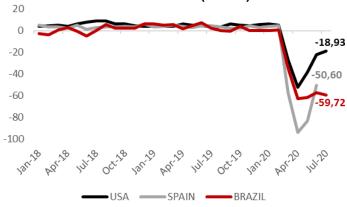


Figure 7. Air Transport (YoY %)



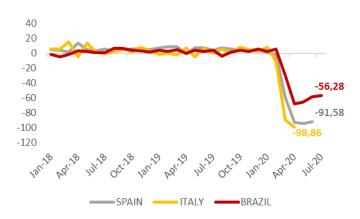
Source: IBGE; Instituto Nacional de Estadística (INE) and Federal Reserve

Figure 8. Food Services and Drinking Establishments (YoY %)



Source: IBGE; INE and Federal Reserve

Figure 9. Tourism (YoY %)



Source: IBGE; INE and Istituto Nazionale di Statistica (Istat)

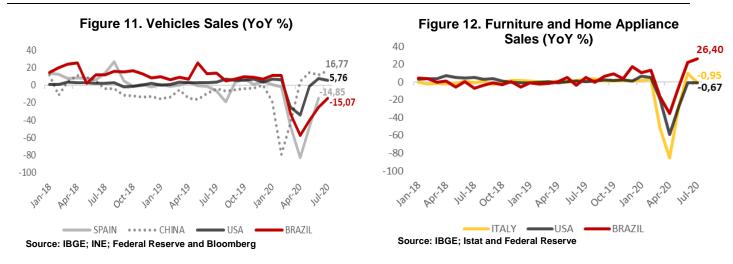
Figure 10. Tourism

| | %GDP | Number of Jobs | % Jobs |
|--------------|------|----------------|--------|
| Greece | 20.8 | 846 | 21.7 |
| Thailand | 19.7 | 8054 | 21.4 |
| Portugal | 16.5 | 902 | 8.6 |
| Mexico | 15.5 | 7232 | 13.3 |
| New Zeland | 15 | 479 | 19.8 |
| Spain | 14.3 | 2878 | 14.6 |
| Italy | 13 | 3475 | 14.9 |
| Turkey | 11.3 | 2643 | 9.4 |
| Australia | 10.8 | 1653 | 12.8 |
| Cuba | 10.3 | 556 | 11 |
| Chile | 10 | 991 | 11.7 |
| Venezuela | 9.4 | 1191 | 9.7 |
| Peru | 9.3 | 1299 | 7.5 |
| Argentina | 9.2 | 1425 | 7.5 |
| Germany | 9.1 | 5668 | 12.5 |
| UK | 9 | 3939 | 11 |
| USA | 8.6 | 16826 | 10.7 |
| France | 8.5 | 2678 | 9.4 |
| Brazil | 7.7 | 7406 | 7.9 |
| South Africa | 7 | 1483 | 9.1 |
| Canada | 6.3 | 1670 | 8.8 |
| Russia | 5 | 4037 | 5.6 |
| Colombia | 4.9 | 1187 | 5.2 |
| Paraguay | 4.2 | 148 | 4.5 |
| | | | |

Source: World Travel & Tourism Council (WTTC)

Among sectors that were initially strongly affected but are already recovering, those most connected to credit stand out (both in Brazil and rest of the world).





In the medium term, we expect labor market dynamics to be among the decisive factors in an eventual recovery. In this sense, we note that despite accounting for a relatively small percentage of GDP, these sectors —food, accommodations, cultural/recreational activities and personal services — have accounted for approximately four million of the 10million jobs lost (or 40% of this total). Hence, the importance of what will be the new normal variable for these sectors with respect to economic activity once this crisis is behind us: a level 40% below the pre-crisis, for example, would imply a loss of 3 million jobs (or R\$35 billion in lost salaries relative to last year, assuming a linear impact).

Figure 13. Impact on Employment

| Sectors | IND - Textiles, apparel and related products | IND - Leather and related products | RET - Clothing, furs, shoes, leather and textile goods | RET - Stationery Products, Books, Newspapers and Magazines | SERV - Accommodation and Food Services | SERV - Arts, Entertainment, and Recreation / Other Personal Services | SERV - Air Transportation |
|---|---|------------------------------------|--|---|--|---|------------------------------|
| Real Revenue 2Q20 (YoY) | -57,89 | -52,82 | -62,37 | -59,66 | -60,19 | -48,08 | -70,53 |
| Job Loss (Jun20/jun19) | 359.593 | 79.007 | 414.725 | 11.076 | 1.424.340 | 2.369.717 | 25.400 |
| Simulation of Impact o | Simulation of Impact on Employment for Different Levels of "New Normal" | | | | | | |
| -50 | 310.603 | 74.792 | 332.457 | 9.282 | 1.183.196 | 2.464.543 | 18.006 |
| -40 | 248.483 | 59.834 | 265.966 | 7.426 | 946.556 | 1.971.634 | 14.405 |
| -30 | 186.362 | 44.875 | 199.474 | 5.569 | 709.917 | 1.478.726 | 10.804 |
| -20 | 124.241 | 29.917 | 132.983 | 3.713 | 473.278 | 985.817 | 7.203 |
| -10 | 62.121 | 14.958 | 66.491 | 1.856 | 236.639 | 492.909 | 3.601 |
| -5 | 31.060 | 7.479 | 33.246 | 928 | 118.320 | 246.454 | 1.801 |
| Simulation of Impact on the Annualized Payroll for Different Levels of "New Normal" | | | | | | | |
| -50 | 4.986.333.083 | 1.366.713.075 | 6.943.915.906 | 202.039.709 | 21.533.412.664 | 34.850.200.508 | 1.045.386.377 |
| -40 | 3.989.066.467 | 1.093.370.460 | 5.555.132.725 | 161.631.767 | 17.226.730.131 | 27.880.160.406 | 836.309.102 |
| -30 | 2.991.799.850 | 820.027.845 | 4.166.349.543 | 121.223.825 | 12.920.047.598 | 20.910.120.305 | 627.231.826 |
| -20 | 1.994.533.233 | 546.685.230 | 2.777.566.362 | 80.815.884 | 8.613.365.066 | 13.940.080.203 | 418.154.551 |
| -10 | 997.266.617 | 273.342.615 | 1.388.783.181 | 40.407.942 | 4.306.682.533 | 6.970.040.102 | 209.077.275 |
| -5 | 498.633.308 | 136.671.307 | 694.391.591 | 20.203.971 | 2.153.341.266 | 3.485.020.051 | 104.538.638 |

IND: Industry; RET: Retail; SERV: Services.

Source: Continuous National Household Sample Survey (Continuous PNAD)

The Role of Credit

Those sectors for which credit plays a significant role (e.g., real estate, vehicles, furniture and household appliances) are among those that are recovering more quickly, although their initial decline was steep. Even investments are recovering faster than expected, which, along with the search for liquidity, should keep companies' credit demand high.



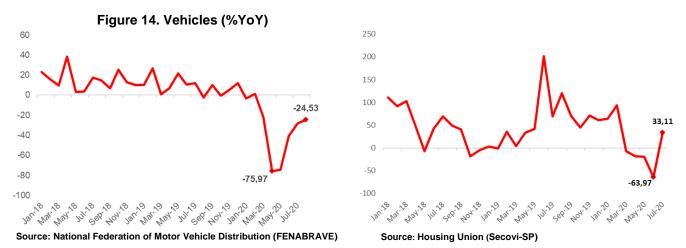
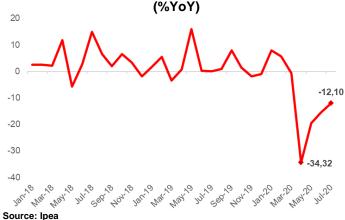
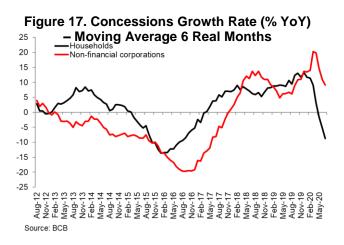


Figure 16. Gross Fixed Capital Formation



Credit estimates corroborate this sectoral view. Companies have increased demand for new loans since the beginning of the pandemic in March due to increased liquidity needs. Households, on the other hand, initially saw an abrupt drop in credit demand, owing to a drop in consumption, especially for some products that are typically purchased via credit (e.g., automobiles), but in recent months, demand has begun to normalize.

In fact, we see that credit, despite the risks, is playing its role as a recovery motor — especially for companies, which took R\$130 billion more YoY in credit in 2020. In the case of households, credit decreased, though it is linked to demand rather than supply (i.e., a drop in concessions concentrated on the use of credit cards and overdrafts).



| | 2019* | 2020* | Diff |
|------------------------------------|---------|---------|---------|
| Non-financial corporations - total | 853.580 | 987.020 | 133.440 |
| Personal Credit - Households | 57.192 | 66.760 | 9.568 |
| Consigned | 99.486 | 110.733 | 11.247 |
| Vehicles - Households | 57.936 | 48.508 | -9.428 |
| Credit Card - Households | 614.089 | 582.653 | -31.436 |
| Bank Check - Households | 191.147 | 154.531 | -36.616 |
| Real Estate - Households | 48.160 | 54.571 | 6.411 |

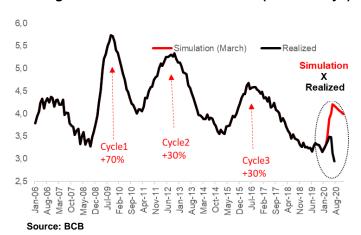
Source: BCB

We also expect defaults to rise less than originally expected. Renegotiations explain part of this relatively positive evolution, potentially implying increased future default. However, even jointly analyzing defaults and renegotiations, the increase is less than that observed in previous recessions. Thus, one of the risks spawned by the pandemic —a rapid



escalation in defaults, followed by a credit supply shortage, which should have intensified the recession and made the recovery even more difficult — apparently did not materialize.

Figure 19. Private Banks' Defaults (over 90 days)



Source: BCB

Figure 20. Free Individuals: Over 90 days + Composition of Debt % of portfolio



The increase in banks' provisioning, which significantly affected results, was much higher than the observed increase in defaults so far, indicating a healthy financial system that is prepared to continue contributing to the recovery.

Figure 21. Private Banks: LLP/ Over 90

3.0 days

2.5 days

2.5 days

2.6 days

2.7 days

2.6 days

2.7 days

2.8 days

2.9 days

2.0 da

Conclusions

The drop in economic growth wrought by the pandemic appears less steep than what was initially anticipated. Also, the recovery has been faster despite quite heterogeneous impacts across sectors.

Those sectors most subject to contamination (e.g., social events and air transport) have modestly recovered so far. On the other hand, credit-related sectors, which sharply declined, are leading the recovery.

Apparently, risks related to the credit market were not realized: despite a fear of lack of liquidity for companies and rising defaults, credit has grown significantly thus far whereas defaults have not, suggesting a healthy financial system that is ready to continue contributing to a resumption in economic growth.

However, we must highlight that long-term dynamics strongly depend upon the government's ability to deal with the fiscal problem — a problem that was already a challenging pre-pandemic and has only intensified as a result of the necessary but expensive, emergency measures. Bringing public debt back to a sustainable trend, in our view, is a necessary condition for GDP to resume the process of recovering potential growth in the medium and long term.



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 | | |
| Fixed Income Research | | | | | |
| Juan Arranz* | Chief Rates & FX Strategist – Argentina& FX | jarranz@santanderrio.com.ar | 5411-4341-1065 | | |
| Mauricio Oreng* | Senior Economist/Strategist – Brazil | mauricio.oreng@santander.com.br | 5511-3553-5404 | | |
| 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 | | |
| Alan Alanis* | Head, Mexico | aalanis@santander.com.mx | 5552-5269-2103 | | |
| 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 | | |
| Electronic | | | | | |

Bloomberg SIEQ <GO>
Reuters Pages SISEMA through SISEMZ

This report has been prepared by Santander Investment Securities Inc. ("SIS"; SIS is a subsidiary of Santander Holdings USA, Inc. which is wholly owned by Banco Santander, S.A. "Santander"), on behalf of itself and its affiliates (collectively, Grupo Santander) and is provided for information purposes only. This document must not be considered as an offer to sell or a solicitation of an offer to buy any relevant securities (i.e., securities mentioned herein or of the same issuer and/or options, warrants, or rights with respect to or interests in any such securities). Any decision by the recipient to buy or to sell should be based on publicly available information on the related security and, where appropriate, should take into account the content of the related prospectus filed with and available from the entity governing the related market and the company issuing the security. This report is issued in Spain by Santander Investment Bolsa, Sociedad de Valores, S.A. ("Santander Investment Bolsa"), and in the United Kingdom by Banco Santander, S.A., London Branch. Santander London is authorized by the Bank of Spain. This report is not being issued to private customers. SIS, Santander London and Santander Investment Bolsa are members of Grupo Santander.

ANALYST CERTIFICATION: The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed, that their recommendations reflect solely and exclusively their personal opinions, and that such opinions were prepared in an independent and autonomous manner, including as regards the institution to which they are linked, and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report, since their compensation and the compensation system applying to Grupo Santander and any of its affiliates is not pegged to the pricing of any of the securities issued by the companies evaluated in the report, or to the income arising from the businesses and financial transactions carried out by Grupo Santander and any of its affiliates: Everton Gomes*.

*Employed by a non-US affiliate of Santander Investment Securities Inc. and not registered/qualified as a research analyst under FINRA rules, and is not an associated person of the member firm, and, therefore, may not be subject to the FINRA Rule 2242 and Incorporated NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

The information contained herein has been compiled from sources believed to be reliable, but, although all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading, we make no representation that it is accurate or complete and it should not be relied upon as such. All opinions and estimates included herein constitute our judgment as at the date of this report and are subject to change without notice.

Any U.S. recipient of this report (other than a registered broker-dealer or a bank acting in a broker-dealer capacity) that would like to effect any transaction in any security discussed herein should contact and place orders in the United States with SIS, which, without in any way limiting the foregoing, accepts responsibility (solely for purposes of and within the meaning of Rule 15a-6 under the U.S. Securities Exchange Act of 1934) for this report and its dissemination in the United States.

© 2020 by Santander Investment Securities Inc. All Rights Reserved.

