



BRAZIL MACRO

January 22, 2021

MACRO COMPASS

INFLATION, ACTIVITY TAKE THE MAIN STAGE

Ana Paula Vescovi* and Brazil Macroeconomics Team anavescovi@santander.com.br +5511 3553 8567

- Keeping its high volatility pattern, the BRL stood among the worst performing currencies this week, on the heels
 of market fears about the renewal of extraordinary fiscal stimulus provided during the pandemic, and possible
 risks for the fiscal regime.
- Fiscal jitters also drove a bear steepening in the domestic curve of nominal yields, pressuring the back end higher. The front-end was driven by Copom's decision (interpreted as more hawkish than expected by the market).
- Brazil's COVID-19 vaccination has started, albeit at a slow pace amid vaccine supplies shortage. As of Wednesday (January 20, 2021), 125k doses have been administered in the country. Amid a persistent second wave of infections, tighter restrictions may be imposed in metropolitan São Paulo, which could mean a headwind for activity in 1Q21.
- The Brazilian Central Bank (BCB) kept the Selic policy rate at the historical low of 2.00% but removed the forward guidance, whereby the authority had been signaling a will not to "reduce the monetary stimulus as long as specified conditions are met." While the decision to scrap it means a small tightening in the policy stance, the committee made it clear that dropping the forward guidance does not imply mechanical rate hikes subsequently, with upcoming COPOM moves being data dependent. The Copom minutes (due on Tuesday) will provide more details on the BCB's scenario assessment and policy signals.
- On economic activity, November's result for the BCB's monthly index (IBC-Br) capped the batch of real activity
 number for the month, reinforcing the likelihood of solid growth in 4Q20. Our tracking for 4Q20 was updated to
 2.6% QoQ-sa (up 0.1 p. p). In the upcoming week, FGV will release the final results of its confidence surveys
 for January. Employment data releases also are slated for release in the upcoming days.
- On Tuesday (January 26, 2021), IBGE is scheduled to release IPCA-15 inflation for January, and we expect another hefty reading of 0.81% MoM. Eyes will turn to the underlying measures, which could show some relief in terms of sequential annualized trends and reduce perceptions of upside risks.
- We expect the accounting of oil platforms imports to be the main driver of the USD5.7 billion deficit that we estimate for the current account balance in December 2020 (due on Wednesday, January 27). This does not change the sound prospects for the Brazilian balance of payments this year.
- The coming week is packed with fiscal policy publications. *The Annual Borrowing Plan for 2021* will be published on January 27, and the BCB will publish its consolidated fiscal number of 2020: the primary deficit and gross debt should end 2020 slightly lower than the (symbolic) levels of 10% and 90%, respectively, of GDP, in our view.

This report uses information up to the end of Thursday, January 21, 2021.



Figure 1. Brazil Macro Agenda for the Week January 25-29, 2021

Indicators	Source	Reference	Date	Santander Estimate	Prior
Copom minutes	всв	Jan-21	Tue, 26-Jan		
Construction Confidence (index)	FGV	Jan-21	Tue, 26-Jan		93.9
Consumer Confidence (index)	FGV	Jan-21	Tue, 26-Jan		78.5
IPCA-15 Inflation (% MoM)	IBGE	Jan-21	Tue, 26-Jan	0.81	1.06
IPCA-15 Inflation (% YoY)	IBGE	Jan-21	Tue, 26-Jan	4.33	4.23
Annual Borrowing Plan	National Treasury	2021	Wed, 27-Jan		
Current Account Balance (USD billion)	BCB	Dec-20	Wed, 27-Jan	-5.7	0.2
Foreign Direct Investment (USD billion)	BCB	Dec-20	Wed, 27-Jan	3.0	1.5
Retail Confidence (index)	FGV	Jan-21	Wed, 27-Jan		91.7
Industrial Confidence (index)	FGV	Jan-21	Thu,28-Jan		114.9
IGP-M Inflation (% MoM)	FGV	Jan-21	Thu, 28-Jan		0.96
IGP-M Inflation (% YoY)	FGV	Jan-21	Thu, 28-Jan		23.14
National Unemployment Rate (%)	IBGE	Nov-20	Thu, 28-Jan	13.9	14.3
Formal Job Creation (thousands)	Labor Min.	Dec-20	Thu, 28-Jan	-130.0	414.6
Bank Lending Report	BCB	Dec-20	Thu, 28-Jan		
Central Gov. Prim. Balance (BRL billion)	National Treasury	Dec-20	Thu, 28-Jan	-49.3	-18.2
Consolidated Prim. Balance (BRL billion)	BCB	Dec-20	Fri, 29-Jan	-60.5	-18.1
Services Confidence (index)	FGV	Jan-21	Fri, 29-Jan		86.2
Federal Tax Collection (BRL billion)	IBGE	Dec-20	20 to 25-Jan	159.1	140.1
Federal Debt Report (BRL billion)	National Treasury	Dec-20	25 to 29-Jan		

Source: Santander Brazil.

For details on Santander's economic forecasts for Brazil, please refer to our latest scenario review1.

¹ Santander Brazil - Macroeconomic Scenario: "(Another) Challenging Year Ahead" - December 17, 2020- Available on: https://bit.ly/Sant-Scenario-Rev-Dec-20



LOCAL MARKETS—FX

The BRL has weakened substantially in since last week (nearly 3%), and the USD/BRL pair is back to the 5.35-5.40 range, which has led it to be the worst performer among emerging currencies since last week. The reason for this behavior has nothing to do with the international news cycle, in our view, as there was not any significant change in the global outlook these days. We believe that the cause for the poor performance of the BRL was related to statements delivered by politicians about the renewal of emergency income aid this year, which should put pressure on the budget framework.

An additional reason for the weakening of the BRL was the difficulties regarding the immunization program against the COVID-19 in Brazil. It is not clear yet how many doses of vaccines the country will be able to distribute, neither when the material needed to expand production on the domestic camp will be available. Therefore, despite the approval of two vaccine options in Brazil, we think the immunization program may take a bit longer to gain momentum, which weighs on prospects for an economic recovery and intensifies the debate about the use of fiscal stimulus to support the economy.

Therefore, notwithstanding the constructive circumstances observed in the global conditions, idiosyncratic issues continue to prevent the BRL from strengthening. We still believe the BRL trends will be largely dependent on the implementation of a successful COVID-19 immunization program (allowing for a gradual but safe reopening of businesses), as well as the maintenance of the fiscal framework (whose backbone is the constitutional spending cap).

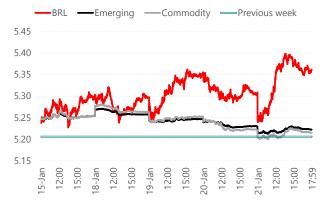
LOCAL MARKETS—Rates

A small bear steepening on the nominal yield curve took place in recent days. The front-end of the curve (Jan-22 DI future) rose to 3.38% (+12 bps since our last report), while the back-end (Jan-27 DI future) rose to 7.26% (+16 bps since our last report). Hence, the steepness in this segment rose to 388 bps from 384 bps since last Thursday.

At the front end, market participants seem to have interpreted the Copom's decision (refer to the monetary policy section on this report for a detailed analysis) as more hawkish than expected, as a higher probability of an earlier Selic rate hike was priced in. At the long end, the domestic news flow regarding the debate on whether another round of income's emergency aid program will take place or not pushed the longer yields up.

We continue to see potential for volatility ahead, amid lingering uncertainties about the next fiscal policy steps, especially as the pandemic continues to pose threats to the speed of the reopening process in many regions. Although we do not believe that an interest rate hike is imminent and that there is still premium in the yield curve, we reckon that the BCB's signals make the asymmetry less attractive to receive the front-end.

Figure 2.A. - USD/BRL Intraday chart



Source: Bloomberg, Santander. Note: As per the closing of Thursday, January 21, 2021.

Figure 2.B. - Brazilian Domestic Yield Curve (% pa)



Source: Bloomberg, Santander.

Note: As per the closing of Thursday, January 21, 2021.



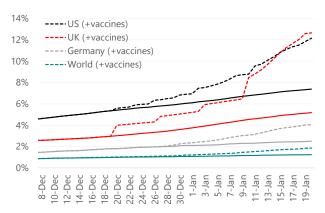
COVID-19 MONITORING

U.S. new cases are falling, but new variants of the virus could interrupt this trend. The risk here is that these new variants are apparently more infectious than the original, possibly forcing authorities to impose tighter restrictions, consequently weighing on economic activity. The pace of vaccinations in the country is currently at 844k/day (7-day moving average). In Europe, new cases in Spain are surging rapidly, but elsewhere (U.K., Italy and France) the new cases curve is either flat or falling. Germany extended and tightened its national lockdown until February 14, 2021. Vaccination campaigns continue amid concerns that delays in the delivery of vaccines could hamper the rollout in Europe. Meanwhile, China is seeing a rise in new cases, with authorities ramping up efforts to contain a resurgence.

Brazil's COVID-19 vaccination start amid short-term vaccine supply shortages. Following Sunday's approval by Anvisa (Brazil's National Health Regulatory watchdog) for emergency use authorization on Sunday (January 17, 2021) of both vaccines (*Butantan*/Sinovac and *Fiocruz*/Astrazeneca), Brazil initiated its nationwide immunization program with 6 million doses of Sinovac's vaccine, with the majority of states receiving shipments on Monday (January 18, 2021). More doses will follow, as India is set to clear the export of 2 million doses of AstraZeneca's production on Friday (January 22, 2021). As of Wednesday (January 20, 2021), 125k doses have been administered in the country. *Butantan* and *Fiocruz*, local manufacturing partners for both vaccine makers, wait on supplies from abroad in order to produce doses for distribution. Another vaccine, Sputnik V, is under consideration by Anvisa for emergency use authorization.

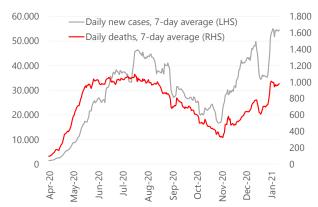
Tighter restrictions may be imposed, meaning a potential headwind for 1Q21 recovery. At a regional level, São Paulo state scheduled for Friday (January 22, 2021) another reclassification of *Plano SP* (reopening process plan) for a third time in two weeks. More regions in the state are expected to step back in phases, including Metropolitan São Paulo, which has recently seen a surge in ICU occupancy rate (70%). Johns Hopkins data for Brazil reports an average of 54k daily new cases (7-day moving average) as of Wednesday (January 20, 2021), stable from last week, while daily deaths (7-day moving average) stood at 981, down 1.7% in the same comparison.

Figure 3.A. - (Total Cases + Vaccines) - % Population



Sources: John Hopkins University, Our World in Data.

Figure 3.B. - Daily COVID-19 Cases, Deaths in Brazil



Sources: Brazil Ministry of Health.



MONETARY POLICY

As widely expected, the BCB kept the Selic policy rate at the historical low of 2.00%. In the statement, the takeaway point was the abandonment of the forward guidance, whereby the authority had been signaling a will not to "reduce the monetary stimulus as long as specified conditions are met."

The BCB estimates the forward guidance meant an easing of monetary conditions equivalent to a Selic cut of 25 bps. Thus, the decision to scrap it means a small tightening in the policy stance. Increases in inflation expectations and projections as well as high underlying CPI numbers explain such a fast tightening (for now, still in the realm) of communication.

The committee made it clear that dropping the forward guidance does not imply mechanical rate hikes subsequently, with upcoming COPOM moves being data dependent. Based on the BCB's inflation simulations, we think a good candidate for a flight plan is to start hiking rates in August.

While we continue to envision wide economic slacks in coming quarters, and still forecast headline IPCA below the mid-target for 2021 and 2022, we are mindful of the upside inflation risks generated by rising input costs. Moreover, a hypothetical situation of rising COVID-19 hospitalizations (leading to mobility restrictions) and further budget stimulus (maybe outside the constitutional spending cap), seen as net inflationary, adds to the picture and elevates chances of propagation of current shocks.

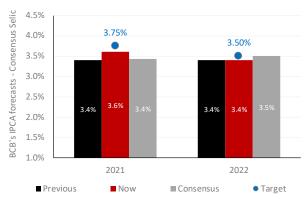
All in all, the accumulation of upside risks to inflation is making us increasingly uncomfortable about our baseline call for a later-than-consensus start to the BCB's rate normalization process. See link below².

Figure 4.A. - Selic Rate (monthly average, % p.a.)



Source: Brazilian Central Bank, Bloomberg, Santander.

Figure 4.B. - Inflation Simulations by the BCB



Sources: Brazilian Central Bank, Santander

² Santander Brazil Monetary Policy - "Making a U-Turn Soon, but Slowly" - January 21, 2021- Available on: http://bit.ly/Sant-copom-jan21



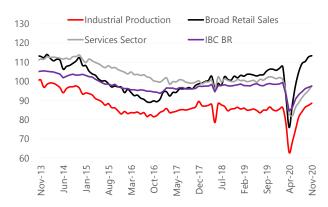
ECONOMIC ACTIVITY

An expected deceleration in goods' spending. Data on retail sales showed signs of softening, with the broad index posting a monthly increase of 0.6%, while the core index (which excludes building materials and vehicles sales) posted a decline of 0.1%, the first drop since April's tumble. This deceleration was highly expected, since we believe the reduced paycheck value from September onward, the prices increases for essential goods and an adverse employment outlook were reasons to expect a cooling down in retail sales at some point. After a favorable start for the sequence of fourth quarter releases, November's result for broad retail sales implies a carryover of 4.5% for 4Q20, reinforcing our expectations of a solid GDP growth in 4Q20. See link below³.

Another sequential gain in overall economic activity. November's result for the BCB's monthly index caped the batch of activity index releases for the month. The IBCB-Br posted a gain of 0.6% MoM-sa (-0.8%), precisely our call, but still not enough to offset the drop registered during the COVID-19 crisis, with the headline index down by 1.9% since February (pre-crisis mark). This monthly gain is consistent with a sequential resumption of activity seen for the other key sector-based indicators in November (e.g., industrial production, broad retail sales and the services sector). After a favorable start for the sequence of fourth quarter, we calculate a carryover of 2.9% in 4Q20, which in our view supports the likelihood of solid growth for economic activity. In a preliminary exercise based on the historical correlation of IBC-Br and GDP, our tracking for 4Q20 GDP was updated to 2.6% QoQ-sa (up 0.1 p.p), which reflects a gradual move toward our current projection of 2.8% QoQ-sa, consistent with our expectation of a 4.1% drop in 2020. See link below⁴.

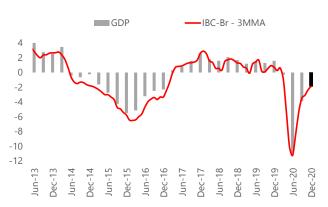
In the upcoming week, FGV will release final January results of its confidence surveys.

Figure 5.A. – Economic Activity (2011=100, sa)



Source: IBGE, BCB, Santander.

Figure 5.B. - 4Q20 GDP Tracking (YoY%)



Source: IBGE, BCB, Santander.

³ Santander Brazil Economic Activity - "An Expected Adjustment" - January 15, 2021- Available on: http://bit.ly/Sant-pmc-nov20

⁴ Santander Brazil Economic Activity - "Another Increase in Economic Activity" - January 18, 2021- Available on: http://bit.ly/Sant-ibcbr-nov20



INFLATION

The first significant inflation release of 2021 should still show an upwardly pressured number. On Tuesday (January 26, 2021), IBGE is scheduled to release IPCA-15 inflation for January. Although monthly inflation should decelerate compared to December's reading, we expect another hefty reading of +0.81% MoM (+4.33% YoY). Once again, we expect food-at-home inflation to be one of the main sources of upward pressure, though we see a deceleration in MoM terms to +1.96% MoM (from +2.57% in December). Industrial goods should also contribute to the upward pressure, in our view, rising +0.93% MoM (from +0.43% in December). We also expect administered prices to post a steep change (+0.99% MoM), as the effects of the change in electricity costs (the flag was lowered from Red 2 in December – the top flag in terms of extra costs for consumers – to Yellow in January) did not fully take place yet. Finally, we expect services to remain well behaved, with a mild change of +0.15% MoM (from 0.72% in December).

In terms of underlying measures, the EX3 core should rise around +0.72% MoM, per our projections, which, despite being hefty, could mean a stabilizing trend (3mma-saar) or even a slight deceleration. If we are right on that front, this would be a positive sign for inflation.

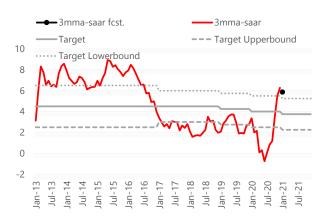
Looking ahead, we still have a benign view for inflation, as our IPCA inflation tracking for 2021 is at 3.2%. However, high-frequency food-price surveys at the wholesale level are accelerating, international gasoline prices continue higher than the domestic ones and the BRL remains depreciated. Also, pass-through to industrial goods is coming in higher than we expected. As a result, the inflationary risks are tilted to the upside.

Figure 6.A. – IPCA Monthly Forecast %

	Mo	MoM		YoY	
	jan/21	Contr.	dec/20	jan/21	
IPCA	0.81	0.81	4.2	4.3	
Administered	0.99	0.25	1.7	2.3	
Free	0.75	0.56	5.1	5.1	
Food-at-home	1.96	0.29	18.7	18.3	
Industrial goods	0.93	0.21	2.7	3.2	
Services	0.15	0.05	1.8	1.5	
EX3 Core	0.72	0.72	2.2	2.4	

Source: IBGE, Santander.

Figure 6.B. -Core Inflation (IPCA EX3)- Annual %



Source: IBGE, BCB, Santander



BALANCE OF PAYMENTS

We calculate that the current account balance should have registered a USD5.7 billion deficit in December 2020, which—if confirmed—would have led to an annual gap of USD13.1 billion. While the primary income account should have accounted for the bulk of the monthly result—which has to do with the seasonal increase in the remittances of profits and dividends in the period—the main highlight, in our view, should be the trade deficit observed last month on the heels of an ad hoc event related to the import of oil platforms (see link below⁵). Were it not for that, we believe the current account deficit would be closer to USD1.0 billion.

Regardless of this technical issue, the fact is that the current account balance has gone through an intense adjustment last year (with the deficit having shrunk to USD13.1 billion from USD50.7 billion in 2019), with outlays related to the remittances of profits and dividends, tourism and import of goods having contracted more strongly than export revenue. Given our expectation for a gradual economic recovery in the coming years, we do not expect the current account deficit to deteriorate much, which should keep the subject off market participants' radar, in our view.

Additionally, on the financial account we expect direct investments in the country to have reached as high as USD3.0 billion in December 2020, which would have led to a volume of USD36.4 billion amassed last year. While this means a notable decline from the USD 69.2 billion total seen in 2019, the amount of direct investments in the country remains more than enough to finance the current account deficit, which means the country continue to face a tranquil situation regarding its external financing needs. Last but not least, the financial account data will bring us more details about the volume of capital repatriation made by Brazilian banks last year, which should help us calculate how much of the "over hedge" issue was left to be addressed in 2021.

Figure 7.A. – Current Account Deficit And Direct investment in the Country (USD billion, 12M-to-date)

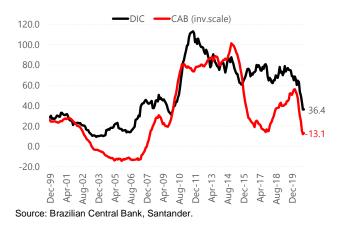
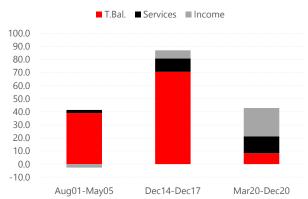


Figure 7.B. – Current Account Balance Adjustment Cycles – by Component (USD billion, 12M-to-date)



Source: Brazilian Central Bank, Santander.

⁵ Santander Brazil External Sector - "Trade Balance - December 2020" - January 4, 2021- Available on: http://bit.ly/Sant-trad-blc-Dec20



FISCAL

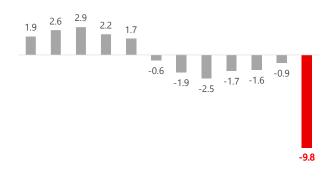
The coming week is packed with fiscal policy publications. On January 27, the National Treasury will publish the Annual Borrowing Plan for 2021, which is the main instrument used to inform the market players and society about the financing guidelines for the Federal Public Debt (FPD) management, including the goals and innovations proposed. We expect an increase in net borrowing requirements ~BRL1.5 trillion, considering that BNDES will repay the Treasury BRL100 billion, due loans owed to the federal government. In 2020, this amount accounted to BRL1.1 trillion, including the transfer of BRL325 billion from the Central Bank FX result to the Treasury.

On January 28, the National Treasury is expected to publish the central government primary deficit of December 2020. We expect a deficit of 49.3 billion in the month, with this result the total deficit of 2020 will reach BRL748 billion or 10.1% of GDP.

On January 29 the BCB will publish the consolidated public sector's fiscal balance for December 2020, which encompasses the federal government, regional governments and state-owned companies. We anticipate a monthly primary deficit of BRL60.5 billion. For the total 2020 deficit, we estimate BRL707 billion – or 9.8% of GDP, with gross debt ending 2020 at 89.5% of GDP.

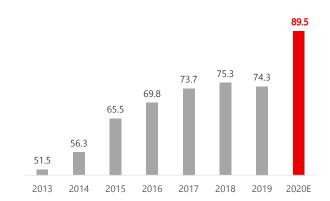
With a more conservative stance on the spending side at the end of 2020 and with total spending related to COVID-19 at BRL524 billion, below the BRL605 billion that had been budgeted, the primary deficit and the gross debt should end 2020 slightly lower than the (symbolic) levels of 10% and 90%, respectively, of GDP, according to our projections.

Figure 8.A. - Consolidated Primary Balance (% GDP)



2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020e Source: Brazilian Central Bank. Santander.

Figure 8.B. -Gross Debt (% GDP)



Source: Brazilian Central Bank, Santander.

Reuters



CONTACTS / IMPORTANT DISCLOSURES

B 11 M -B			
Brazil Macro Res			
Ana Paula Vescovi*	Chief Economist	anavescovi@santander.com.br	5511-3553-8567
Mauricio Oreng*	Head of Macro Research	mauricio.oreng@santander.com.br	5511-3553-5404
Jankiel Santos*	Economist – External Sector	jankiel.santos@santander.com.br	5511-3012-5726
İtalo Franca*	Economist – Fiscal Policy	italo.franca@santander.com.br	5511-3553-5235
Daniel Karp Vasquez*	Economist – Inflation	daniel.karp@santander.com.br	5511-3553-9828
Tomas Urani*	Economist – Global Economics	tomas.urani@santander.com.br	5511-3553-9520
Lucas Maynard*	Economist – Economic Activity	lucas.maynard.da.silva@santander.com.br	5511-3553-7495
Felipe Kotinda*	Economist – Credit	felipe.kotinda@santander.com.br	5511-3553-8071
Gabriel Couto* Gilmar Lima*	Economist – Special Projects	gabriel.couto@santander.com.br	5511-3553-8487
Raissa Freitas*	Economist – Modeling Business Manager	gilmar.lima@santander.com.br raifreitas@santander.com.br	5511-3553-6327 5511-3553-7424
Global Macro Res		Tamenas@santander.com.bi	5511-5555-7424
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		48-22-534-1888
		piotr.bielski@santander.pl	
Mike Moran	Head of Macro Research, US	mike.moran@santander.us	212-350-3500
Fixed Income Res	search		
Juan Arranz*	Chief Rates & FX Strategist – Argentina	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	5	SIEQ <go></go>	
	_		

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.

Pages SISEMA through SISEMZ

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: Ana Paula Vescovi*.

*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.

