BRAZIL MACRO March 11, 2022
MACRO COMPASS

BRACING FOR ANOTHER PRICE SHOCK (AND ITS CONSEQUENCES)

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

- In the rolling week ended on March 10, the BRL strengthened 0.2% against the USD and closed the period at 5.02, thus standing out among the top 10 performers in the basket with the 31 most liquid currencies in the world. In our view, the influence that the Russian-Ukrainian conflict is exerting on commodities prices and global portfolio changes, in tandem with prospects for an eventual extension of the local monetary tightening cycle, helped the BRL achieve this relative stability vis-à-vis the greenback, given a backdrop of higher risk aversion and further signals of swifter removal of monetary stimulus by the central banks of advanced economies. The local yield curve saw a major sell-off, with the commodities price shock causing inflation fears globally and domestically and with hawkish signals from major central banks driving global yields higher.
- Congress has approved legislation to change the states' VAT (ICMS) levied on fuel (such as diesel, biodiesel, LNG). The text of the legislation also cut down to zero the diesel federal tax (PIS/Cofins) through the end of 2022, with the fiscal impact estimated at BRL17 billion for federal government. The Senate also approved a bill to set up a government-funded price-stabilization mechanism and some additional fiscal stimulus.
- In contrast to a good pace of economic growth in 4Q21, as per the recent GDP figures, the first batches of economic activity data point to a slowdown in 1Q22. Industrial output shrank 2.4% MoM-sa, below market expectations and virtually fully giving back December's positive surprise. Conversely, broad retail sales surprised to the upside by retreating only 0.3% MoM-sa, well above market consensus, although we continue to see a discouraging composition. For the coming week, IBGE will release services real revenue for January, and we expect monthly growth of 0.6% MoM-sa. Moreover, the BCB will release its monthly GDP proxy (IBC-Br), and we expect a sequential gain of 0.2% MoM-sa.
- Based on the January CAGED survey, we estimate that seasonally adjusted net formal job creation slowed to 167k, further reducing the three-month average to ~200k. In our view, CAGED has had a clear deceleration trend since mid-2021, as the economic reopening effects gradually fade. We expect a lower level of net job creation throughout 2022, especially considering the lingering effects of a tighter monetary policy stance. On Friday (March 18), the January PNAD household survey is due to be released: we estimate the seasonally adjusted unemployment rate at 11.9%.
- February's IPCA registered a 1.01 % MoM change, above our call (0.96%) and the consensus expectation (0.94%). In annual terms, IPCA accelerated to 10.5% YoY from 10.4%, reinforcing our call that the peak will not be clear until April/May. The composition remains worrisome, as the core inflation average has trended at 10% saar in the last three months. All in all, the numbers suggest that the disinflation process will undergo significant difficulties ahead, and our tracking now points to IPCA 2022 at ~6.7%.
- The Copom is scheduled to announce its monetary policy decision on Wednesday (March 16). In line with market expectations, we look for another increase in the Selic rate, but this time of a magnitude of 100 bps, reaching 11.75%. This will be the highest interest rate since mid-2017. Amid a sea of uncertainty regarding the baseline scenario after the outbreak of the Russia-Ukraine conflict (given its political and economic consequences), what is clear for now is an additional deterioration in the balance of risks for inflation. We believe that in its communiqué, the BCB will maintain the monetary policy pledge to advance further "into the restrictive territory", but leaving the next steps open in terms of both speed at the next meeting and expected terminal Selic rate. We understand that the BCB will seek to buy itself some flexibility given the even greater difficulty of anticipating the size, duration and effect of (the additional) shocks in progress. However, we see the bias as clearly skewed to the upside when it comes to the size of monetary tightening expected.

Most of the information in this report is up to the end of Thursday, March 10, 2022.

Figure 1. Brazil Macro Agenda for the Week of March 14 to March 18, 2022

Indicators / Events	Source	Reference	Date	Santander Estimate	Prior
Inflation: IGP-10 (% MoM)	FGV	Mar/22	Wed, 16-Mar	--	1.98
Services Volume (% MoM)	IBGE	Jan/22	Wed, 16-Mar	0.6	1.4
Services Volume (% YoY)	IBGE	Jan/22	Wed, 16-Mar	10.0	10.4
Copom Meeting - Selic Rate (%)	**BCB**	**Mar/22**	**Wed, 16-Mar**	**11.75**	**10.75**
IBC-Br Activity Index (% MoM)	**BCB**	**Jan/22**	**Thu, 17-Mar**	**0.2**	**0.3**
IBC-Br Activity Index (% YoY)	BCB	Jan/22	Thu, 17-Mar	1.2	1.3
National Unemployment Rate (%, nsa)	IBGE	Jan/22	Fri, 18-Mar	11.5	11.1
National Unemployment Rate (%, sa)	**IBGE**	**Jan/22**	**Fri, 18-Mar**	**11.9**	**11.8**

Sources: Bloomberg, IBGE, Santander.

For details on Santander's economic forecasts for Brazil, please refer to our last Scenario Review[1].

[1] **Santander Brazil – Scenario Review:** ***"Higher Inflation and Selic Forecasts, Despite the Stronger BRL"*** **–** February 24, 2022- Available on: https://bit.ly/Std-scenreview-feb22

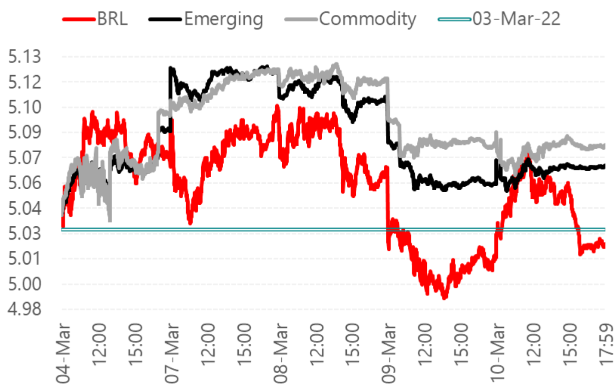
LOCAL MARKETS—FX

In the rolling week ended on March 10, the BRL strengthened 0.2% against the USD and closed the period at 5.02, thus standing out among the top 10 performers in the basket with the 31 most liquid currencies in the world. The performance took place despite the intensifying the Russia-Ukraine conflict and the failure in the latest negotiations between the two countries. In addition, we have witnessed a sell-off in global yields (particularly in the U.S.) given markets' perception that the global environment tends to be more inflationary than previously thought, which may result in faster than anticipated normalization of monetary policy by the Fed and other central banks of advanced economies (as the ECB's latest policy signals indicate). In our opinion, these factors should have weighed on the BRL, but given the influence that the conflict has wrought on commodities prices and global portfolio changes, in tandem with the prospects for an eventually higher Selic rate at the end of the cycle (more details in the "Monetary Policy" and "Local Markets – Rates" sections), the BRL managed to remain relatively stable against the greenback. Therefore, we believe the interest rate differential and commodities price factors are counterbalancing higher risk aversion for now.

LOCAL MARKETS—Rates

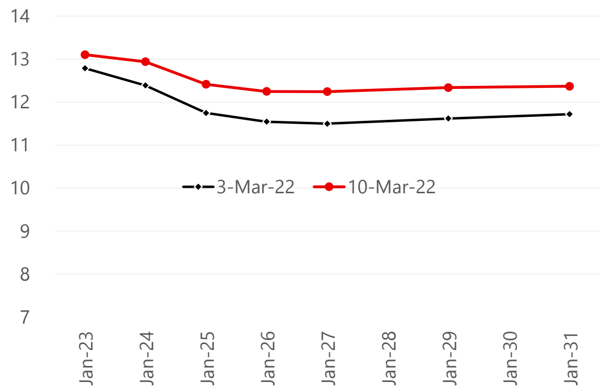
The local yield curve saw a major sell-off, with the commodities price shock causing inflation fears globally and domestically and with hawkish signals from major central banks driving global yields higher. Since Thursday (March 3), the front end of the curve (Jan-24 DI future) rose 40 bps to 12.80%, while the back end of the curve (Jan-27 DI future) rose 65 bps to 12.15%. As a result, the curve's steepness in this segment increased 24 bps, but even with this movement, the curve remained inverted at -65 bps. At the front end, the rally in commodities prices—on the back of Russia-Ukraine conflict—generated inflation fears worldwide and contributed to a sell-off of short-term rates. The market repriced a bit the implied probabilities of the next Copom movement, as the probability of 125- and 150-bps hikes rose from 25% to 33%. However, the most likely scenario continued to be a 100-bp hike at the next meeting, which is also our expectation. At the back end, some specific fiscal risks associated with discussion of possible fuel subsidies may also have contributed to push long rates higher. Yet the bulk of the movement (not only in the back end, but also in the front end) could also reflect the global environment of higher inflation and interest rates for even longer than was expected before the outbreak of the military conflict in Eastern Europe. Hawkish signals from the ECB policy meeting have been the latest development on that front, just a few days ahead of the expected start of the hiking cycle by the Fed.

Figure 2. USD/BRL Intraday Trends



Sources: Bloomberg, Santander.
Note 1: As of the close on Thursday, March 10, 2022.
Note 2: For other currencies, we use USDBRL values as a base-index.

Figure 3. Brazilian Domestic Yield Curve (% p.a.)



Sources: Bloomberg, Santander.
Note: As of the close Thursday, March 10, 2022.

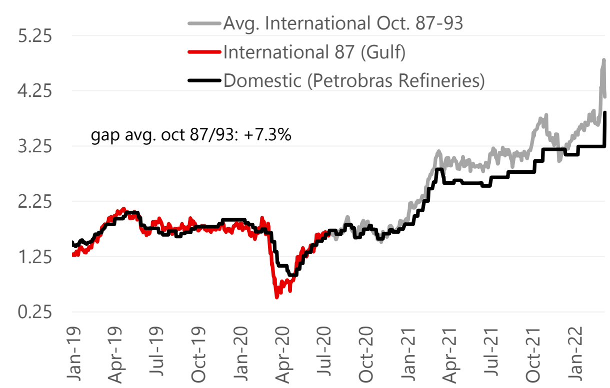
FISCAL POLICY, INFLATION AND LEGISLATION

The Congress has approved legislation to change states' VAT levied on fuel. On March 10, the Senate approved (by 52 votes) the PLP 11/2020 bill and in the same day the Lower House approved by 414 votes (out of 513 deputies). The legislation changes the calculation of the states' VAT (ICMS) on fuels such as diesel, biodiesel, LNG and kerosene. The tax rates would be levied on units of fuel instead of on an average price, keeping tax rates unchanged amid global oil and FX rate variations. It is worth noting that the average price of fuel for state ICMS calculations has been frozen by governors since mid-4Q21. In the same legislation, the text reduces to zero the federal tax (PIS/Cofins) on diesel through the end of 2022. The fiscal impact (revenue) would be BRL24 billion in 2022 (BRL16.5 billion to the federal government and BRL7.5 billion to regional governments), without any compensation expected (or required) in order to comply with the fiscal responsibility law. This legislation now heads to Presidential sanction.

In addition, the Senate also approved the bill PL 1472/2021, which creates a stabilization fund for oil prices backed by the government. Yet, in our view, there is limited fiscal space under the spending cap to finance the fund. Beyond that, the text of the bill foresees an increase in the welfare program to finance LNG purchases (*Auxílio Gas*), reaching 11 million families (double the current number of beneficiary families). This increase will represent a fiscal impact of BRL2 billion, financed by the Transfer of Rights revenue (BRL3.4 billion) and could be implemented in 2022. The Senate also included higher welfare spending, totaling BRL3 billion in aid to rideshare and taxi drivers (BRL300 benefit per month), subject to the constitutional spending cap. However, as the fiscal margin is limited for 2022, even if this bill is approved, it is expected to be enacted only in 2023. The piece of legislation now head to the Lower House for final approval.

Fuel price increases continue to be a key issue in the short term. As a result of the intensifying conflict between Ukraine and Russia, the price of oil has soared (to above USD110 per barrel). To cover part of the gap between international fuel prices and those in Brazil, we believe that the government is likely to implement measures in order to maintain the gap of recent months (gasoline 10%, diesel 14%). In light of this, Petrobras has increased fuel prices at its refineries. Gasoline prices rose 18.7%, LNG has increased 16%, and diesel is up 24.9%. As a result, the gap with international prices dropped to ~7% for gasoline and 8% for diesel. If the government decides to implement a fuel price subsidy, we estimate the following elasticities to fiscal accounts for each BRL0.10/liter reduction in fuel prices: (i) gasoline: BRL0.35 billion per month; (ii) diesel: BRL0.5 billion per month. There is considerable uncertainty about whether such a subsidy will be enacted, especially after Petrobras's fuel price increases. All of this debate also depends on international prices and the evolution of the conflict in Eastern Europe. However, if oil prices remain high, we believe that the government is likely to take measures to contain fuel prices.

Figure 4. Gasoline Gap with International Prices



Sources: Bloomberg, Santander.

Figure 5. New Legislation: Fiscal Impact

New Legislation on Fuels	Fiscal Impact 2022 BRL bn
PLP 11/2020 - Approved in Congress	
Change in ICMS for Diesel (for Regional Gov.)	-7.5
Zeroing PIS/Cofins on Diesel	-16.5
PLP 1472/2021 - Approved in Senate	
Stabilization Fund	? (No Fiscal Margin)
Gasoline Benefit to drivers*	3.0
LNG purchase benefit to 11 million families	2.0

* More likely to be implemented in 2023 - no fiscal margin

Sources: National Congress, Santander.

INFLATION

February's IPCA registered a 1.01% MoM change, above our call (0.96%) and the consensus expectation (0.94%). In year-over-year terms, IPCA accelerated to 10.5% from 10.4%, reinforcing our call that the peak for IPCA 12-month will not be clear until April/May 2022. As for the trend at the margin, it remained basically stable at 7.5% 3MMA-saar, suggesting that the disinflation process will be a sticky, difficult, and risky one, leading IPCA to end 2022 at around 6.7% - according to our estimate.

The main upside/ surprise was industrial goods. More specifically, perfume, which is a highly volatile and mean-reverting item was the major surprise inside industrial goods. As for services, food-at-home and regulated prices they all came in line with our expectation.

Broad qualitative measures worsened even more at the margin. The average of the main core measures accelerated from 8.7% to 10.0% 3MMA-saar. Moreover, the diffusion index continued to rebound and reached a new high at 75.8% (seasonally adjusted), compatible with YoY inflation running at around 12.0% a few months from now.

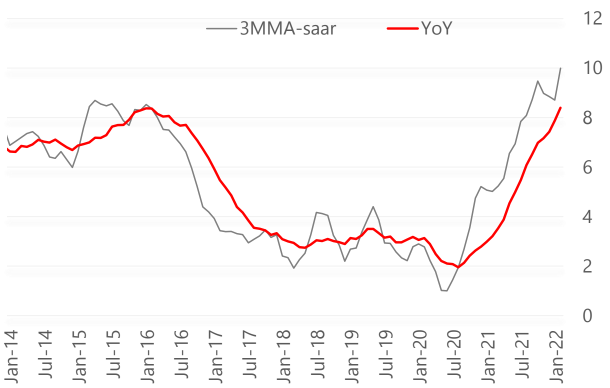
All in all, this reading reinforces our concerns about the inflation outlook. We still forecast that a clear peak should come around April or May 2022, but the level and composition of inflation are likely to remain sources of concern, keeping the balance of risks tilted to the upside for our year-end tracking (now running at 6.7%).

Figure 6. February's IPCA-15 Details (% annual)

	MoM			YoY	
	Feb-22	Santander	Dev.	Jan-22	Feb-22
IPCA	1.01	0.96	0.05	10.4	10.5
Administered	0.12	0.16	-0.01	16.8	15.0
Free	1.34	1.26	0.06	8.2	9.0
Food-at-home	1.65	1.58	0.01	8.6	10.1
Industrial goods	1.11	0.87	0.06	12.7	13.0
Services	1.36	1.38	0.00	5.1	5.9
EX3 Core	1.00	0.73	0.10	7.6	8.2

Sources: IBGE, Santander.

Figure 7. Core Inflation EX3 (% annual)



Sources: IBGE, Santander.

ECONOMIC ACTIVITY

Stronger than anticipated economic growth in 4Q21. GDP jumped 0.5% QoQ-sa, in line with our call (+0.4% QoQ-sa), owing mainly to mobility-related activities and a farm output rebound, while industry continued to weigh on activity. GDP stands 0.5% above the pre-pandemic mark (4Q19), and we forecast 0.7% growth this year. See details in the link[2].

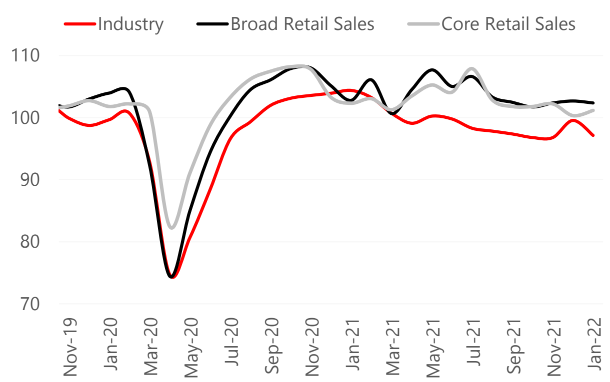
Weak start for industry. Domestic industrial activity plummeted 2.4% MoM-sa in January, after jumping 2.9% MoM-sa in the previous month, a negative surprise vs. our expectations (-1.3% MoM-sa) and market consensus (-1.9% MoM-sa). Manufacturing drove the decline (-2.2% MoM-sa), but mining was the main disappointment (-5.2% MoM-sa). Among industrial activities, the decline was widespread (diffusion index reached 23%), and vehicles contributed the least (-1.76 p.p.). See details in the link[3].

Better than expected headline but with weak composition for retail. Broad retail activity surprised to the upside in January, retreating only 0.3% MoM-sa, topping market expectations (-1.1% MoM-sa) and our call (-1.5% MoM-sa). Zooming in on the details, we saw a widespread drop, with seven of ten activities posting weak prints. According to our proxies, vehicles sales (-0.47 p.p.) and clothing (-0.24 p.p.) were the lowlights. Conversely, pharmaceutical products contributed +0.2 p.p., while other personal items contributed +0.73 p.p. Looking further, economic confidence data and our proprietary index (IGet) point to positive figures in February. See details in the link[4].

According to the January CAGED survey, net formal job creation stood at 155.2k (consensus: 160k; Santander: 200k). According to our own seasonal adjustment, net formal job creation decelerated to 164.6k, from 180.9k in December. The number of hirings and layoffs showed increases of 1.1% MoM-sa and 2.3% MoM-sa, respectively. The three-month average now points to a payroll expansion of 202k jobs, down from 221k in December. In our view, CAGED has shown a clear deceleration trend since mid-2021, as the economic reopening effects are gradually fading. Layoffs remain at high levels, as the end of the formal job-preservation program (BEm) is still affecting the results. We expect a lower level of net job creation throughout 2022, especially considering the lingering effects of a tighter monetary policy stance.

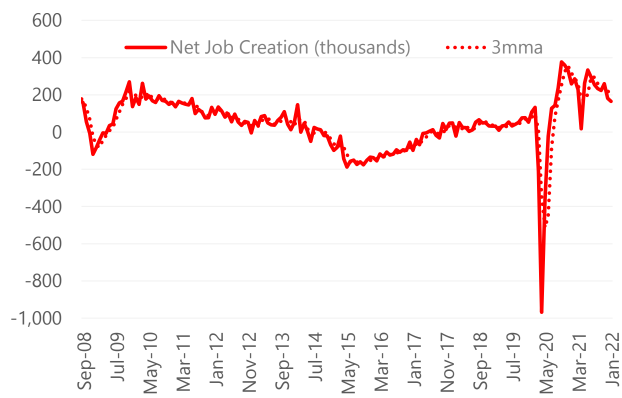
In the coming week, data on services real revenue and BCB's monthly GDP proxy (IBC-Br) will be released on Wednesday (March 16) and Thursday (March 17), respectively. We expect monthly gains of 0.6% MoM-sa and 0.2% MoM-sa, respectively. On Friday (March 18), the January PNAD household survey is due: we estimate the unemployment rate at 11.5%, meaning a 0.1 p.p. increase to 11.9% in our seasonally adjusted series.

Figure 8. Activity Indexes (sa, Jan/2019=100)



Sources: IBGE, Santander.

Figure 9. Net Formal Job Creation (sa)



Sources: Ministry of Labor, Santander.

[2] **Santander Brazil Activity: *"GDP Consolidates a Stronger Than Anticipated 4Q21"* –** March 4, 2022 – Available on: https://bit.ly/Std-GDP-4Q21
[3] **Santander Brazil Activity: *"Weaker-than-expected Start to 1Q22"* –** March 9, 2022 – Available on: https://bit.ly/Std-econact-030922
[4] **Santander Brazil Activity: *"Better Headline but With Still Weak Composition"* –** March 10, 2022 – Available on: https://bit.ly/Std-econact-031022

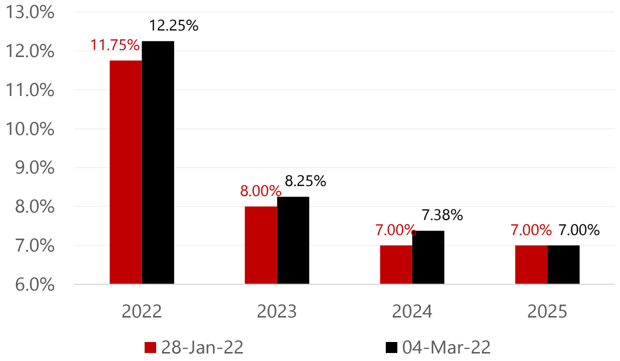
MONETARY POLICY

The Copom, the monetary policy committee of the Brazilian Central Bank (BCB), is scheduled to announce its monetary policy decision on Wednesday (March 16). In line with market expectations (i.e., both analysts' forecasts and the yield-curve pricing), we project another increase in the Selic policy rate, but this time of a magnitude of 100 bps, reaching 11.75%. This would be the ninth consecutive move in this tightening cycle—which started with the Selic at 2.00%—taking rate to the highest level since 2017.

At the last Copom meeting in *February 1-2*, the BCB raised interest rates by 150 bps. Back then, the authority announced its intention to reduce the speed of adjustment in monetary conditions at the March meeting. Despite important changes in the outlook since early February, particularly in the external environment, we do not see reasons for the BCB to abandon the plan (or scrap the signal) of deceleration in monetary tightening. In our view, softening is justified by the stage of the cycle and the still high magnitude of an adjustment of 100 bps per meeting, which we still see as consistent with an eventual extension of the tightening cycle if necessary. In other words, at this juncture, an adjustment of 100 bps allows the BCB to move fairly quickly and, at the same time, accumulate additional information on the prospective scenario and risks, which will help determine the Selic level at the end of the cycle. According to the projections of the BCB and its balance of risks, as presented at the last meeting, the Copom would need to raise the Selic rate to a level above 12.25% to bring (expected) IPCA inflation back to the central target (of 3.25%) for 2023. The probability of an even greater monetary adjustment cycle, and/or an even slower return to the neutral (or structural) level subsequently, has recently increased due to the conflict in Eastern Europe. The latter has caused a sharp rise in commodity prices in USD, whose impact was only partially mitigated by the more appreciated BRL.

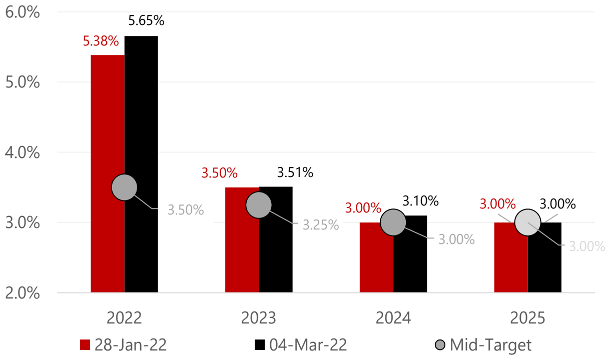
As per analysts' expectations, a key input for the BCB's inflation projections, there have been few changes for the 2023 horizon (which is of greater relevance for the BCB) since the last Copom meeting, up to the time of this writing. Even so, we believe that the BCB is likely to present a much higher IPCA projection for 2022 and a slightly higher reading for 2023, which will depend especially on the assumptions that the BCB adopts for the trajectory of oil prices ahead. Considering this scenario, we believe that in its communiqué the Copom will maintain signals that monetary policy could advance even further into restrictive territory, with the BCB identifying upside risks (both fiscal and geopolitical) for the anchoring of inflationary expectations. Amid a sea of uncertainty regarding the inflation outlook, what seems clear for now is an additional deterioration in the balance of risks for inflation over the relevant policy horizon. Although we believe that the BCB will probably keep mentioning the current stage of the cycle and the expected lagged effects of the cumulative Selic hikes so far, we think the Copom will leave the range of alternatives for the next steps somewhat open, both in terms of speed at the next meeting and in terms of the terminal Selic rate in the cycle. We believe the BCB will seek to buy some flexibility given the even greater difficulty of anticipating the size, duration and effects of ongoing shocks, in addition to possible secondary effects. For now, we continue to project the end-of-cycle Selic at 12.50%, with a gradual decline starting in 1Q23, reaching 9% at the end of 2023 and 7% in 2024. Clearly, the risks are skewed to the upside for the future trajectory of interest rates.

Figure 10. Median Selic Rate Forecasts



Sources: Brazilian Central Bank, Santander.

Figure 11. Median IPCA Inflation Forecasts



Sources: Brazilian Central Bank, Santander.

CONTACTS / IMPORTANT DISCLOSURES

Brazil Macro Research			
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
Ítalo 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 – Commodities	felipe.kotinda@santander.com.br	5511-3553-8071
Gabriel Couto*	Economist – Special Projects	gabriel.couto@santander.com.br	5511-3553-8487
Fabiana Moreira*	Economist – Credit	fabiana.de.oliveira@santander.com.br	5511-3553-6120
Gilmar Lima*	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327
Global 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
Mike Moran	Head of Macro Research, US	mike.moran@santander.us	212-350-3500
Fixed Income Research			
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
Mariana Cahen Margulies*	Head, Brazil	mmargulies@santander.com.br	5511-3553-1684
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: 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.

Within the past 12 months, Grupo Santander has managed or co-managed a public offering of securities of Petrobras.

Within the past 12 months, Grupo Santander has received compensation for investment banking services from Petrobras.

Within the next three months, Grupo Santander expects to receive, or intends to seek, compensation for investment banking and/or underwriting activities and/or other services (includingacting as adviser, manager, or lender) services from: Petrobras.

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.