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BRAZIL MACRO PROPOSITIONS 2023

Economic Slowdown and Inflation Control

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SANTANDER BRAZIL'S MACRO PROPOSITIONS FOR 2023:

Economic Slowdown and Inflation Control

As a new administration begins, we expect Brazil to be challenged by the necessity to raise domestic confidence, necessitating a signal of greater institutional stability, public debt sustainability, and a viable structural reform agenda. If this occurs, we could see a reduction in idiosyncratic risk and asset price pressure, especially with respect to future interest rates, allowing the stock market to appreciate and some BRL strengthening. The global scenario could help the disinflation process through monetary tightening and the sharp slowdown in the growth of advanced economies.

Strong Slowdown in Advanced Economies

Monetary tightening promoted by the main central banks should cause a sharp deceleration in activity.

End of Zero COVID and Growth in China

With the end of the zero COVID policy, we expect China to finally embark on a faster pace of growth.

Commodity Prices Expected to Moderate

We maintain our view that most commodity prices will continue to see a retreat in 2023.

Cruising Speed for the Balance of Payments

In our view, the recent upward trend of the current account deficit should cease on the heels of three key reasons: i) domestic economic slowdown; ii) cheaper transportation costs, and iii) smaller remittances of profits and dividends.



SANTANDER BRAZIL'S MACRO PROPOSITIONS FOR 2023:

Economic Slowdown and Inflation Control

Fiscal Consolidation in the Spotlight Amid Changes in Fiscal Framework

After the Transition PEC approval by Congress raised the likelihood of more expenditures, adjustments for 2023 are on the radar amid discussions on a new fiscal framework.

The Road to Debt Stabilization Looks Risky; Reforms Affect Structural Parameters

Changes in the fiscal framework implied in budget gap deterioration. Higher neutral interest rates and lower potential GDP may hinder debt convergence.

Tight Financial Conditions Will Limit GDP Growth in 2023

More cyclical sectors should enter into recessive territory, but farm output and real wage bill expansion should bring resilience to activity.

Government Transfers and Higher Real Wages Expected to Sustain Household Income Growth

The maintenance of the welfare program and the higher real wages should maintain the household income growth in positive terrain in 2023.

Tighter Financial Conditions Lead to a Decelerating, But Still-Heated Labor Market

The participation rate should remain short of its historical average and maintain the unemployment rate below the NAIRU at least until 2H23.

Household Defaults Remain on the Radar

The greater risk is in the rise of defaults, especially in non-earmarked credit to families, with credit card in focus.



SANTANDER BRAZIL'S MACRO PROPOSITIONS FOR 2023:

Economic Slowdown and Inflation Control

Stabilization in the Annual Inflation above the Target

Again, inflation should end the year above the upward bound of the BCB's inflation target and with an unfavorable composition.

An Even Narrower Space to Ease Interest Rate in 2023

We anticipate rate cuts to start in 2H23, taking the Selic to 12% by 2023YE. However, the adverse CPI composition and inflation persistence, combined with limited (if any) economic slack, fiscal stimuli and higher neutral interest rates imparts upside risks.

Headwinds for the BRL Ahead

Uncertainties about the world economic growth and the domestic fiscal dynamics should limit the room for the FX rate to strengthen steadily, in our view.

Tax Reform: An Overview of the Current Proposals

We believe that one priority of the new federal administration should be the reform of taxes on goods and services.

Valuation Levels Are More Appealing Than During the Last Macroeconomics Crisis

Markets are already pricing in a lot of negative news, and we think that the current selloff is overdone.



Santander 2022 Projection Performance – Global Economy

| Global Scenario (Baseline) 2022 | | | | | |
|---------------------------------|-----------|-----------|--------|--|--|
| | Consensus | Santander | Actual | Notes | |
| | | | | | |
| Global GDP (%) | 4.4 | 4.5 | - | Pandemic in China, conflict in Europe and withdrawal of stimulus in the US led to lower global growth. | |
| China GDP (%) | 5.2 | 5.6 | 3.0 | Persistence of the pandemic in several waves and maintenance of the zero-COVID policy had a negative impact on activity and left growth below expectations. | |
| US GDP (%) | 3.9 | 4.0 | 3.3** | The worsening of the external scenario and the more accelerated withdrawal of stimuli from the US economy resulted in below expectations growth | |
| US Inflation (Core PCE, %) | 3.3 | 3.5 | 5.1* | Inflation continued to be affected by several shocks and proved to be more resilient, with the reversal of the inflationary process starting later than anticipated. | |
| US Interest Rate (FFR, %) | 0.75 | 1.00 | 4.50 | Greater persistence of inflation forced the Federal Reserve to raise interest rates to a higher-than- expected level. | |
| US Interest Rate (UST10y, %) | 2.01 | 2.2 | 3.9 | Like shorter interest rates, longer maturities were also more impacted by a more restrictive monetary policy. | |
| Dollar Index - DXY | - | 99 | 104 | With lower-than-anticipated global growth and the Federal Reserve raising interest rates to higher levels, the dollar has strengthened more than projected. | |
| Commodity Prices - CRB | - | 498 | 555 | Geopolitical shock (War in Ukraine) along with climate shock (<i>La Niña</i> for a 3rd year running) have limited a sharper slowdown in commodities prices. | |

* Estimated result for the year with data from the last 12m

** Rolling 4-quarter change

Santander 2022 Projection Performance – Brazilian Economy

| Santander 2022 Forecast Performance | | | | | | |
|-------------------------------------|-----------|-----------|--------|---|--|--|
| | Consensus | Santander | Actual | Notes | | |
| | | | | | | |
| GDP (%) | 0.5 | 0.7 | 3.0* | The economy's reopening consolidation led to a stronger than expected recovery of services. Additional government transfer measures and rising commodities prices after the outbreak of war in Europe were also key to the positive surprise seen in growth. | | |
| IPCA (%) | 5.00 | 5.80 | 5.80 | Despite forecasting correctly, the projections changed a lot throughout the year (having reached as high as 9.5%) and the tax cuts were one of the main factors that helped us to get the year-end 2022 inflation right. | | |
| Selic Rate (% end of period) | 11.25 | 12.25 | 13.75 | The inflation persistence (i.e., inertia from the 2021 shocks) and the cyclical recovery of services (amid a reopening process) helped produce higher-than-expected underlying inflation, impacting expectations and making the BCB raise further the intensity of the monetary tightening cycle. | | |
| FX Rate - USDBRL (end of period) | 5.50 | 5.70 | 5.22 | The mix of still high commodity prices, stronger-than-anticipated monetary tightening and better-than-expected fiscal result opened room for the BRL to strengthen. | | |
| Current Account Balance (% of GDP) | -19 | -12 | -53* | There was a methodological change in some components of the services account that led to larger estimates for the deficits observed in recent years. | | |
| Primary Fiscal Balance (% of GDP) | -1.2 | -1.7 | - | Surprise in revenues, with shock in commodities (mainly oil). | | |
| Central Gov. Net Revenue (% GDP) | 16.7 | 17.1 | 18.7 | Better cyclical recovery + Higher extraordinary revenue and dividends from state-owned enterprises. | | |
| Central Gov. Expenditures (% GDP) | 17.9 | 18.8 | 18.2 | Queue for the granting of INSS benefits (- expense with/ Social Security). Lower payroll outlays. | | |
| Gross Public Debt (% of GDP) | 83.5 | 87.1 | - | Primary Surplus and higher nominal GDP. | | |

* Rolling 4-quarter change

** Estimated result for the year with preliminary data from December

Overview: Propositions for 2023, in Brief

We expect an environment of high uncertainty to persist, permeating the Brazilian economy in 2023. We expect the main event of the year in Brazil to be the change in government, and what this will entail for economic policy and institutions. This is, of course, the continuation of the uncertainties that have grown since the Covid-19 pandemic. Abroad, we expect the effects to come in the aftermath of the reflation resulting from massive stimulus, rapid post-lockdown cyclical recoveries, and some geopolitical rupture with the outbreak of the Russia-Ukraine war. We further expect the simultaneous monetary tightening in advanced economies to lead to a significant global economic slowdown, with a cooling down of commodity prices. Some relief should come from the Chinese economy which, finally, seem to be entering recovery mode after easing its zero-Covid policy and the implementation of stimuli. We, therefore, believe that the recession will be less severe and relatively short-lived, and that inflationary convergence will take longer, with interest rates in advanced economies in contractionary territory for longer.

We expect the Brazilian balance of payments to remain off-radar in 2023. The current account deficit of 2.9% of GDP in 2022 should remain stable, per our projections, due to accommodation in energy commodity prices, reduced logistics costs, and lower imports, profits, and dividends. Moreover, we expect the external financing needs of the Brazilian economy to continue being covered by the entry of direct investments in the country. On the domestic front, we expect attention to be focused on the new government's fiscal adjustment strategy, in order to avoid a primary deficit above 1% of GDP (deterioration of 2p.p of GDP compared to 2022), which we expect to occur amid the proposal of a new fiscal framework. We foresee important political challenges, given that the current consensus does not include reforms on the side of mandatory spending (increased by the Transition PEC) nor increases in the tax burden. There are high takes on a broad tax reform, which, if it happens, should bring a significant increase in productivity, in our view, though in the long term.



Overview: Propositions for 2023, in Brief (Continued)

Thus, also due to the high SELIC level, we see a deterioration in the nominal deficit, which makes debt convergence riskier and the Brazilian economy less resilient to external shocks.

With more restrictive external and domestic financial conditions, GDP growth will be limited in 2023. Though we believe that more cyclical sectors should enter the recessive field, agriculture and the expansion of the wage bill should bring resilience. Although decelerating, the labor market will likely remain heated, in our view, with a growing but-below-double digit unemployment for most of the year. The participation rate should stay below its historical average and keep the unemployment rate below the NAIRU at least until 2H23. On the demand side, we believe that government transfers and higher real wages should keep household income growth in positive territory, contributing to some growth in consumption. However, in a scenario of high-interest rates and strong household debt, we believe that defaults will increase and may contain the cyclical recovery ahead, being an object of public policy action. Finally, after significant disinflation in 2022, we anticipate stability in this year's reading. Despite the continued deceleration of free prices, a possible partial return of the previous year's tax cut could pressure regulated prices.

Largely due to the persistence and composition of inflation, low economic idleness, and a probable increase in neutral interest rates, we expect the SELIC to end the year not far from the current level, with limited space for reduction. Thus, we believe that uncertainty regarding the performance of the world economy and skepticism regarding domestic fiscal dynamics in the absence of structural reforms will continue to limit the space for BRL appreciation. However, the markets are already pricing in many of the difficulties expected for 2023, which makes us believe that the current selloff on the Brazilian stock exchange is exaggerated.

Hence, though we do not anticipate a critical backdrop for the Brazilian economic scenario in 2023, we think it is high likely that there will be an accommodation in the economic growth that should help curbing inflationary pressures still in place.

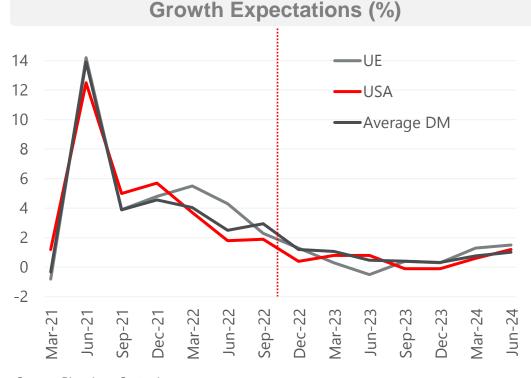
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Strong Slowdown in Advanced Economies

• Monetary tightening promoted by the main central banks expected to cause a sharp deceleration in activity.

With a more-persistent-than-expected inflationary shock, key central banks promoted fast and intense monetary tightening. In the U.S., the central bank (Federal Reserve) raised its policy rates by 450 basis points over the course of 2022. With interest rates already at restrictive levels, with the Fed signaling higher rates for the next meetings, and considering monetary policy lags, markets are expecting a sharp deceleration of the U.S. economy, with GDP contracting in the third guarter of this year. On the European continent (both in the euro area and in the United Kingdom), central banks also continue to promote monetary tightening. The energy crisis resulting from the Russia-Ukraine conflict, in addition to resulting in higher energy prices, also pressures activity. With natural gas stocks close to historic highs and the prospect of a warm summer, expectations for the short term are better than expected, but in the absence of a resumption of Russian natural gas supplies, it is likely that the problem returns throughout the year.

Risks: Therefore, in 2023, risks are for a sharper slowdown in the activity of the main developed economies.



Sources: Bloomberg, Santander.

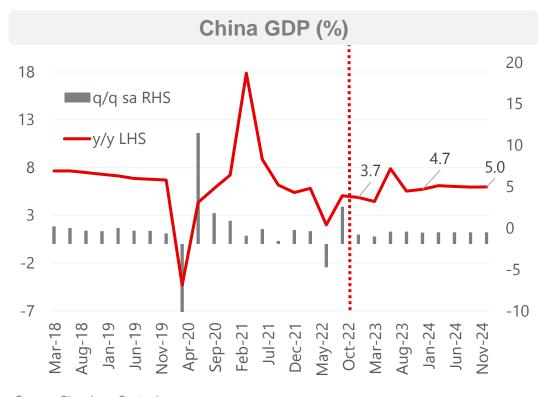
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End of Zero Covid and Growth in China

• With the end of its zero-Covid policy, China is expected to finally embark on a faster pace of growth.

Expectations for Chinese growth in 2022 were high. Having succeeded in controlling the pandemic and with a government committed to stimulating the economy, analysts projected growth above 5.0% for the country. However, with the emergence of new variants and a low immunization rate against Covid-19, outbreaks ebbed and flowed throughout the year. With the government still committed to its zero-Covid policy, activity was heavily impacted. At the end of the year, the government decided to relax restrictive measures and change its stance toward the virus. In addition, there are signs that more stimuli are to come, including in the infrastructure and real estate sectors. As in Western economies, the process of reopening the economy is turbulent, and the country is still facing a strong wave of outbreaks, which is a bottleneck in the recovery of the economy.

Risks: After this initial period, for 2023 we finally expect a more accelerated pace of growth, especially from the second quarter onward.



Sources: Bloomberg, Santander.



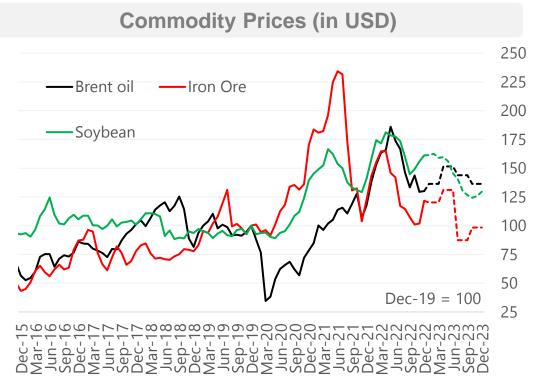
Commodity Prices Expected to Moderate

• We maintain our view that most commodity prices will continue to see a retreat in 2023.

Overall, we project that commodity prices will continue to cool down in 2023. We expect food commodity (soybeans and corn) prices to retreat given the weakening of La Niña (after three years running) and a record domestic agricultural output. Thus, we expect food inflation to decelerate.

In energy, we still see a deficit oil market, with global inventories at low levels and producers struggling with low investment despite increasing demand for more production. In particular, we see upside for prices in 2Q23, when the reopening of China gains traction. Finally, we maintain a more cautious view on metal prices due to expectations of a lower Chinese growth, despite the announced stimuli. The macro scenario will also constrain commodities, as the lagged effects of the tight monetary policy in 2022 play out on the global economy.

Risks: Stronger-than-expected Chinese demand, further geopolitical or climate shocks and stronger-than-expected deceleration in global economic activity.



Source: Bloomberg, Santander.

| | YE2022 | YE2023 fct. |
|-------------------------|--------|-------------|
| Soybean (USD/bushel) | 15 | 12 |
| Brent Oil (USD/barrell) | 86 | 90 |
| Iron ore(USD/ton) | 111 | 90 |

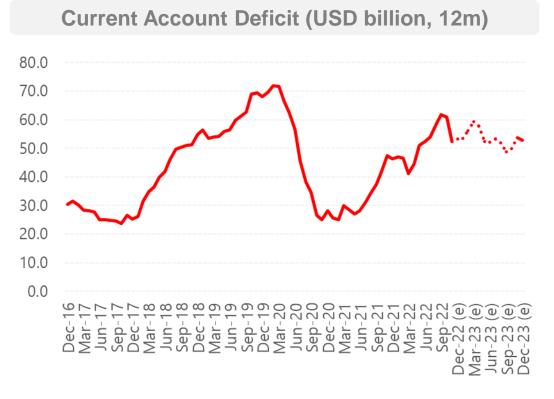
Source: Bloomberg, Santander.

Cruising Speed for the Balance of Payments

• The recent upward trend of the current account deficit should cease on the heels of the domestic economic slowdown, cheaper transportation costs and smaller remittances of profits and dividends.

The balance of payments should continue to be a "non-issue" in 2023, given our expectation for a relatively stable current account deficit. After having followed an upward trend lately stemming from the domestic economic recovery, the loosening in mobility restrictions and dearer transportation costs, we think the current account deficit should register a relatively stability in 2023. The expected economic deceleration due to the monetary policy tightening should help to curb imports and to reduce the remittances of profits and dividends, while the accommodation in prices of energy commodities and the reduction in logistics bottlenecks should result in cheaper transportation costs (a significant component of the services account.) Therefore, we expect the Brazilian external financing needs to be easily met this year.

Risks: Collapse in commodity prices. Strong and protracted slowdown in the world economic growth.



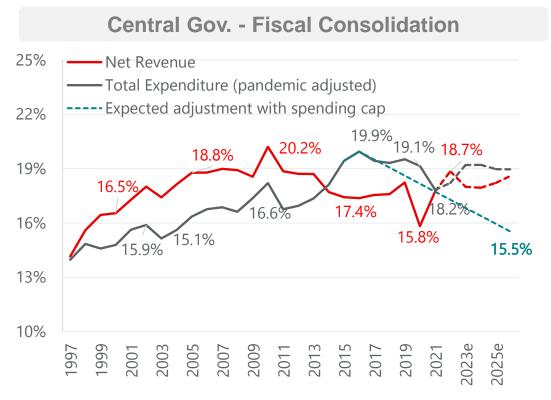
Sources: Brazilian Central Bank, Santander.

Fiscal Consolidation on the Spotlight Amid Changes in the Fiscal Framework

 This year, the focus will be on fiscal adjustment to avoid a higher budget gap, all along of which we must observe a new fiscal framework that will be approved by a complementary law (foreseen in the Transition PEC).

The fiscal proposed plan to mitigate the estimated deficit foreseen in 2023 budget (2.2% of GDP) will be relevant to fiscal expectations, yet it should not change the debt's upward trajectory outlook. We maintain the thesis that the spending cap fiscal rule lost its anchoring power, after the fourth consecutive constitutional amendment to expand expenditures above the fiscal rule limit. Despite the improved primary result in 2022, from 2023 onward, we forecast a higher primary deficit, with a rise in primary spending ahead. On the expenditure side, most expenditures are mandatory (~93%) and, after the pension reform, measures to reduce expenditures are more fragmented and difficult to reach political consensus. On the revenue side, we see a slowdown in cyclical growth, dependence on commodity prices and lower extraordinary revenues.

Risks: Lower effectiveness of fiscal adjustment measures and fiscal rule constructed considering the rise mandatory spending ahead, intensifying budget rigidity. In this context, considering a reduction in the fiscal rule power (to induce reforms on the spending side) could imply an environment with higher real interest rates and inflation.



Sources: National Treasury, Santander.

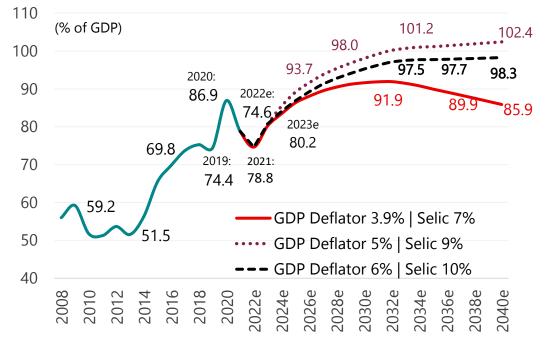
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The Road to Debt Stabilization Looks Risky, Reforms Affect Structural Parameters

 We see a deterioration in the nominal deficit ahead, making debt convergence riskier. Structural reforms and fiscal adjustment measures will be relevant to the neutral interest rate and potential GDP growth estimates. Broad tax reform should be the focus, with possible positive effects on long-term productivity.

Uncertainty lies in how the proposals for fiscal consolidation ahead will be conducted, mainly with it focused on the revenue side. The fiscal consolidation (which implies an adjustment of around 3% of GDP in the primary result) will be fundamental for a sustainable public debt path. That figure is necessary to achieve a primary result that is adequate to stabilize the gross debt at 90% of GDP by the end of the decade, with the help of an oil revenue increase from pre-salt production and the positive effects of pension reform. We also estimate a deterioration in the nominal result due to the increase in the Selic rate. As a result, for gross debt, we project an upward trajectory, with an increasingly risky path to long-term stabilization. This leads to the need for further structural reforms. We see broad tax reform as a central focus for increasing productivity over the long term. In addition, we expect further tax increases to face greater scrutiny in Congress.

Risks: The accumulation of expenses with unpaid court-ordered debt (*precatórios*) and loss of credibility in the processes of consolidation and fiscal anchoring.



Debt Trajectory – Riskier Convergence

Sources: Brazilian Central Bank, Santander.

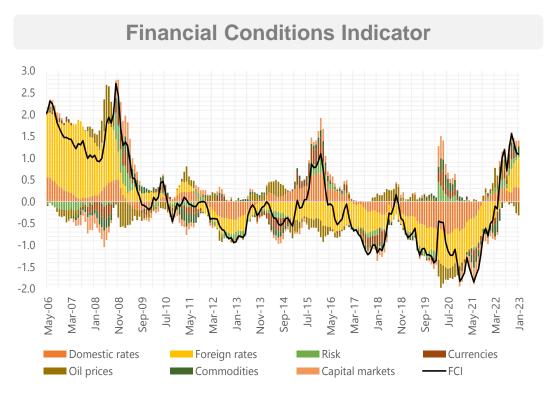
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Tight Financial Conditions Will Limit GDP Growth in 2023

We expect a significant slowdown in domestic demand and in cyclical supply components. Nevertheless, expectations of strong
growth for non-cyclical farm output and expansion of the real wage bill bring resilience to domestic activity.

Cyclical sectors will be the most affected by tightening financial conditions. The exhaustion of important growth vectors in 2022, such as the normalization of mobility and the surge in commodity prices, brings challenges to the dynamics of activity this year. Strongly restrictive financial conditions will continue to limit the growth of the most cyclical components of GDP, which should remain in recessive territory at least until 1H22. On the other hand, after a weak performance in the 2021-2022 biennium, we expect an all-time high 2022-23 grain harvest, promoting strong growth in the agro-industrial chain. The recovery of labor income along with government income transfer measures will contribute to an expansion of the expanded wage bill. We expect the construction sector to also continue supporting growth, albeit with a substantial slowdown.

Risks: More robust Chinese growth potentially triggering a new commodity cycle, and the resumption of public investment could boost demand. Weather problems could also compromise crop performance.



Sources: Brazilian Central Bank, Bloomberg, Santander. * Data available until January 23, 2003.



Government Transfers and Higher Real Wages to Sustain Household Income Growth

The maintenance of the BRL600 value for the Bolsa Familia program and the higher average wages should maintain the "expanded" real wage bill growth in positive territory for 2023 despite the deceleration projected for the job market.

The maintenance of the BRL600 value in the Bolsa Familia program will have a slightly positive overall effect on the real wage bill. The effect of the spending allocated for the welfare program will be marginal, mainly due to a full year with the increased value, in comparison with 2022, when the BRL600 value started only in August. Furthermore, the additional values in the welfare program should also help to sustain the growth estimate, such as the BRL150 for households with young children. As for labor income, we expect a positive effect as real wages have recovered in 2H22, due to both inflation deceleration and a tight labor market. The positive carryover for 2023 left by this recovery should lead to an expansion in the real wage bill. We consider this scenario compatible with an expansion of household consumption in 2023.

Risks: Higher-than-expected inflation hurting real household income, as well as a more intense labor market deceleration and a stronger impact from the last decade's labor reforms leading to higher employment as well as a higher real wage bill.

"Expanded" Real Wage Bill (BRL billion) Emergency FGTS +PIS\PASEP Withdrawal Emergency Aid and BEm Regular Benefits 1.100 ■ Real Wage bill (s.a) 1.000 900 800 700 600 500 2022Q4e 2023Q2e 2019Q4 2020Q2 2021Q4 2015Q4 2016Q2 2016Q4 2017Q2 2017Q4 2018Q2 2018Q4 2019Q2 2020Q4 2021Q2 2022Q2 2023Q4e

Sources: National Treasury, IBGE, Ministry of Economy, Santander.

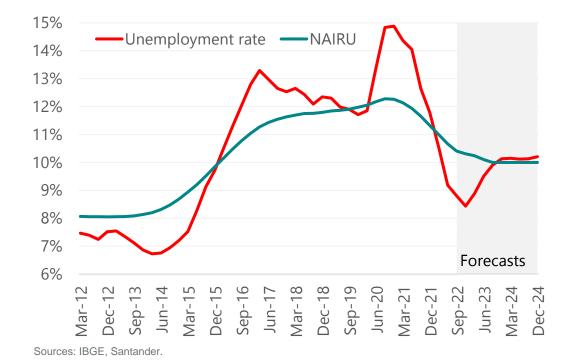
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Tighter Financial Conditions Leading to a Decelerating, But Still Heated Labor Market

 The participation rate should remain short of its historical average and maintain the unemployment rate below the NAIRU at least until 2H23.

We expect the unemployment rate to increase throughout 2023 and maintain the higher levels in 2024. We see monetary tightening taking the driver's seat for labor market trends in 2023, and a continuity of the deceleration trend in employment growth that started in 2H22. We expect a gradual normalization of the participation rate, which should, however, remain short of the historical average throughout 1H23 and limit the increase in the unemployment rate. We project the structural unemployment rate stabilizing after the postpandemic adjustment. We continue to see no drivers for additional gains in labor productivity indicators. Despite the important reforms implemented in the past few years, we see high uncertainty and the remaining elements of rigidity in the labor market limiting further drops in the level of structural unemployment.

Risks: A higher-than-expected impact of the last decade's labor reforms may lead to even lower levels of structural unemployment. Highly restrictive financial conditions for longer than we expect could lead to higher unemployment in 2023-24.



Unemployment Rate and the NAIRU

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Household Defaults Remain on the Radar

o The greater risk is in the rise of defaults, especially in non-earmarked credit to families, with credit card in focus.

For 2023, given the expectation of lower economic growth together with the high leverage of families, we foresee a slowdown in the nominal growth of new concessions, with a slight decrease compared to the pre-pandemic level (2019: 6.4%). We expect the composition of credit to remain unfavorable, with demand trending still high in high-cost modalities consisting of families and short-term credit by companies, and with financial institutions' very restrictive supply in an attempt to contain a growth in arrears. Our biggest concern is still rising defaults, especially in the household credit segment, which has increased since 4Q21 in line with the scenario of high-interest rates and high-income commitment. Among the modalities, the worsening in credit cards NPLs has been leading to increasing defaults among individuals, given the significant drop in the quality of credit card holders' profiles because of the expansion of the product offer in recent years. However, we see a slowdown in concessions, but with the full health of the banking system.

Risks: Significant higher defaults, mainly in the non-earmarked credit-tofamilies segment, leading to government policies that imply high moral risk or even a bank credit system crisis



Core* Household Non-Earmarked NPL

10.0 9.0 Overdraft; 8.0 Personal credit: Vehicles: Card overdraft: 7.0 Card financing; Renegotiation; 6.0 2020 2011 2012 2013 2014 2015 2016 2017 2018 2019 2021 2022

Sources: Brazilian Central Bank, Santander.

* This NPL considers the following categories: Overdraft, Non-Payroll Personal Credit, Vehicles, Credit Card, and Renegotiation.

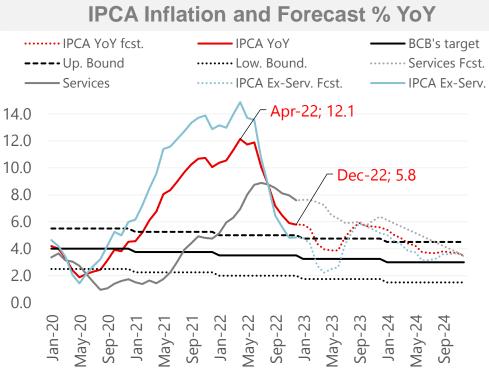
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Stabilizing Annual Inflation, That is, above the Target

• Again, inflation should end the year above the upward bound of the BCB's inflation target and with an unfavorable composition.

We foresee inflation for 2023 relatively stable compared to the 5.8% rise of 2022. On one side, inflation of market-set prices will continue decelerating, with food and industrial goods softening due to the continuing easing of the shocks related to the pandemic and the war in Ukraine. Services inflation will decelerate too, as monetary policy reduces demand. However, its contribution for the headline deceleration will be slim, because besides the prices in the sector being more inertial, the new round of government expenses should reduce the impact of monetary policy on demand (and on the job market). What we believe will keep inflation close to the 2022's level will be regulated prices, which will happen because we consider a partial reinstatement of the taxes that were cut last year (notably fuels).

Risks: For upward we see a full reinstatement of the taxes (instead of a partial one) and a stronger impact of fiscal stimuli on the economy (or new round of measures). Downward risks include no reinstatement of taxes and a stronger-than-expected monetary policy.



Sources: Brazilian Central Bank, Santander.

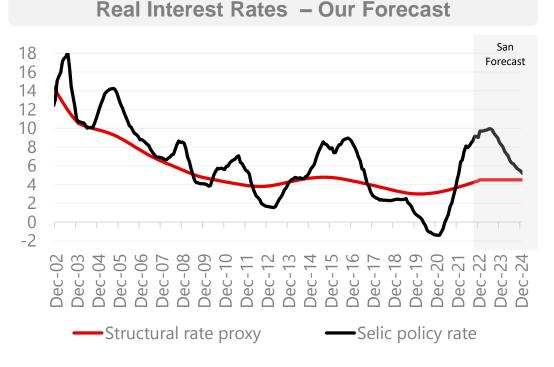


An Even Narrower Space Forecast to Ease Interest Rates in 2023

 We anticipate rate cuts to start in 2H23, taking the Selic to 12% at the end of 2023. However, the adverse CPI composition and persistence, the limited (if any) economic slack, the fiscal stimuli, and the higher neutral rate increase the upside risks.

In the recent months, the BCB has been following its strategy of "high for long", holding interest rate steady at 13.75%. In the coming months, the authority will watch the evolution of macro conditions and its outlook, so as to verify if the flight plan remains compatible with the IPCA convergence to the mid-target in the relevant policy horizon (18 months ahead). Bringing inflation down to 3% for the medium term will be all but an easy task, given the high degree of inflationary persistence generated by a composition where core services account for a good deal of CPI pressures. Moreover, with the economy moving around its potential now, and given the fiscal impulses on the pipeline, additional price pressures may follow. In a context of higher global interest rates, fiscal impulses also lead to an increase in the structural level of interest rate. We have evidence on that: to estimate the structural rate, we use a proxy based on forward rates on the real yield curve (NTN-Bs). Our methodology points to a neutral rate increase of 1.5 p.p. since the pandemic outbreak, reaching 4.5%.

Risks: Higher neutral rate leads to more painful and lasting monetary adjustment. We do see a clear upward bias as per our Selic rate projection.



Sources: Brazilian Central Bank, Santander.

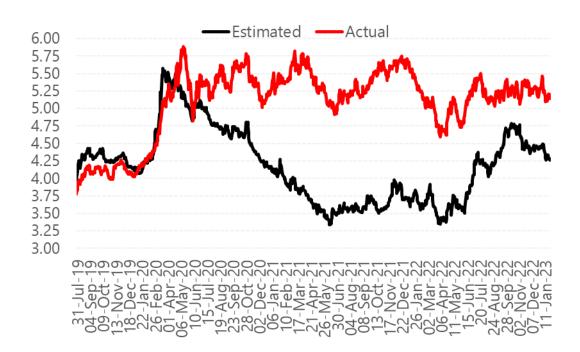
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Headwinds for the BRL Ahead

 Uncertainty about the performance of the world economy and the skepticism about the domestic fiscal dynamics in the absence of reforms ensuring the convergence of government debt should limit the room for the BRL to strengthen in a perennial fashion.

We expect the unclear international environment in tandem with misgivings about the sustainability of Brazilian government debt to weigh on the BRL. In addition to the lack of measures that hint at a sustainable trajectory for the government debt over the medium term, we have seen international sources of concerns rising lately and hindering significant and lasting episodes of BRL strengthening. In our view, the moment in which these concerns on the international front will be cleared lies far ahead and so it does the moment in which the skepticism with the Brazilian fiscal backdrop will be lower. Therefore, we expect the BRL to continue to weaken further, yet moderately.

Risks: Lengthening of monetary tightening cycles in advanced economies. Failure to set a new and (perceived as) reliable fiscal framework.



USD/BRL – External vs Domestic Influences

Sources: Brazilian Central Bank, Bloomberg, Santander,



Tax Reform: An Overview on the Current Proposals

• We believe that one of the priorities of the new federal administration should be the reform of taxes on goods and services.

In his inaugural post-elections speeches, new Finance Minister Fernando Haddad has emphasized the need for tax reform in Brazil. Moreover, the appointment of Bernard Appy as the new Special Secretary of the Finance Ministry suggests that tax reform is likely to be a top priority for 2023. Appy helped to draft *PEC 45/2019*, a constitutional amendment that has already received some support in the Lower House. In this PEC, it is proposed to streamline the tax code in Brazil by combining five different taxes into a single VAT tax (IBS - *Imposto sobre Bens e Serviços*), with positive effects in productivity and potential GDP.

The Senate is concurrently debating a reform proposal, called *PEC 110/2019*. In this case, the proposal involves the creation of two VAT-type taxes: (i) *CBS* (*Contribuição sobre Bens e Serviços*), replacing the federal taxes *IPI*, *PIS* and *Cofins*; and (ii) *IBS*, replacing *ICMS* (state tax) and *ISS* (municipal tax).

Main Differences between PEC 45 and PEC 110

| | PEC 45 / 2019 | PEC 110 / 2019 | | |
|--------------------|---|---|--|--|
| Who´s Leading? | Lower House; Approved by the CCJ in May 2019. | Senate; Still not approved by the CCJ. | | |
| Main Proposal | Replacement of <i>IPI</i> + <i>PIS</i> + <i>Cofins</i> + <i>ICMS</i> + <i>ISS</i> by <i>IBS</i> and create a selective tax | Replacement of <i>IPI</i> + <i>Cofins</i> + <i>PIS</i> by <i>CBS</i> , replacement of <i>ICMS</i> + <i>ISS</i> by <i>IBS</i> , and create a selective tax | | |
| Tax Rates | Uniform rate for all goods and services, but tax rate could differ between states and municipalities | | | |
| Fiscal Benefits | No tax benefits are predicted. The eventual inclusion of tax benefits must be evaluated technically. | Eliminate most tax benefits, except Simples and Zona Franca. New benefits may be created by complementary legislation. | | |
| Tax Burden | No increase | | | |

Sources: CCiF and Pra Ser Justo.



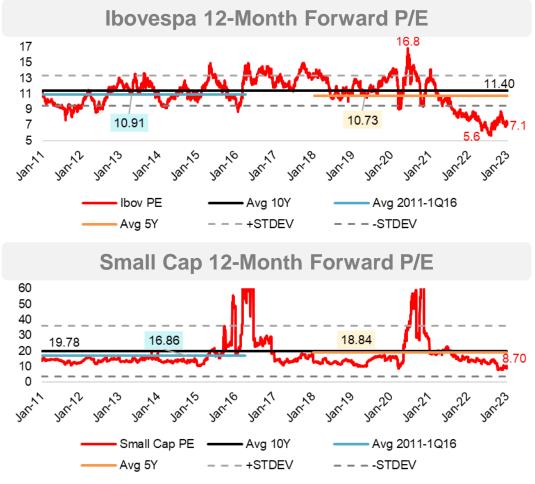
Equity Valuation Levels More Appealing Than During the Last Macroeconomics Crisis

o Markets are already pricing in a lot of negative news, and we think that the current selloff is overdone.

Although we have a more cautious outlook for Brazilian equities in 2023, particularly owing to local uncertainties, we think that the current selloff is overdone. The stock market has already priced in a substantial amount of negative news, and certain assets, such as 10-year real rates, are trading at more appealing valuation levels than during the 2011-1Q16 period, when Brazil experienced a severe financial crisis.

Ibovespa is currently trading at 7.1x 12M Fwd P/E, a significant discount to the 10-year average of 11.4x and to the average between 2011-1Q16. Even if we adjust Ibovespa's P/E by the increase in long-term real interest rates, it still looks attractive vs. the historical average. The Small Cap Index is also trading at a significant discount to the 10-year average and to the average between 2011-1Q16.

Risks: Even if the valuations appear to be attractive, the forecasted earnings have a chance of being lower than expected, which might cause the P/E to rise to levels closer to the historical average.



Source: Bloomberg, Santander.



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Our purpose is to help people and businesses prosper.

Our culture is based on believing that everything we do should be:

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