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SPECIAL REPORT – FISCAL POLICY

# FISCAL REVENUE: RECENT PERFORMANCE AND OUTLOOK

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- As the economy recovers with the waning and normalization of the pandemic, and as a result of the government's large stimulus package, fiscal revenue has recovered beyond expectations. The government's net revenue increased from 16.1% of GDP in 2020 to 18.2% of GDP in 2021. Since last year, revenue has been surprising positively vs. forecasts, and projections have been revised upward, partly due to structural and permanent gains and partly owing to cyclical/temporary improvements.
- We see three key factors that have been fundamental for this recovery: (i) the more robust than expected economic recovery (we highlight the recent surprises in labor market numbers); (ii) structural gains from terms of trade (e.g., commodity prices, especially iron ore and oil prices); and (iii) a price effect associated with higher wholesale inflation (IGP higher than IPCA), with a change in relative prices showed by the mismatch between the inflation indexes. As the economic recovery continues (albeit slowing), federal tax collection has benefited from the economic recovery's concentration in the industrial sector rather than the services sector.
- We developed a series of models to analyze the recent decoupling of revenue from the activity index. In our view, some of the recent jump in total revenue can be explained by the change in relative prices, with wholesale prices (IGP) being higher than CPI (IPCA). We simulated some changes to the relative price index that could change tax collection numbers, especially for 2023. In our scenario, we estimate a stable relationship between the index and a 1.5% drop in tax collection. In a scenario in which the ratio IGP/IPCA gradually converges to the pre-pandemic values, tax collection could fall by more than 8.5% in real terms.
- In addition, we believe that oil prices have been a key element in the recent improvement in federal and state revenue. We used a model to estimate the contributions from recent tax collection for the federal government, showing a significant contribution of Brent oil prices to 2021-22 results (in our estimates). The activity recovery has also been vital for recent results. For 2023, we project both activity and oil prices falling along with a slowdown in global and domestic growth, especially due to monetary tightening. Finally, in this report we simulate the response of total revenue to changes in oil prices and GDP growth.
- We also analyzed how the Russia-Ukraine war and rising oil prices have affected the public accounts since January. At the beginning of the year, in our forecasts, we expected states to receive total oil revenue of BRL120 billion from the VAT tax (ICMS). Based on rising oil prices since Russia's invasion of Ukraine, we raised our estimate to BRL145 billion (not including the effects of the law LC145 approved in Congress, which could reduce our revenue forecast by BRL40 billion). If the ICMS is capped at 17-18% for essential and inelastic goods, we calculate that the impact consumes practically the entire additional gain for the year. However, we also see risks for the coming years from any decline in international oil prices. In addition, if the cap on the VAT tax is maintained from 2023 onward, we believe states will probably raise taxes on more elastic goods to recover revenue (affecting inflation).
- All in all, we see part of the revenue gains as structural, although it is still difficult to specify the exact amounts, as there is uncertainty in our various models. In any case, part of the revenue was also due to temporary factors such as accelerating inflation and commodity prices. Thus, despite remaining positive in the short term, we believe that the future still holds uncertainties. We remain cautious given the possibility of a revenue growth slowdown with the economic deceleration and disinflation we expect.

## Introduction

With the economy in recovery as the pandemic subsides and normalizes, and because of the large government stimulus, the fiscal revenue recovery has exceeded expectations. The surprises came largely from a faster than expected economic recovery from the pandemic and from the price shock (inflation and terms of trade). In the breakdown, corporate taxes saw the biggest recovery (mainly commodities-linked sectors). More recently, we have observed a revenue recovery related to the labor market. In addition, we have seen significant one-offs that are contributing to the revenue jump (e.g., more dividends, extraordinary revenue and concessions, et al.).

The government's net revenue increased to 18.2% of GDP in 2021 from 16.1% of GDP in 2020, returning to the 2000-19 average (18.2% of GDP). Since last year, revenue has been surprising positively vs. forecasts, and projections have been revised upward. In our view, part of this development is structural, with permanent gains, and part of it is due to cyclical (temporary) improvements. We recognize the uncertainty in quantifying the difference between temporary and permanent, especially given the several shocks that have affected the economy recently. In previous reports, we have discussed how we expect some softening ahead, with a deceleration in economic activity and a process of disinflation[1], both resulting from the Brazil Central Bank's (BCB) monetary tightening. Yet, we acknowledge that we have been surprised by the recovery in tax revenue, and the timing of any deceleration in growth is uncertain.

Compared with the 2022 Budget (LOA), revenue rose by ~BRL196 billion in the last Budget Review (published on July 22, 2022). We highlight that the last budget review increase came mainly from higher extraordinary revenue (BRL45 billion: BRL26 billion from the Eletrobras capitalization, and BRL18.8 billion in state-owned companies' [SOE] dividends, especially from BNDES). Considering that we estimated BRL65 billion in dividends, and given the recent figures and the federal government's request to SOE companies to increase this amount, we believe it is possible that revenue could reach BRL95 billion (1.0% of GDP). Regarding expenditure, that has increased by BRL113 billion since Congress approved the budget. In this regard, considering the jump in revenue, we can observe a more balanced result for the central government, with the potential to reach a primary surplus after eight years in deficit.

**Figure 1. Budget Review and Our Forecast**

| 2022 - BRL billion | Budget (LOA) | Budget Review Mar-22 | Budget Review May-22 | Budget Review Jul-22 (a) | Santander (b) | Delta (b) - (a) |
|---|---|---|---|---|---|---|
| **Total Revenue** | 2,031 | 2,118 | 2,167 | 2,226 | 2,196 | -30 |
| Revenues Collected by the Brazilian IRS | 1,289 | 1,286 | 1,332 | 1,343 | 1,300 | -43 |
| Net Social Security Revenues | 499 | 527 | 532 | 537 | 541 | 4 |
| Revenues Not Collected by the IRS | 242 | 305 | 304 | 347 | 355 | 8 |
| Transfers by Revenue Sharing | 386 | 432 | 445 | 452 | 446 | -6 |
| **Net Revenue** | 1,644 | 1,686 | 1,722 | 1,774 | 1,750 | -24 |
| **Total Expenditure** | 1,720 | 1,753 | 1,788 | 1,834 | 1,820 | -13 |
| Social Security Benefits | 778 | 778 | 789 | 790 | 788 | -2 |
| Payroll - Public Servants | 336 | 339 | 341 | 340 | 339 | 0 |
| Other Mandatory Expenses | 253 | 282 | 280 | 295 | 297 | 2 |
| Mandatory Expenses with Cash Control | 223 | 223 | 223 | 256 | 246 | -10 |
| *Discretionary Expenses* | 131 | 131 | 155 | 154 | 150 | -4 |
| Central Gov. Budget Gap | -76.2 | -66.9 | -65.5 | -59.4 | -70.3 | -10.9 |
| % GDP | -0.8% | -0.7% | -0.7% | -0.6% | -0.7% | -0.1% |

Sources: Brazilian IRS, BCB, Santander.

In this context, we believe that three elements were fundamental to this recovery: (i) more robust than expected economic recovery (we highlight the recent surprises in the labor market numbers; (ii) structural gains from terms of trade (.e.g., commodities prices, especially iron ore and oil prices); and (iii) price effect associated with higher wholesale inflation (IGP higher than IPCA), , with a change in relative prices showed by the mismatch between the inflation indexes (i.e., change in relative prices). As the economic recovery continues (albeit slowing), federal tax collection results were helped by the recovery's concentration in the industrial sector rather than the services sector. In this context, the mining sector played an important part, gaining a greater share of

[1] **Santander Brazil – Scenario Update: "Better *Activity Expected in the Short Term, with Higher Interest Rates (Even) Longer"* –** July 14, 2022- Available on: https://bit.ly/Std-scenupdate-jul22

total revenue. Before the pandemic, total metallurgy and metallic mineral extractions accounted for 1.96% of the revenue collected by the Brazilian IRS; in 2021 this number jumped to 4.75%.

More recently, the impulse for increased tax revenue has come from revenue linked to the labor market, which in a 12-month reading is close to mid-2015 levels in real terms. The recovery in the employment numbers is helping tax collection in the short term. Looking ahead, the uncertainty relates to whether commodity prices and domestic activity can maintain these positive results. We believe the first is likely to suffer from the global deceleration, while the second will probably be affected by the monetary tightening still under way.

**Figure 2. Federal Tax Collection Models**

| Revenues Collected by the Brazilian IRS | YTD - Jun | | | |
|---|---|---|---|---|
| BRL billion | 2022 | 2021 | Delta | YoY |
| Corporate Taxes (IRPJ/CSLL) | 258.5 | 212.7 | 4.6 | 21.5 |
| Income tax - Households (Invest.) | 43.9 | 26.9 | 16.9 | 62.8 |
| Pension Contributions | 261.2 | 2.5 | 16.0 | 6.5 |
| Social contribution (PIS/Pasep) | 205.0 | 193.3 | 11.7 | 6.1 |
| Income tax - Households (Labor Income) | 90.4 | 84.1 | 6.4 | 7.6 |
| Financial Operations (IOF) | 29.0 | 23.0 | 6.0 | 26.1 |
| Income tax - Households (External Invest.) | 23.2 | 22.4 | 0.8 | 3.7 |
| Fuels - CIDE | 1.3 | 0.7 | 0.6 | 92.6 |
| Income tax - Households | 32.3 | 32.6 | -0.3 | -0.9 |
| Income tax - Households (Others revenues) | 7.9 | 8.6 | -0.7 | -8.7 |
| Industrialized Products (IPI) | 21.0 | 22.9 | -1.9 | -8.3 |
| Foreign Trade | 41.1 | 52.1 | -1.1 | -21.0 |
| Others | 0.3 | 37.0 | -3.9 | -10.5 |
| Total (Includes Pension Contributions) | 1,048 | 961.3 | 86.5 | 9.0 |

Sources: Brazilian IRS, Santander

**Figure 3. Tax Collection by Sectors**

| Revenues Collected by the Brazilian IRS | YTD - Jun | | | |
|---|---|---|---|---|
| BRL billion | 2022 | 2021 | Delta | YoY |
| Fuels | 52.9 | 18.1 | 34.8 | 192.5 |
| Financial Entities | 116.8 | 100.8 | 16.0 | 15.9 |
| Auxiliary activities of the financial sector | 30.4 | 23.9 | 6.5 | 27.2 |
| Extraction of metallic minerals | 27.9 | 23.3 | 4.6 | 19.7 |
| Extraction of oil and natural gas | 6.3 | 2.2 | 4.2 | 192.7 |
| Information technology service activities | 12.9 | 1.1 | 1.8 | 16.2 |
| Metallurgy | 14.8 | 13.1 | 1.7 | 13.0 |
| Manufacture of machinery and equipment | 11.8 | 10.7 | 1.1 | 10.4 |
| Storage and transport activities | 8.5 | 7.6 | 0.9 | 11.9 |
| Agriculture, livestock and related services | 3.7 | 2.8 | 0.8 | 29.0 |
| Others | 500.7 | 502.6 | -1.9 | -0.4 |
| Total | 786.6 | 716.1 | 70.5 | 9.8 |

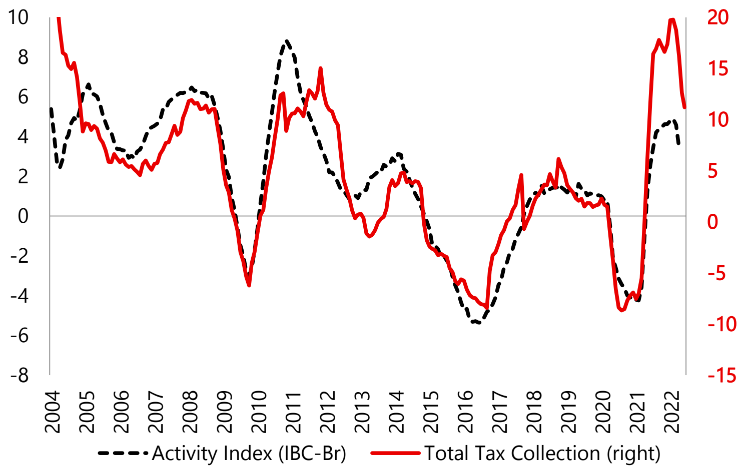
Sources: Brazilian IRS, Santander

In light of this, we have run models in order to study the GDP elasticity of recurring revenue. On average, we see this variable as close to 1.7 during 2021, above the historical pattern of 1.0, and even higher than the average of 1.3 observed in the previous commodities boom. For this year, the results of short-term models are surprising to the upside: we were expecting elasticity to converge to close to 1.0, but we now believe it is closer to 1.3. For the long term, we still see elasticity converging to 1.06.

Usually in times of economic recovery (which result in the closing of the output gap), revenue tends to recover faster than GDP. We attempt to estimate the improvement in public revenue and to understand how these shocks are affecting results. Our models are now pointing to structural revenue growth from the commodity shock of about 0.8% of GDP (vs. 0.5% of GDP before the conflict in Russia and revised oil-related revenue).

In the latest releases from the federal government, revenue came in above market expectations. Although economic activity is gradually cooling down, Brazilian federal revenue has benefited from cyclical factors that are influencing prices as a whole, such as the rise in the prices of oil and other commodities. However, we will show that these are not the only factors positively affecting total federal revenue. Based on the good performance of tax collection, our objective is to calculate the share of federal revenue that is explained by these factors and simulate fiscal revenue if the parameters are changed.

**Figure 4. Tax Collection and Activity**




Sources: Brazilian IRS, BCB, Santander.

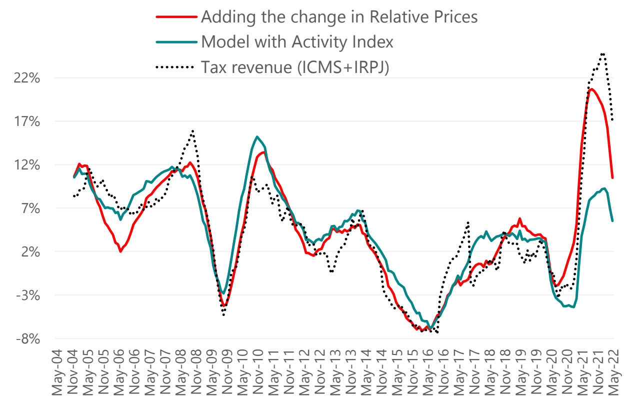
One of the main factors that may explain this decoupling from the model of tax collection explained by activity indexes was the change in relative prices. In the post-pandemic recovery, we have observed a global inflationary shock, and in Brazil the jump in commodity prices was boosted by FX depreciation (usually FX moves in the opposite direction from commodity prices). In light of this, we have seen a divergence between IGP (wholesale prices) and IPCA (CPI).

Because of this price divergence in the inflation-adjusted series (from IPCA), tax collection has continued to perform better than market expectations recently. We believe that a substantial part of the price acceleration is not being captured by IPCA, and we believe that the IGP index can better represent the inflation that has been affecting public revenue. In our view, this is because the prices affecting consumers are not the same as prices affecting companies. Moreover, we have seen a substantial increase in corporate taxes (IRPJ/CSLL) — in 1H22, revenue from corporate taxation rose 21.5% YoY. In our view, this could be explained by the price shock effect (inflation and terms of trade), companies' deleveraging in recent periods, and a more robust activity recovery. We believe that corporate profits are the main thermometer to evaluate the impact on revenue in the short term. So far, the most recent company results for 2Q22 have been positive, but there is uncertainty regarding 2H22, given the increase in the Selic rate and other costs. In addition, we have observed higher extraordinary revenue related to corporate restructuring (M&A and IPO activities), close to BRL40 billion a year.

In order to verify whether the change in relative prices had an impact on recent tax collection results, we first created a time series (Figure 3 – dotted line) composed by the public revenue from two taxes, the ICMS and IRPJ, which directly affect companies' expenses. We believe that those two are the most affected by this change in relative prices and also are sensitive to activity numbers. The intention of this model is simply to simulate the change in the relationship between the inflation indexes.

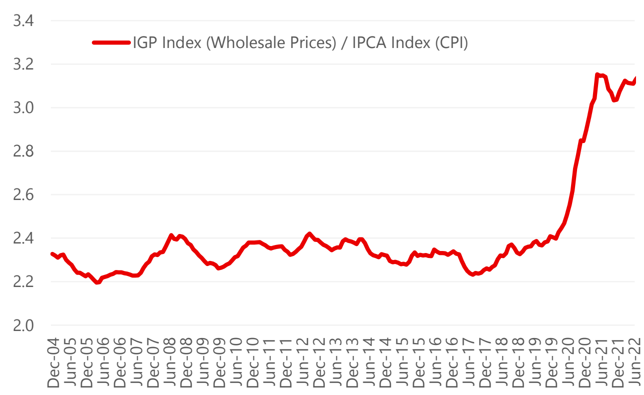
As shown in Figure 5, the model using only the activity index did not explain the most recent results. Therefore, we added a relative price index composed of IPCA and IGP-M, which can explain part of the recent decoupling in the relationship between tax collection and the model, considering only activity numbers (IBC-Br). In the in-sample estimation, the recent values caused a significant decrease in the gap between the response variable (ICMS + IRPJ) and the values obtained by our model (red line). We used the state tax (ICMS), calculating the corporate taxes that are more linked to these explanatory variables and that are highly affected by the change in relative prices. This relative price impact in the model is in line with our hypothesis (Figure 5).

**Figure 5. Federal Tax Collection Models**




Sources: National Treasury, BCB, Santander.

**Figure 6. Divergence in Relative Prices**

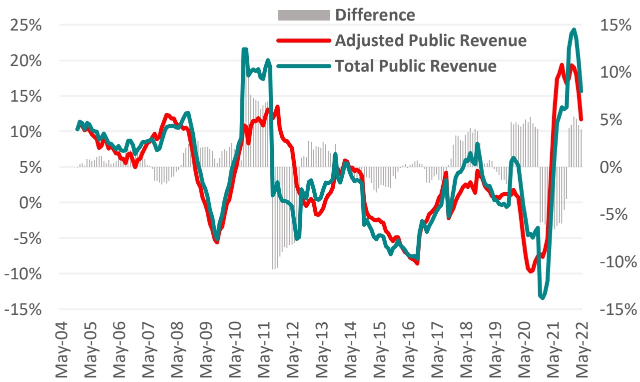



Sources: FGV, IBGE, Santander

To expand our analysis, we replicated this model to attempt to explain total public revenue; however, the relative price index as a regressor showed a low significance level (close to 10% in statistical terms ) — not closing the gap between the curves, as in the model built in the first exercise. With the result obtained, we adjusted total public revenue, excluding the revenue not collected by the Brazilian IRS (revenue from concessions, royalties, etc.) — in Figure 7 we called it "adjusted public revenue" (more exogenous, in our view). In Figure 7, we show the difference between adjusted revenue and total revenue. When adjusting public revenue, we obtained a similar effect to that observed in the first econometric exercise (Figure 7).

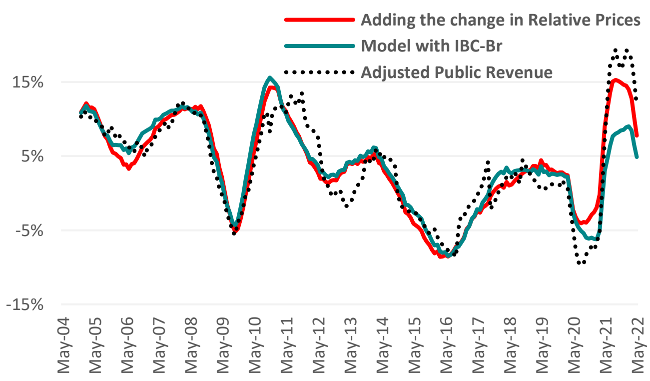
Regarding the details of the methodology, we first accumulated all the time series mentioned in 12 months and then calculated their YoY increases or decreases. With these transformed series in hand, we ran a simple OLS (Ordinary Last Squares regression) for each model (alternating between the regressors and activity index (IBC-Br), plus one adding the relative price change indicator). In addition, we controlled for 12 minus 1 monthly dummies (equal to 1 when in the month) to capture the seasonal effects of each month that could disrupt the analysis. The same method was used both in the model that has the sum of revenue from the ICMS tax and the IRPJ tax as the response variable and in the model that explains adjusted total federal revenue.

**Figure 7. Modeling Total Revenue and Adjusted**




Sources: National Treasury, BCB, Santander

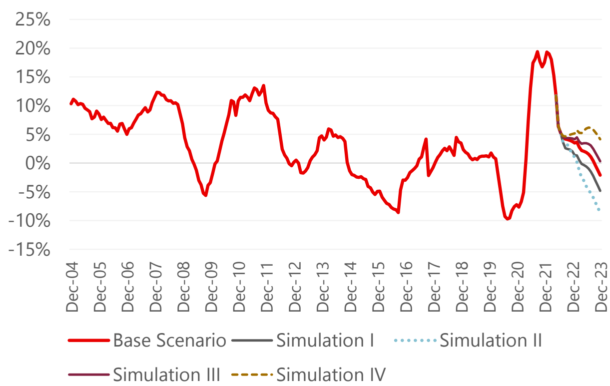
**Figure 8. Model with Activity and Relative Prices**




Sources: National Treasury, BCB, Santander

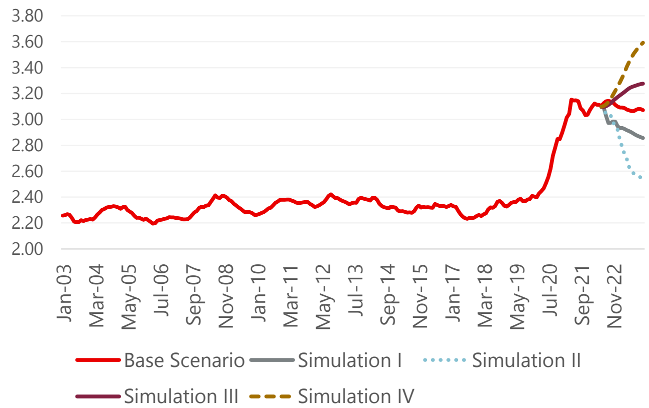
With the coefficients of the model developed to explain the adjusted revenue, we carried out an exercise with the aim of forecasting both 2022 and 2023. For this, we extended the time series of the IGP, IPCA, and IBC-Br (all in line with our expected values). With this data in hand, we created a group of simulations consistent with our base scenario and four alternative scenarios (Figures 9 and 10), each with a different forecast of the relative price indicator but keeping the IBC-Br (activity index) forecast constant and in line with our projections. As can be seen in Figures 9 and 10, a change in prices could alter real revenue, especially for 2023. If the change in the IGP/IPCA ratio increases, tax collection tends to increase and improve the fiscal result; on the other hand, if the convergence in the index returns to historical levels (as in Simulation II), total revenue could drop significantly. Of course, there other factors affecting revenue, such as the activity numbers, extraordinary revenue, dividends, and royalties, among others.

**Figure 9. Revenue Collected by the Brazil IRS**




Sources: National Treasury, BCB, Santander

**Figure 10. Relative Price Index Simulations (Ratio)**




Sources: National Treasury, BCB, Santander

| Figure 11 - Total Revenue Simulation (% real YoY) | 2022 | 2023 |
|---|---|---|
| **Our Official Forecast** | **3.2%** | **-1.5%** |
| Simulation with our inflation scenario | 3.8% | -2.1% |
| Simulation I (Slight relative price convergence) | 2.1% | -4.8% |
| Simulation II (More intense price convergence) | 1.5% | -8.7% |
| Simulation III (New slight increase in prices diff.) | 4.3% | 0.3% |
| Simulation IV (More intense increase in prices diff.) | 5.0% | 4.1% |

Source: Santander estimates

### Impact of Oil Forecasts

Another key factor in the recent increase in revenue is the jump in oil prices. With the aforementioned series, we performed a sensitivity analysis (Figures 12 and 13) using a log-log model — that is, a regression with the natural logarithm of each explanatory variable to explain each response variable: adjusted total revenue and IRPJ + ICMS revenue. The difference in this sensitivity analysis is that our objective was to understand the potential impact on these revenues from variations in the price of oil, so we removed the relative price indicator as a regressor and added the price of a Brent oil barrel (in BRL). Such models are structured with all variables remaining level and only with the natural logarithm transformation, and in this type of model we can interpret the coefficients as the elasticity of revenue with respect to each regressor. In addition, monthly dummies were inserted into the model to control the seasonality of the calendar effect. It worth mentioning that we do not include the effects of the legislation (LC194) that imposed a VAT (ICMS) cap of 18-17% on essential goods.

As shown in Figures 12 and 13, changes in FX rate and oil prices could also alter the revenue fiscal scenario. As we believe consider that there is an unbalanced global oil supply and demand, this could keep prices more elevated. On the other hand, the global slowdown could reduce demand and cause a reduction in prices.

**Figure 12. States (ICMS) Revenue Simulation**

| States Revenue Sensitivity - Additional revenue in BRL bn | | | | | | |
|---|---|---|---|---|---|---|
| | Oil Price (brent) | $ 90 | $ 100 | $ 115 | $ 125 | $ 150 |
| FX Rate Year-Average | R$ 4.90 | -31.0 | -21.0 | -7.5 | 0.8 | 19.2 |
| | R$ 5.10 | -27.1 | -17.0 | -3.4 | 4.9 | 23.5 |
| | R$ 5.30 | -23.8 | -13.7 | 0.0 | 8.4 | 27.1 |
| | R$ 5.45 | -21.4 | -11.2 | 2.5 | 10.9 | 29.7 |
| | R$ 5.30 | -16.0 | -5.8 | 8.2 | 16.6 | 35.6 |

Source: Santander estimates.

**Figure 13. Federal Revenue Simulation**

| Federal Revenue Sensitivity - Additional revenue in BRL bn | | | | | | |
|---|---|---|---|---|---|---|
| | Oil Price (brent) | $ 90 | $ 100 | $ 115 | $ 125 | $ 150 |
| FX Rate Year-Average | R$ 4.90 | -36.0 | -24.3 | -8.6 | 0.9 | 21.9 |
| | R$ 5.10 | -31.4 | -19.7 | -3.9 | 5.6 | 26.8 |
| | R$ 5.30 | -27.6 | -15.8 | 0.0 | 9.6 | 30.8 |
| | R$ 5.45 | -24.8 | -13.0 | 2.9 | 12.5 | 33.7 |
| | R$ 5.75 | -18.5 | -6.6 | 9.3 | 19.0 | 40.3 |

Source: Santander estimates.

### Breakdown of Fiscal Revenue

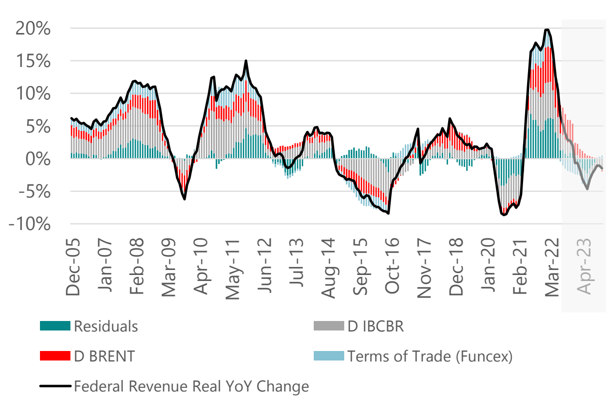
Another exercise intended to complement our analysis is an attempt to break down the factors contributing to the federal revenue increase. First, we created a monthly database containing five time series: (i) total tax collection data released by the Brazilian IRS, (ii) IBC-Br (monthly GDP proxy), (iii) Brent oil price in BRL, (iv) Brazilian CPI index (IPCA), and (v) a terms of trade indicator developed by Funcex.

We added 11 seasonal dummies to capture the effect in each of the 12 months in a year. As a second step, we generated a linear regression model (estimated via OLS), with total tax collection as response variable and the other mentioned series as regressors (we put all variables through the natural logarithm transformation).

We analyzed the significance of each coefficient, verified the in-sample fit of the model, and checked the residuals' behavior to ensure that we had consistent forecasts.

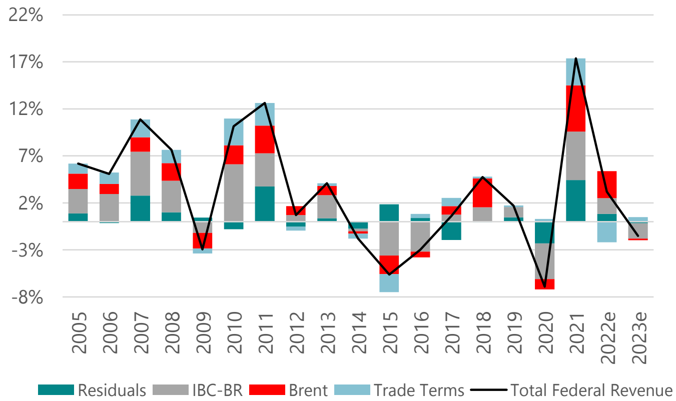
As we expected, oil prices and the activity recovery accounted for a substantial part of the recent increase in revenue. As we expect a decline in oil prices (to USD95 per barrel) and a GDP decrease of 0.6% for 2023, we see that both represent the largest contribution to our -1.5% forecast.

**Figure 14. Federal Government Revenue – Monthly**




Sources: National Treasury, Santander.

**Figure 15. Federal Government Revenue – Annual**




Sources: National Treasury, Santander.

In Figures 16 and 17 we used the model above to simulate changes in oil prices and the GDP forecast to assess the sensitivity of federal tax collection in 2022 and 2023. As can be seen, a change in either variable (both of which have significant uncertainty) could alter the fiscal outlook. However, we believe that there will tend to be a reduction in revenue due to the global and domestic GDP deceleration. It is important to highlight that this number refers to federal tax collection, not including the dividends from SOE companies, which would improve the amount of total revenue published in the federal government results.

**Figure 16. 2022 Federal Tax Collection**

| Federal Tax Collection - 2022 (12-month - YoY%) | | | | | | |
|---|---|---|---|---|---|---|
| Considering Fx at R$ 5.30 | Oil Price (brent) | $ 95 | $ 105 | $ 115 | $ 125 | $ 135 |
| GDP Growth | 1.2% | 1.8% | 2.1% | 2.3% | 2.6% | 2.9% |
| | 1.5% | 2.1% | 2.4% | 2.7% | 3.0% | 3.2% |
| | 1.9% | 2.6% | 2.9% | 3.2% | 3.5% | 3.7% |
| | 2.2% | 3.0% | 3.3% | 3.5% | 3.8% | 4.1% |
| | 2.7% | 3.6% | 3.9% | 4.2% | 4.4% | 4.7% |

Source: Santander estimates.

**Figure 17. 2023 Federal Tax Collection**

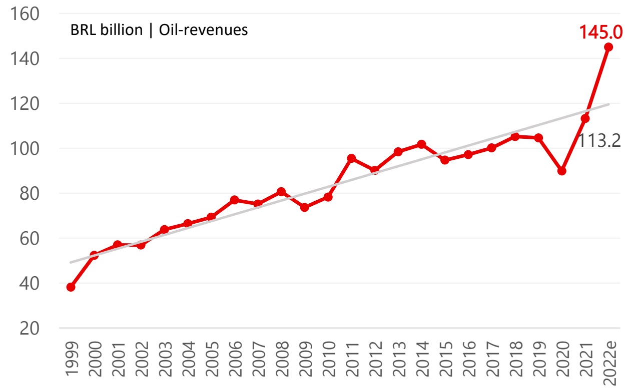
| Federal Tax Collection - 2023 (12-month - YoY%) | | | | | | |
|---|---|---|---|---|---|---|
| Considering Fx at R$ 515 | Oil Price (brent) | $ 75 | $ 85 | $ 95 | $ 105 | $ 115 |
| GDP Growth | -1.4% | -3.5% | -3.0% | -2.5% | -2.0% | -1.6% |
| | -1.0% | -3.0% | -2.5% | -2.0% | -1.6% | -1.1% |
| | -0.6% | -2.5% | -2.0% | -1.5% | -1.1% | -0.7% |
| | -0.2% | -2.1% | -1.6% | -1.1% | -0.6% | -0.2% |
| | 0.2% | -1.6% | -1.1% | -0.6% | -0.2% | 0.3% |

Source: Santander estimates.

### Gains in Revenue Since January and Implementation of Government Measures

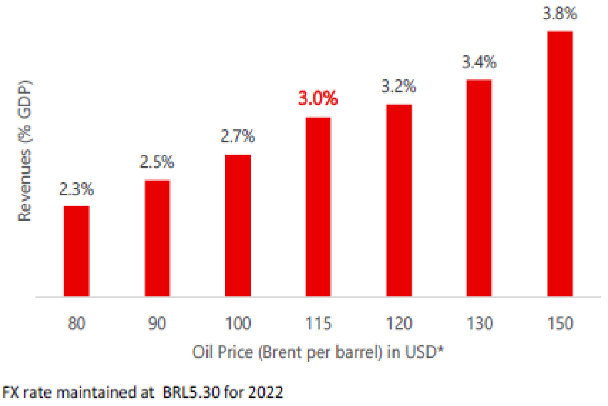
In this section, our intention is to show how the impact of the Russia-Ukraine war on oil prices has affected public accounts since January. At the beginning of this year, looking at the states, we projected revenue from oil of close to BRL120 billion from ICMS. However, as a result of the rise in oil prices, our estimate jumped to BRL145 billion (not including the impact of the legislation [LC145] approved to cap the VAT (ICMS) state tax, which could reduce this revenue by BRL40 billion, in our view). If the ICMS rate is limited, we can see that the impact consumes practically the entire additional gain for the year. However, there is a risk for the coming years from a possible decline in international oil prices. As we have previously shown for the public sector, revenue for both the states and the federal government amounted to around 3.0% of GDP, considering our scenario for oil (which has volatile prices).

**Figure 18 – ICMS Revenue Oil-Related**




Sources: Confaz, Santander.

**Figure 19 – Public Sector Oil Revenue – 2022**

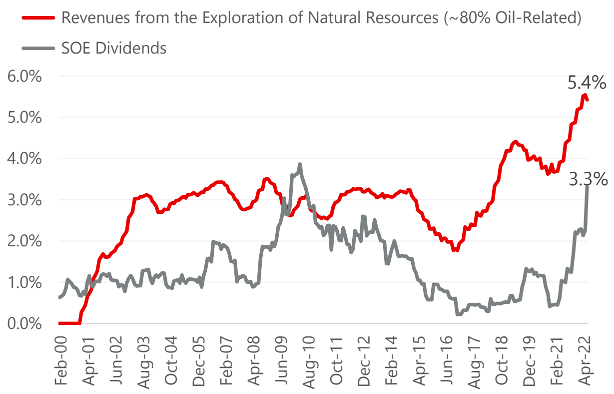



Sources: Brazilian Central Bank, Santander.

Considering total revenue, Figure 18 shows that revenue from the exploitation of natural resources (mostly royalties from oil) reached 5.2% of total revenue, while dividends from state-owned companies related to oil reached 1% of total revenue, and the trend is that this amount will continue to rise. In January, we expected that SOE dividends would reach BRL40 billion (0.4% of GDP) this year. This forecast rose to BRL65 billion in our last scenario update, and now we believe it is possible that SOE dividends could reach BRL95 billion (1.0% of GDP), based on recent results and the federal government's request to SOE companies to increase their dividend payments this year. We highlight that the average of this revenue from 1997-2019 was 0.3% of GDP a year, while last year it was 0.5% of GDP. In June, SOE dividends reached 3.3% of total revenue in YTD terms, and we estimate this amount could exceed 4.0% of total revenue by the end of 2022. It is worth noting that total revenue (the ratio denominator) has shown a robust increase so far this year.

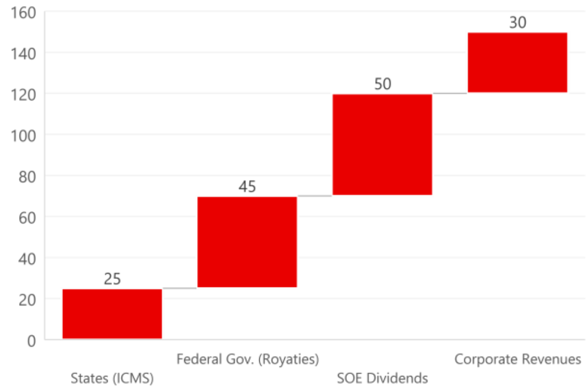
All in all, we calculate that the gain compared to our early-year scenario totals BRL150 billion (1.6% of GDP). In our view, despite the extra revenue gains, the permanent use of extra revenue in policies regarding tax breaks (or an increase in fiscal transfers), without future offsets to contain expenditures, could generate additional pressure on the fiscal framework, making the fiscal consolidation process riskier.

**Figure 20 – Federal Tax Revenue (% of total Revenues)**




Sources: National Treasury, Santander.

**Figure 21 – Revenue Rise from Oil vs. January 2022**




Sources: Santander.

With this increase in revenue, the government has adopted a series of tax cuts to stimulate the economy. Taking together the extraordinary income from the extra dividends and the capitalization of Eletrobras, we estimate the net impact of the measures at around BRL11 billion for 2022. This is not likely to have much of an impact on the fiscal result, which is quite positive in the short term. However, we see around 0.5% of GDP as being permanently allocated to these measures, which could worsen the revenue scenario if there is a process of disinflation, a drop in oil prices, and/or a slowdown in activity, as we showed previously.

**Figure 22 – Fiscal Stimulus Implemented by the Federal Government**

| REVENUES | | | |
|---|---|---|---|
| Tax waiver measures in 2022 | BRL billion | Permanent? | %GDP |
| Reduction of IPI federal tax by 35% | 23.6 | Yes | 0.2% |
| Reduction of PIS/Cofins of Diesel, kerosene and LPG | 14.9 | No | 0.2% |
| Extension of payroll tax exemption* | 9.2 | ? | 0.1% |
| Reduction of import tax rates by 10% | 2 | Yes | 0.0% |
| Soccer specific tax regime (TEC) | 2.3 | Yes | 0.0% |
| Extension of PCD benefit | 1.3 | Yes | 0.0% |
| ZPE expansion | 1.2 | Yes | 0.0% |
| IOF reduction for credit support programs | 0.8 | Yes | 0.0% |
| IRRF reduction on aircraft leasing | 0.4 | Yes | 0.0% |
| Others | 3 | Yes | 0.0% |
| PIS/Cofins Gasoline + Cide | 17 | No | 0.2% |
| Total | 75.7 | | 0.8% |
| Total Temporary (Tax Break) | 31.9 | | 0.3% |
| Total Permanent | 43.8 | | 0.5% |
| Temporary Gains (Eletrobras 26bn + Petrobras 25bn + BNDES and Others 14bn) | 65 | | 0.7% |
| Net Impact on 2022 | 10.7 | | 0.1% |

* We consider as permanent before the approval of a Tax Reform

Sources: National Treasury, Santander

We see a more consistent primary balance only in 2026-27. We estimate a budget gap adjustment of ~2.5% of GDP, in order to achieve the primary result necessary to stabilize the gross debt at 90% of GDP. We continue to expect a risky path to fiscal consolidation. We expect a rise in expenditures and a reduction in revenue growth as (commodity- and inflation-driven) impulses fade. For the long term, since we assume the commodity cycle will not, by definition, be permanent, we continue to see a risky path toward debt stabilization, given the reduced efficacy of the fiscal rules and the popular pressure to increase government expenditures in a context of higher inflation. Despite the breathing room on the fiscal side provided by this extended commodity cycle, we believe the high level of mandatory expenses is a problem that needs fixing as soon as possible (via economic reforms) in order to quell the fiscal risks in the medium to long term. In our view, this implies the necessity for further structural reforms and a trustworthy anchor.

The trend for the reform scenario is for elasticity to stay between 1.0-1.1 in the medium term. So, both potential growth and elasticity will play a key role in fiscal consolidation ahead.

**Figure 23 – Simulation: First Year with a Consolidated Primary Balance**

| Elasticity: GDP-Revenues | GDP Growth: 1.0% | 1.5% | 2.5% | 3.0% |
|---|---|---|---|---|
| 0.9 | 2038 | 2032 | 2029 | 2027 |
| 1 | 2031 | 2028 | 2027 | 2026 |
| 1.1 | 2028 | 2027 | 2026 | 2025 |
| 1.2 | 2027 | 2026 | 2026 | 2024 |
| 1.3 | 2026 | 2025 | 2024 | 2024 |

Assumptions: GDP deflator: 4.0% after 2023; Net revenue from the 3nd bimonthly government report; Santander expenses scenario.

Source: Santander

**Conclusion**

Public sector revenue has recently surprised the market with a robust recovery from the pandemic. We see several positive shocks to revenue that contributed to these favorable fiscal results in the short term. Mainly owing to the shock of the conflict in Eastern Europe, commodity-related revenue and the difference in relative prices increased. All of this occurred during an activity recovery that was more robust than expected; although our scenario since November 2021 considered positive GDP growth for 2022, it has been surprising to the upside recently.

There are several possible scenarios for tax collection performance this and next year. In our sensitivity analyses in the models in this report, we have shown changes among several parameters and hypotheses to calculate revenue forecasts ahead. With the cooling of the global and local economy, and as the effects of the recent monetary tightening start to materialize in the real economy, we expect a deceleration that could affect fiscal revenue.

We do see part of the revenue gains as structural, although it is still difficult to specify the exact amounts, as there is uncertainty in the various models for estimating revenue. However, we have to consider the uncertainty related to the effects of the recently approved tax breaks on the final numbers, as well as several one-offs that helped lead to the recent positive fiscal results. In any case, we see part of the revenue jump as due to temporary factors such as accelerating inflation and commodity prices. Thus, the future still holds uncertainties, although we remain positive in the short term, and we expect that the disinflation process and the deceleration in economic activity could both reduce future revenue.

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