



GREATER  
REWARDS

DEEPER  
INSIGHTS

FERI  
Country Dossier  
Economic Forecast

Brazil

April 2024



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## Executive Summary

In 2020, the Covid-19 pandemic and the restrictions imposed by the government resulted in a slump of GDP by 3.3%. However, two fiscal stimuli packages, introducing cash handouts and general support for the struggling economy have allowed the Brazilian economy to recover by 4.8% in 2021, although the massive hike in interest rates by the central bank due to rising inflation rates increasingly strained private consumption and investment growth. All in all, GDP growth moderated to about 3% in 2022 and 2023. In 2024, however, GDP growth will likely be even weaker, as still high central bank rates will weaken investment and private consumption growth.

As for consumer prices, the combination of supply bottlenecks, the war in Ukraine and the emergence of the Omicron variant has increased the inflation rate. 2021 saw consumer prices rise by 8.3% and in 2022, inflation even rose to 9.3%. The Brazilian central bank has started to respond to the high inflation already in March 2021, raising the Selic interest rate initially by 75 bps to 2.75%. Since then, the Selic rate has been raised to finally 13.75% in August 2022. Since inflation peaked at 12.2% in April 2022 and moderated to 4.6% in February 2024, the central bank has started to lower interest rates in August 2023 most recently to 11.25% in February 2024. Although inflation had an overall negative effect on the economy, it helped to push the high debt to GDP ratio lower in 2021 and 2022. Regarding the labor market, the unemployment rate has started a falling trend after having risen up to 14.9% in December 2020. Due to the weak economic outlook for 2024, however, the unemployment rate will likely stop its falling trend soon.

Politically, the former far-right president Jair Bolsonaro has been heavily criticized, and lost popularity due to his skepticism towards the pandemic as well as his dismissive opinion about sovereign institutions. Following the successfully approved pension reform by the government in October 2019, which helped to combat the massive deficit in the pension system by raising the retirement age, the political stability in the country has been very uncertain, with continuing street protests and rising tensions between the executive authorities and the judiciary. After returning to Brazilian politics in 2022, former president Lula da Silva, who was imprisoned in 2018 for passive corruption and money laundering, won the general elections. The President's Palace and other political buildings were stormed by Bolsonaro's supporters on the 10th of January 2023, underscoring the extreme degree of polarization brought on by the elections. With Lula's return, Brazilian politics are in flux with plans to increase government spending and reduce deforestation in the Amazon region. Another project is planned, namely the realization of a joint currency, the "sur", for Brazil and Argentina.

As an emerging industrialized country, the Brazilian economy is the eighth biggest economy in the world and remains heavily oriented towards domestic demand, with trade playing a minor role. Demand is driven largely by private consumption (aided by climbing wages) and by fixed investment, with industrial investments playing an essential role.

Given its orientation towards domestic demand, the economy was not as heavily affected by the global recession in 2009 as other countries were: Although GDP did decline slightly, the recession was moderate. In the wake of globally weaker demand for raw materials - Brazil's main export good, and the ongoing crisis in Argentina - one of Brazil's most important trading partners, exports have been suffering in the last few years.

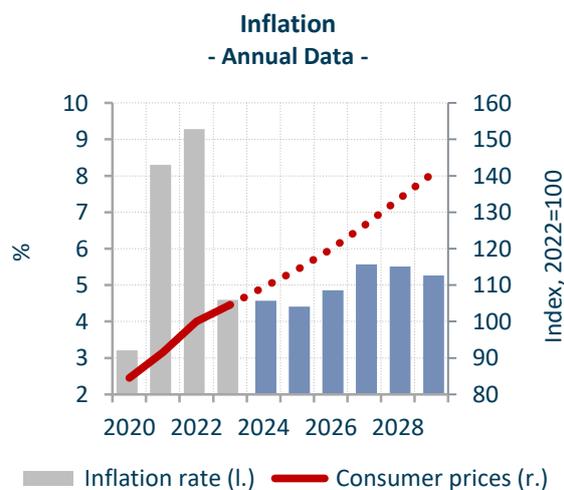
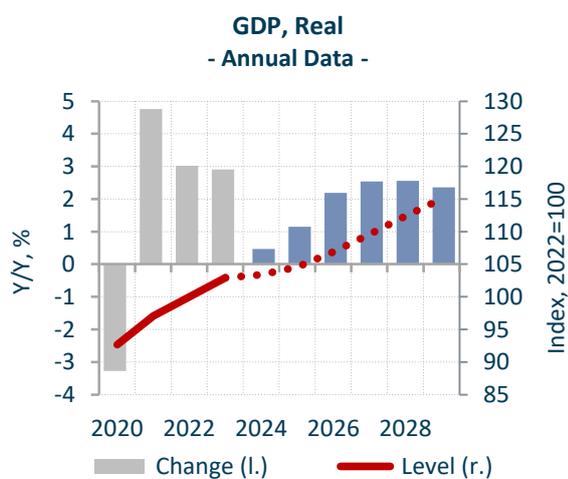
Agricultural products and foodstuffs still dominate exports, while imports are largely chemicals, oil, industrial goods and advanced consumer goods. The importance of the primary sector for the economy will not change significantly during the forecast period. While the secondary sector is expected to decline in terms of generated GDP. This does not reflect an absolute decline of this sector, but rather the emergence of a robust and strong Brazilian financial sector, driven by the financial demands of the emerging Brazilian middle class.

After decades of failed policies and errors that led to several waves of severe inflation, economic policy has, along with a more efficient monetary policy, aided in gaining some more control over inflationary pressures overall. While Brazilian inflation still posts higher rates than in industrialized countries, it seems to remain at clearly more manageable levels than in the past.

The increasing weather phenomenon EL Nino as a result of climate change is causing more and more droughts. This puts a strain on both the agricultural and energy sector, where hydroelectric power plants are among the most important energy suppliers. A change in the energy mix could eliminate the risk of an energy supply problem in the future.

## Executive Summary

| Summary<br>Economic Forecast            |        |        |        |        |
|---|--------|--------|--------|--------|
|   | 2023   | 2024   | 2025   | 2026   |
| GDP Per Cap., Nominal (1000 US\$ (PPP)) | 18.865 | 19.254 | 19.879 | 20.890 |
| GDP, Real (% Change)                    | 2.9    | 0.5    | 1.2    | 2.2    |
| Consumer Prices (% Change)              | 4.6    | 4.6    | 4.4    | 4.9    |
| Unemployment Rate (%)                   | 8.0    | 7.5    | 7.9    | 8.4    |
| Current Account Balance (% of GDP)      | -1.3   | -1.0   | -1.0   | 0.1    |
| Industrial Production (% Change)        | 0.2    | 1.9    | 2.5    | 2.3    |
| Public Balance (% of GDP)               | -7.2   | -6.6   | -5.8   | -5.3   |
| Gross Public Debt (% of GDP)            | 86.9   | 90.0   | 93.0   | 94.0   |
| Central Bank Rate (%)                   | 13.2   | 10.0   | 7.9    | 6.8    |
| Government Bond Yield, 10 Y. (%)        | 11.9   | 10.2   | 10.2   | 10.0   |
| BRL / €                                 | 5.40   | 5.35   | 5.74   | 6.47   |
| BRL / US\$                              | 5.00   | 5.06   | 5.19   | 5.27   |



## Country Profile



## Profile Data\*

|   |                               |   |             |
|---|-------------------------------|---|-------------|
| <b>Constitution</b>                         |                               | <b>Life Expectancy, Years</b>   | 72.8        |
| <b>Official Name</b>                        | Federative Republic of Brazil | <b>Life Expectancy, Male (Years)</b>  | 69.6        |
| <b>Capital</b>                              | Brasília                      | <b>Life Expectancy, Female (Years)</b>  | 76.009      |
| <b>Form of State</b>                        | Federal Republic              | <b>Labor Market &amp; Income</b>  |             |
| <b>Currency</b>                             |                               | <b>Labor Force</b>  | 108 750 811 |
| <b>Currency</b>                             | Real (BRL)                    | <b>Labor Force (% of Population)</b>  | 50.3        |
| <b>Population &amp; Demography</b>          |                               | <b>Female Labor Force (% of Total Labor Force)</b>  | 43.5        |
| <b>Population (Mn.)</b>                     | 216.4                         | <b>Foreign Labor Force (% of Total Labor Force)</b>   | 0.5         |
| <b>Annual Population Growth (%)</b>         | 0.5                           | <b>Employment in the Public Sector (% of Employment)</b>  | 17.1        |
| <b>Net Migration</b>                        | 6 425                         | <b>Part-time Employment (% of Employment)</b>   | 14.2        |
| <b>Area (sq. km)</b>                        | 8 515 770                     | <b>Long-term Unemployment (% of Labor Force)</b>  | 2.6         |
| <b>Population Density (People/sq. km)</b>   | 25.6                          | <b>Youth Unemployment (% of Youth Labor Force under the Age of 25)</b>                              | 28.3        |
| <b>Urban Population (% of Total)</b>        | 87.6                          | <b>Youth Exclusion (Share of Youth Population [15-24] not in Education, Employment or Training)</b> | 23.4        |
| <b>Population over 65 (% of Population)</b> | 9.9                           | <b>Total Hourly Compensation in Manufacturing (USD)</b>   | 2.75        |
| <b>Fertility Rate (Births per Woman)</b>    | 1.6                           | <b>Percentage of Household Incomes going to Highest (Richest) 10% of Households</b>                 | 39.4        |
| <b>Birth Rate (per 1,000 People)</b>        | 12.9                          |   |             |
| <b>Death Rate (per 1,000 People)</b>        | 8.3                           |   |             |

\*) Sources: FERI Databases; World Bank Data; IMD

## Country Profile

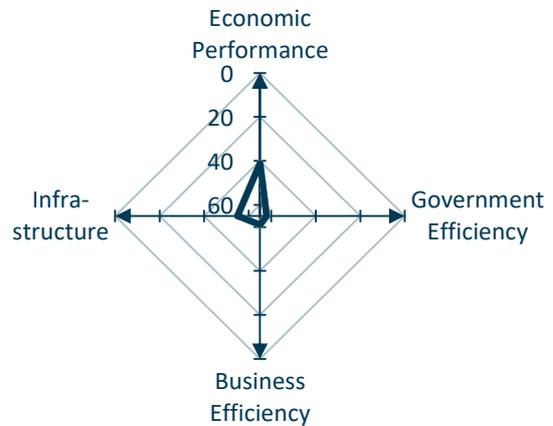
| Socioeconomic Data*  |            |
|--|------------|
| <b>Energy &amp; Environment</b>  |            |
| Total Final Energy Consumption per Capita (MTOE)   | 1.1        |
| Energy Consumed (MTOE) for each 1,000 USD of GDP   | 151.1      |
| Total Indigenous Energy Production (%)   | 105.1      |
| Electric Power Consumption (kWh per Capita)  | 2 611      |
| Electric Power Transmission and Distribution Losses (% of Output)                        | 15.8       |
| Share of Renewables (%)  | 44.2       |
| CO2 Emissions from Fuel Combustion (m3 per 1 Mio USD of GDP)                             | 266.2      |
| Mean Population Exposure to PM2.5 (Micrograms per m3)                                    | 12.1       |
| <b>Prices &amp; Taxes</b>  |            |
| Cost-of-living index (New York =100); Price of Basket of Goods and Services in Main City | 59.7       |
| Monthly 3-Room Apartment Rent in Major Cities (USD)                                      | 1 235      |
| Collected Personal Income Taxes on Profits, Income and Capital Gains (% of GDP)          | 2.9        |
| Collected Corporate Income Taxes on Profits, Income and Capital Gains (% of GDP)         | 3.6        |
| <b>Business</b>  |            |
| Number of Start-up Procedures to Register a Business                                     | 11.0       |
| Cost of Business Start-up Procedures (% of GNI per Capita)                               | 4.2        |
| Days Required to Start a Business  | 16.6       |
| Ease of Doing Business Index (1 = Most Business-friendly Regulations)                    | 124        |
| Hours Required to Prepare and Pay Taxes  | 1501       |
| Days Required to Enforce a Contract  | 801        |
| Years to Resolve Insolvency  | 4.0        |
| <b>Health</b>  |            |
| Total Health Expenditure per Capita (USD)  | 719        |
| Hospital Beds (per 1,000 People)   | 2.1        |
| Inhabitants per Physician  | 418.0      |
| Under 5 Mortality Rate per 1,000 Live Births   | 14.7       |
| Healthy Life Expectancy (Years)  | 63.3       |
| <b>Infrastructure &amp; Communication</b>  |            |
| Arable Land (% of Land Area)   | 7.0        |
| Kilometer Roads per Square km Land Area  | 0.20       |
| Investment in Telecommunications (% of GDP)  | 0.32       |
| Internet Users per 1,000 Inhabitants   | 760        |
| Internet Average Bandwidth Speed (MBit/s)  | 78.1       |
| <b>International Trade</b>   |            |
| Exports to top 5 Countries (% of Exports)  | 52.5       |
| Top 5 Products (% of Exports)  | 58.4       |
| High-tech Exports (% of Manufactured Goods)  | 9.0        |
| Exports of Commercial Services (% of GDP)  | 2.0        |
| Weighted Mean Import Tariff (%)  | 8.4        |
| Container Port Traffic (TEU: 20 Foot Equivalent Units)                                   | 11 801 530 |
| <b>Education &amp; Innovation</b>  |            |
| Total Public Expenditure on Education per Capita (USD)                                   | 453        |
| Secondary School Enrollment (% of Age Group)   | 91.6       |
| University Degree (% of Population)  | 23.0       |
| PISA Assessment (Points)   | 400.0      |
| Patent Applications per 100,000 Inhabitants  | 3.2        |
| Full Time Researchers in R&D per 1,000 Inhabitants                                       | 1.0        |

\*) Source: World Bank Data, IMD

## Country Profile

### Competitiveness Ranking (IMD)

#### Overall Ranking



#### Economic Performance ↑ 41

*(Relative) Strengths*

|   |   |   |
|---|---|---|
| Direct investment flows inward (% of GDP) | ↑ | █ |
| Direct investment flows inward (\$bn)     | ↑ | █ |
| Employment - growth                       |   | █ |

*(Relative) Weaknesses*

|                                    |  |   |
|------------------------------------|--|---|
| GDP (PPP) per capita               |  | █ |
| Trade to GDP ratio                 |  | █ |
| Exports of commercial services (%) |  | █ |

*Strongest Improvement*

|   |   |   |
|---|---|---|
| Direct investment flows abroad (% of GDP) | ↑ | █ |
|---|---|---|

*Strongest Worsening*

|   |   |   |
|---|---|---|
| Gross fixed capital formation - real growth | ↓ | █ |
|---|---|---|

#### Government Efficiency 62

*(Relative) Strengths*

|                         |  |   |
|-------------------------|--|---|
| Exchange rate stability |  | █ |
| Ageing of population    |  | █ |
| Immigration laws        |  | █ |

*(Relative) Weaknesses*

|                   |  |   |
|-------------------|--|---|
| Labor regulations |  | █ |
| Creation of firms |  | █ |
| Cost of capital   |  | █ |

*Strongest Improvement*

|                         |   |   |
|-------------------------|---|---|
| Exchange rate stability | ↑ | █ |
|-------------------------|---|---|

*Strongest Worsening*

|                          |   |   |
|--------------------------|---|---|
| Unemployment legislation | ↓ | █ |
|--------------------------|---|---|

#### Business Efficiency ↓ 61

*(Relative) Strengths*

|                          |   |   |
|--------------------------|---|---|
| Labor force              |   | █ |
| Banking sector assets    | ↑ | █ |
| Initial Public Offerings |   | █ |

*(Relative) Weaknesses*

|                                   |   |   |
|-----------------------------------|---|---|
| Auditing and accounting practices | ↓ | █ |
| International experience          |   | █ |
| Corporate debt                    |   | █ |

*Strongest Improvement*

|                       |   |   |
|-----------------------|---|---|
| Banking sector assets | ↑ | █ |
|-----------------------|---|---|

*Strongest Worsening*

|                  |   |   |
|------------------|---|---|
| Corporate boards | ↓ | █ |
|------------------|---|---|

#### Infrastructure 55

*(Relative) Strengths*

|  |  |   |
|--|--|---|
| Dependency ratio                         |  | █ |
| Electricity costs for industrial clients |  | █ |
| Population under 15 years                |  | █ |

*(Relative) Weaknesses*

|                                 |  |   |
|---------------------------------|--|---|
| University education            |  | █ |
| Primary and secondary education |  | █ |
| Management education            |  | █ |

*Strongest Improvement*

|                       |   |   |
|-----------------------|---|---|
| Energy infrastructure | ↑ | █ |
|-----------------------|---|---|

*Strongest Worsening*

|                     |   |   |
|---------------------|---|---|
| Population - growth | ↓ | █ |
|---------------------|---|---|

Ranks: █ 1-6 █ 7-21 █ 22-42 █ 43-57 █ 58-64

Shown are current ranks unless otherwise stated. The ranking is from 1 to 64. The arrows indicate an improvement (up arrow) or worsening (down arrow) of at least 5 ranks compared to the previous year.

Source: The IMD World Competitiveness Center, Switzerland ([www.imd.org/wcc](http://www.imd.org/wcc))



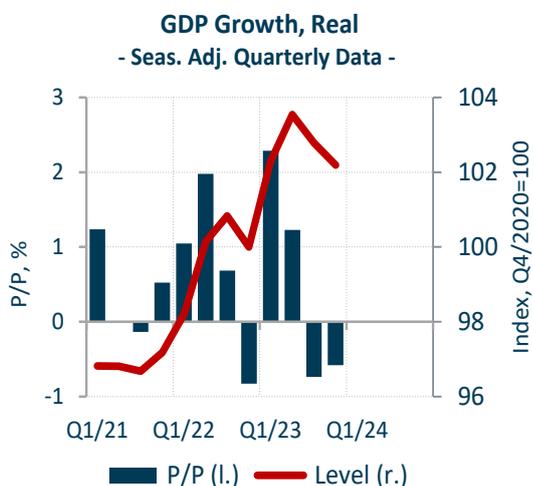
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## Economic Forecast

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**Demand**

Mainly due to strong government consumption, GDP growth will be positive in 2024. In 2025, GDP growth is expected to improve due to stronger private consumption. The overall economic growth rate in 2025 will be stronger than the historical average.



|                               | Brazil | Emerging Countries |
|-------------------------------|--------|--------------------|
| Previous 10 years (2013-2022) | 0.5    | 4.1                |
| 2023                          | 2.9    | 4.4                |
| 2024                          | 0.5    | 3.4                |
| 2025                          | 1.2    | 3.8                |
| Next 10 years (2026-2035)     | 2.2    | 3.6                |

GDP growth in Brazil will be positive in 2024. This year, government consumption and net exports will be the main supportive drivers of the economic development. In 2025, GDP growth is expected to improve. Now, stronger growth contributions from private consumption and fixed investment will be the driving forces of higher GDP growth. All in all, GDP growth in 2025 will be positive and much weaker than economic growth in the Emerging Countries.

Brazil's GDP growth has been positive in the 10 years up to 2022. It has been weaker than the economic growth rate in the Emerging Countries. The same relationship will hold in the next 10 years. While the Emerging Countries will grow 3.6 percent per year, Brazil's economy is expected to grow by 2.2 percent per year in the next decade. Brazil's growth rate in the next 10 years will be stronger than historical economic growth up to 2022.

## Demand

| Growth of GDP Components<br>- Annual Data in % - |           |      |      |      |           |
|--|-----------|------|------|------|-----------|
|  | 2013-2022 | 2023 | 2024 | 2025 | 2026-2035 |
| GDP Growth                                       | 0.5       | 2.9  | 0.5  | 1.2  | 2.2       |
| Private Consumption                              | 0.8       | 3.1  | -0.3 | 1.0  | 2.4       |
| Government Consumption                           | 0.3       | 1.7  | 2.1  | 1.5  | 1.5       |
| Fixed Investment                                 | -0.9      | -3.0 | -1.9 | 0.5  | 2.2       |
| Exports  | 2.2       | 9.1  | 2.6  | 0.9  | 3.0       |
| Imports  | -0.3      | -1.2 | -0.1 | 0.7  | 3.6       |

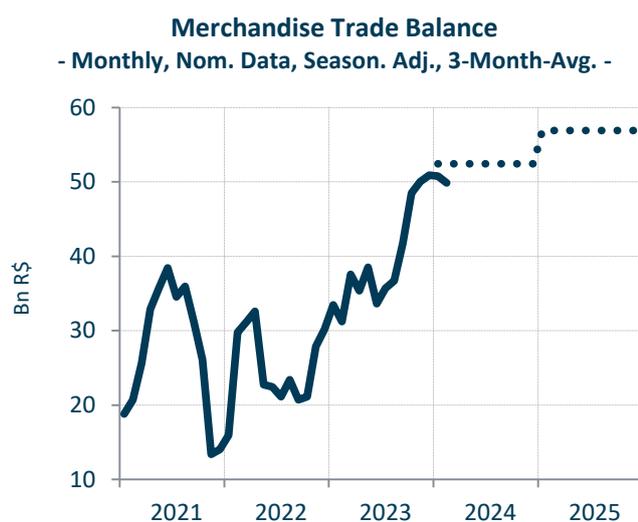
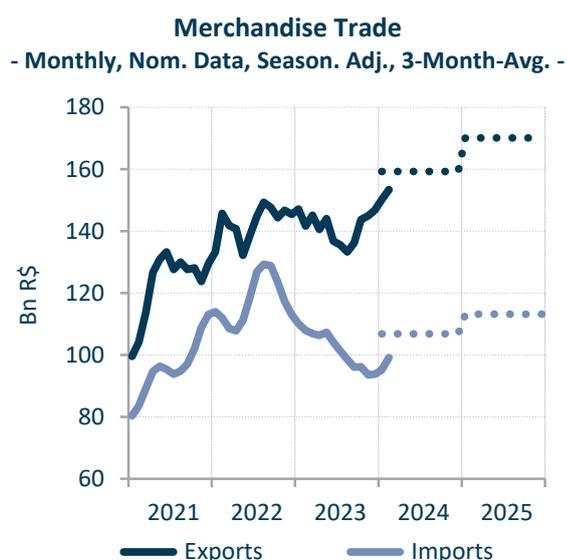
| Contribution to GDP Growth (Y/Y) by Components<br>- In Percentage Points - |           |      |      |      |           |
|--|-----------|------|------|------|-----------|
|  | 2013-2022 | 2023 | 2024 | 2025 | 2026-2035 |
| GDP Growth   | 0.5       | 2.9  | 0.5  | 1.2  | 2.2       |
| Private Consumption  | 0.5       | 2.0  | -0.2 | 0.6  | 1.5       |
| Government Consumption   | 0.1       | 0.3  | 0.4  | 0.3  | 0.3       |
| Fixed Investment   | -0.2      | -0.5 | -0.3 | 0.1  | 0.4       |
| Net Exports  | 0.3       | 1.3  | 0.4  | 0.1  | 0.0       |
| Chg. in Inv.   | -0.2      | -0.1 | 0.2  | 0.1  | 0.1       |

In 2024, GDP growth will be positive. Economic growth is mainly driven by strong government consumption and net exports. GDP growth in 2025 will improve compared to the previous year due to stronger growth contributions especially from private consumption and fixed investment. In the long-term perspective economic growth in Brazil will be higher than in the decade up to 2022. Stronger private consumption growth will be the main driver of higher GDP growth in the next 10 years up to 2035.

## Trade

The level of merchandise exports has been higher than that of imports in recent months. This trend is expected to apply for 2024 as a whole. Net exports, which include not only merchandise goods, but also services, are expected to be positive in 2024.

The current account balance that includes also net income from abroad and net current transfers, is expected to be negative in 2024. The current account deficit implies that Brazil is a net borrower from the rest of the world.



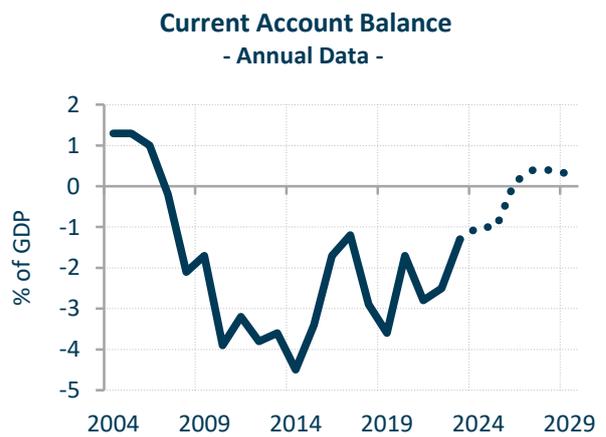
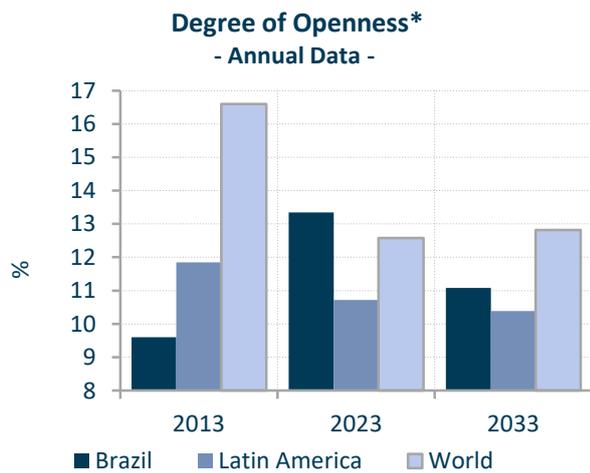
| Foreign Trade Forecast       |           |       |       |       |           |
|------------------------------|-----------|-------|-------|-------|-----------|
| - Annual Data -              |           |       |       |       |           |
|                              | 2013-2022 | 2023  | 2024  | 2025  | 2026-2035 |
| Merchandise Exports (Bn R\$) | 899       | 1 695 | 1 912 | 2 042 | 2 692     |
| Merchandise Imports (Bn R\$) | 744       | 1 203 | 1 282 | 1 359 | 1 967     |
| Merch. Trade Bal.* (Bn R\$)  | 155.2     | 491.8 | 629.3 | 682.9 | 724.7     |
| Exports, real (G+S*), % Y/Y  | 2.2       | 9.1   | 2.6   | 0.9   | 3.0       |
| Imports, real (G+S*), % Y/Y  | -0.3      | -1.2  | -0.1  | 0.7   | 3.6       |
| CAB* (Bn. US\$)              | -56.4     | -28.6 | -23.0 | -23.1 | -2.2      |
| CAB* (% of GDP)              | -2.8      | -1.3  | -1.0  | -1.0  | 0.0       |

\* (G+S) = Goods + Services  
Merch. Trade Bal. = Merchandise Trade Balance  
CAB = Current Account Balance

Trade

| Main Trading Partners<br>- Share in Total Trade in % - |      |           |      |
|--|------|-----------|------|
| Exports  | 2023 | Imports   | 2023 |
| China  | 30.7 | China     | 22.1 |
| USA  | 11.0 | USA       | 16.0 |
| Argentina  | 4.9  | Germany   | 5.5  |
| Netherlands  | 3.6  | Argentina | 5.0  |
| Mexico   | 2.5  | Russia    | 4.2  |

| Items of Trade<br>- Share in Total Trade of Goods in % - |      |              |      |
|--|------|--------------|------|
| Exports  | 2023 | Imports      | 2023 |
| Food   | 24.5 | Chemicals    | 20.0 |
| Oil & Gas  | 16.8 | Other Mach.  | 10.9 |
| Metal Ores   | 13.8 | Computers    | 10.3 |
| Basic Metals   | 9.6  | Petro. Prod. | 9.0  |
| Other Mach.  | 5.2  | Automotives  | 7.9  |

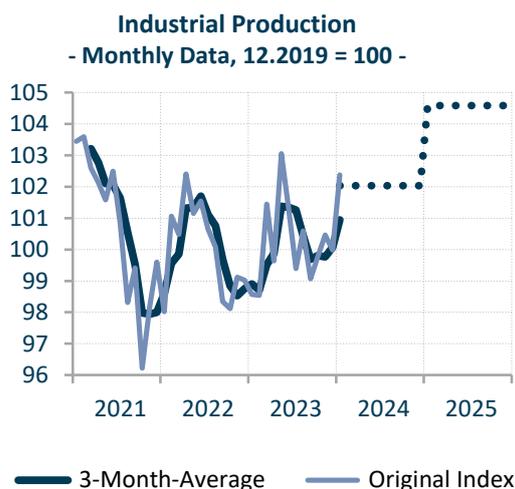


\* Degree of Openness =  $0.5 * (\text{Exports} + \text{Imports}) / \text{nominal GDP}$   
 The degree of openness measures the extent to which the country depends on trade with other countries. A level of 100% means that the trade volume equals the level of economic output.

## Supply

The primary sector, comprising mining & quarrying, agriculture, forestry and fishing, usually is of minor importance today. In Brazil, the sector is still large. Its importance is expected to rise slightly in the next decade. The industrial or secondary sector is of moderate importance in Brazil. It is expected to become less significant up to 2034. Finally, the tertiary sector in Brazil, comprising the service industry, is relatively very large. We forecast that it will lose in importance over the next 10 years.

All in all, the primary sector will likely show the highest growth rate and thus expand the most in the next decade.



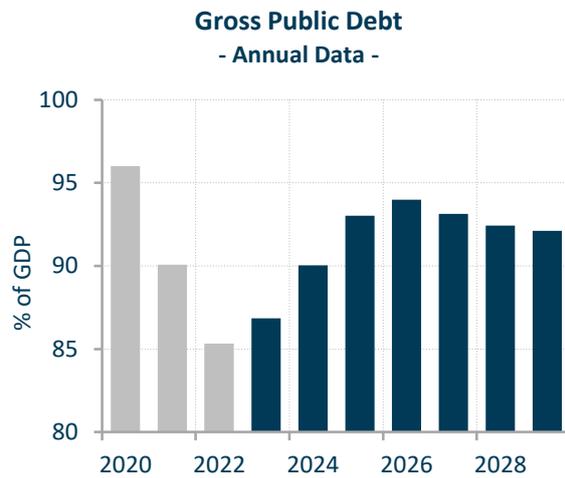
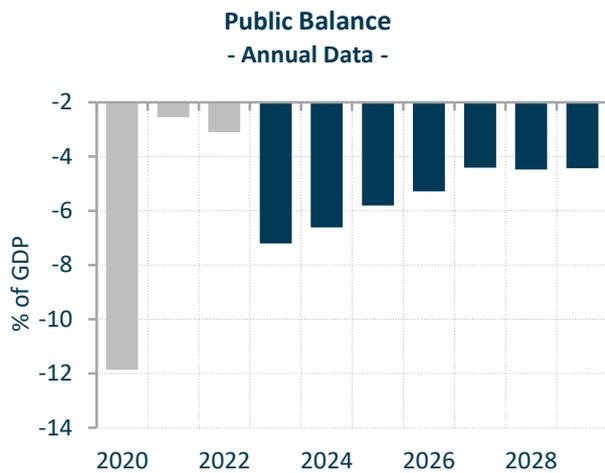
- Production has been rising in the last three months. We expect industrial production to be higher in 2024 compared to the previous year.

| GDP Composition, Real<br>- Share of GDP; Annual Data in % - |      |      |      | Growth by Sectors<br>- Annual Growth in % - |           |
|---|------|------|------|---|-----------|
|   | 2014 | 2024 | 2034 | 2013-2022                                   | 2026-2035 |
| Primary Sector  | 5.1  | 6.6  | 7.6  | 2.7   | 3.8       |
| Secondary Sector  | 13.5 | 11.3 | 10.5 | -1.4  | 1.4       |
| Tertiary Sector   | 81.5 | 82.1 | 81.8 | 0.5   | 2.2       |
| Business Rel. Svs.  | 16.1 | 17.7 | 18.1 | 1.5   | 2.5       |
| Personal Rel. Svs.  | 15.8 | 15.0 | 13.9 | 0.2   | 1.5       |
| Trade   | 12.6 | 11.5 | 11.1 | 0.0   | 1.9       |
| Other Services  | 36.9 | 37.9 | 38.8 | 0.8   | 2.6       |

Public Sector

In 2023, the level of public debt in percent of GDP was large. In the next three years, the debt ratio will be even higher. Brazil will have a high public deficit and strong nominal GDP growth.

Brazil will have a moderate public expenditure quota in 2024. A moderate public expenditure quota means that the government interferes moderately in the economy.



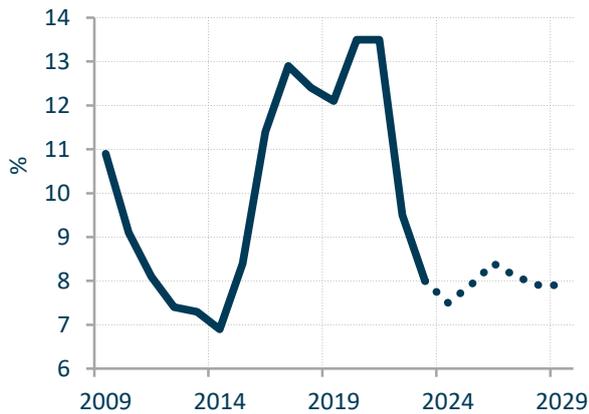
| Public Finance Forecast<br>- Annual Data - |      |      |      |
|--|------|------|------|
|  | 2014 | 2024 | 2034 |
| Public Expenditure / GDP (%)               | 44.2 | 47.7 | 41.9 |
| Interest Expend. / Receipts (%)            | 14.0 | 14.4 | 15.1 |
| Receipts (% Y/Y)                           | 5.4  | 8.7  | 7.7  |
| Expenditures (% Y/Y)                       | 12.5 | 7.0  | 7.6  |
| Primary Balance (% of GDP)                 | -5.7 | -0.7 | 1.5  |

### Labor Market & Income

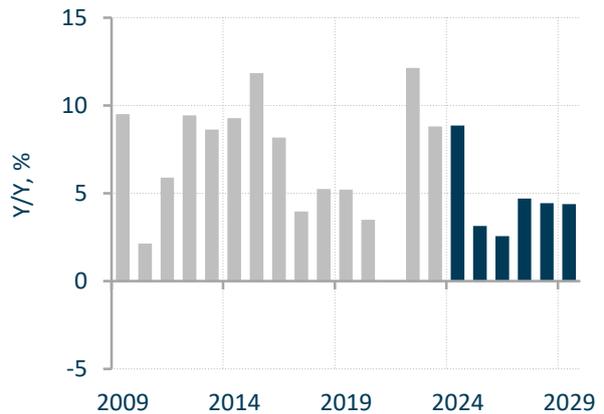
In 2023, the unemployment rate in Brazil was smaller than in the previous year. In 2024, the rate will temporarily tend lower because of positive employment growth.

Real wages grew at about the same rate as productivity between 2018 and 2023. In the next five years, real wages will grow weaker than productivity. Insofar, the competitiveness of the companies in Brazil will benefit.

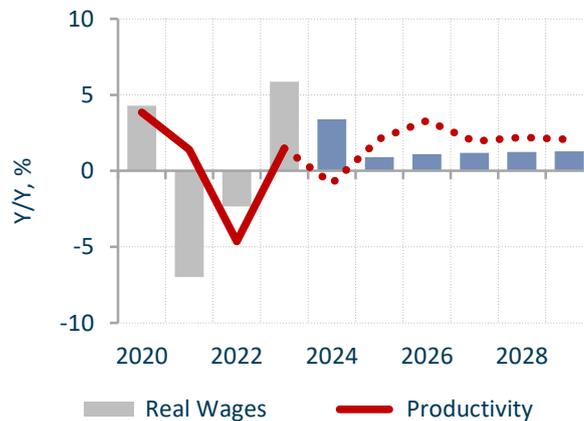
**Unemployment Rate**  
- Annual Data -



**Unit Labor Costs**  
- Annual Data -

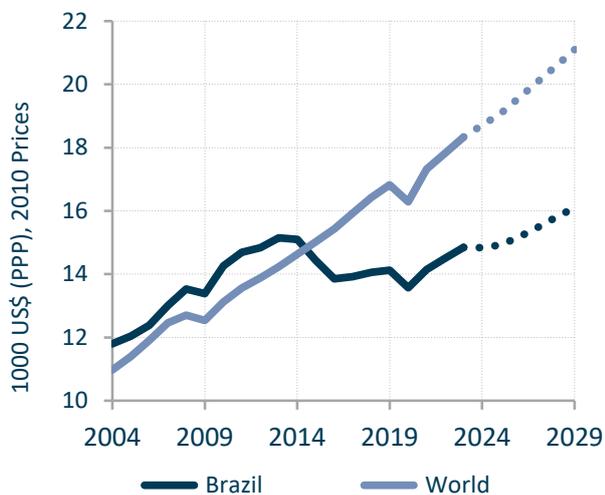


**Real Wages & Productivity**  
- Annual Data -



Labor Market & Income

**GDP per Capita (real)**  
- Annual Data -



- Brazil's real GDP per capita is fairly lower than the world average. The gap is expected to widen in the next five years.

**Gini Coefficient**  
- Annual Data in % -

| Gini Coefficient<br>- Annual Data in % - |               |
|--|---------------|
|  | Current Value |
| Gini Coefficient*                        | 53            |

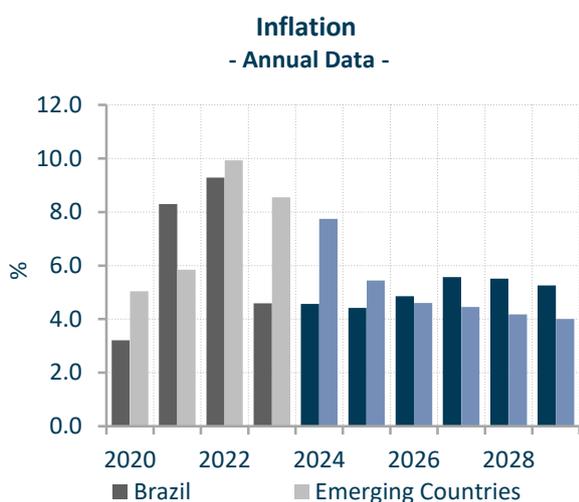
- The Gini coefficient in Brazil shows a high inequality of income distribution in the country.

**\*Gini Coefficient:**

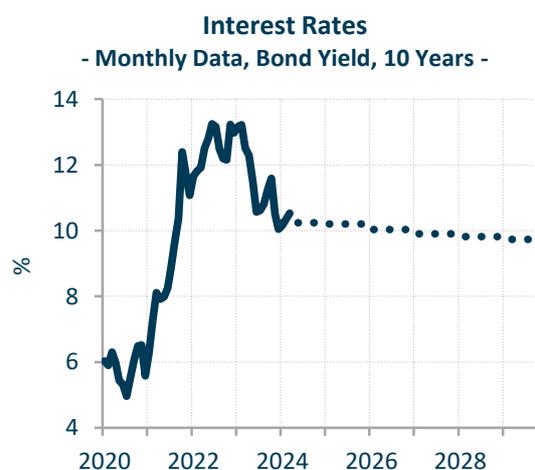
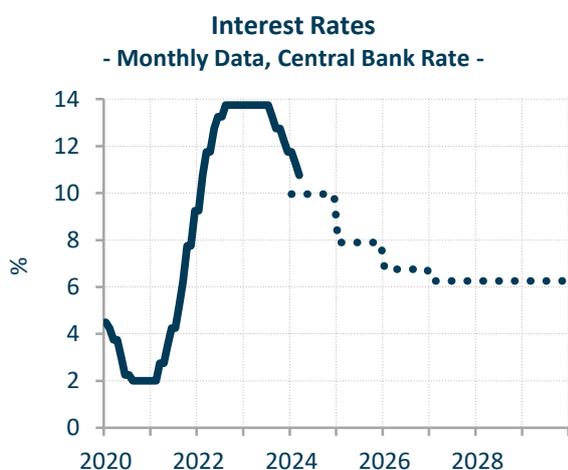
The Gini coefficient is a measure of statistical dispersion reflecting the income distribution of the residents within a country. A Gini coefficient of 0% means perfect income equality in a country, where all residents have the same income, whereas a Gini coefficient of 100% expresses maximal income inequality, where only one resident has all the income.

### Prices, Interest Rates & Exchange Rates

Inflation has been moderate in Brazil in 2023. In 2024 and 2025, the inflation rate is expected to remain about unchanged. While the inflation rate in Brazil will fall by 0.2 percentage points from 2023 to 2025, the inflation rate in the Emerging Countries is expected to decrease by 3.1 percentage points.



| Prices                 |                 |                 |
|------------------------|-----------------|-----------------|
| - Annual Growth in % - |                 |                 |
|                        | Consumer Prices | Producer Prices |
| 2023                   | 4.6             | -6.3            |
| 2024                   | 4.6             | 1.7             |
| 2025                   | 4.4             | 5.6             |
| 2026                   | 4.9             | 4.7             |
| 2027                   | 5.6             | 4.8             |



| Exchange Rate Forecast                               |      |      |      |        |
|--|------|------|------|--------|
| - Annual Data -                                      |      |      |      |        |
|  | 2022 | 2023 | 2024 | 2025   |
| Local Currency / US\$                                | 5.2  | 5.0  | 5.1  | weaker |
| Local Currency / Euro                                | 5.4  | 5.4  | 5.4  | weaker |
| Trade Weighted Exchange Rate (real) Appreciation Y/Y | 12.1 | 4.8  | 1.9  | weaker |

## Forecast Tables

| Demand: GDP and Components                      |      |       |       |       |       |       |       |       |       |              |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| In Bn R\$ unless otherwise specified            |      |       |       |       |       |       |       |       |       |              |
| - Annual Data -                                 |      |       |       |       |       |       |       |       |       |              |
|   | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033         |
| <b>Gross Domestic Product (GDP)</b>             |      |       |       |       |       |       |       |       |       |              |
| <b>GDP, Nominal</b>                             | 9012 | 10080 | 10856 | 11541 | 12329 | 13355 | 14608 | 15973 | 17393 | <b>23594</b> |
| Y/Y % Change                                    | 18.4 | 11.8  | 7.7   | 6.3   | 6.8   | 8.3   | 9.4   | 9.3   | 8.9   | <b>7.7</b>   |
| <b>GDP, Real (2022=100)</b>                     | 97.1 | 100.0 | 102.9 | 103.4 | 104.6 | 106.9 | 109.6 | 112.4 | 115.0 | <b>125.0</b> |
| Y/Y % Change                                    | 4.8  | 3.0   | 2.9   | 0.5   | 1.2   | 2.2   | 2.5   | 2.6   | 2.4   | <b>2.1</b>   |
| <b>GDP, Nominal (Bn US\$ (PPP))</b>             | 3472 | 3829  | 4083  | 4190  | 4350  | 4594  | 4905  | 5218  | 5529  | <b>6694</b>  |
| Y/Y % Change                                    | 9.6  | 10.3  | 6.6   | 2.6   | 3.8   | 5.6   | 6.8   | 6.4   | 6.0   | <b>4.4</b>   |
| <b>GDP Per Cap., Nominal (1000 US\$ (PPP))</b>  | 16.2 | 17.8  | 18.9  | 19.3  | 19.9  | 20.9  | 22.2  | 23.5  | 24.8  | <b>29.6</b>  |
| Y/Y % Change                                    | 9.0  | 9.8   | 6.1   | 2.1   | 3.2   | 5.1   | 6.2   | 5.9   | 5.5   | <b>4.0</b>   |
| <b>GDP Per Cap., Real (1000 US\$ (PPP))</b>     | 14.1 | 14.5  | 14.8  | 14.8  | 14.9  | 15.2  | 15.5  | 15.8  | 16.1  | <b>17.2</b>  |
| Y/Y % Change                                    | 4.2  | 2.5   | 2.4   | -0.1  | 0.6   | 1.7   | 2.0   | 2.1   | 1.9   | <b>1.7</b>   |
| <b>Components of GDP</b>                        |      |       |       |       |       |       |       |       |       |              |
| <b>Consumption</b>                              |      |       |       |       |       |       |       |       |       |              |
| <b>Private Consumption, Real</b>                | 2631 | 2740  | 2825  | 2818  | 2845  | 2907  | 2977  | 3053  | 3126  | <b>3431</b>  |
| Y/Y % Change                                    | 3.0  | 4.1   | 3.1   | -0.3  | 1.0   | 2.2   | 2.4   | 2.6   | 2.4   | <b>2.4</b>   |
| <b>Government Consumption, Real</b>             | 780  | 797   | 810   | 827   | 840   | 852   | 865   | 878   | 891   | <b>946</b>   |
| Y/Y % Change                                    | 4.2  | 2.1   | 1.7   | 2.1   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | <b>1.5</b>   |
| <b>Investment</b>                               |      |       |       |       |       |       |       |       |       |              |
| <b>Fixed Investment, Real</b>                   | 779  | 788   | 764   | 750   | 753   | 769   | 785   | 806   | 826   | <b>899</b>   |
| Y/Y % Change                                    | 12.9 | 1.1   | -3.0  | -1.9  | 0.5   | 2.1   | 2.0   | 2.6   | 2.5   | <b>2.1</b>   |
| <b>Construction, Real</b>                       | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| <b>Construction, Resid., Real</b>               | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| <b>Machinery &amp; Equipment, Real</b>          | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| <b>Other, Real</b>                              | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -            |
| <b>Change in Stocks</b>                         | -13  | -46   | -51   | -42   | -36   | -32   | -19   | -11   | -6    | <b>0</b>     |
| <b>Trade</b>                                    |      |       |       |       |       |       |       |       |       |              |
| <b>Net Exports (Goods &amp; Services), Real</b> | 30   | 55    | 111   | 127   | 130   | 135   | 141   | 145   | 148   | <b>142</b>   |
| <b>Exports (Goods &amp; Services), Real</b>     | 522  | 552   | 603   | 618   | 624   | 642   | 664   | 689   | 713   | <b>793</b>   |
| Y/Y % Change                                    | 4.4  | 5.7   | 9.1   | 2.6   | 0.9   | 2.9   | 3.5   | 3.8   | 3.4   | <b>2.7</b>   |
| <b>Imports (Goods &amp; Services), Real</b>     | 493  | 497   | 491   | 491   | 494   | 507   | 523   | 544   | 565   | <b>651</b>   |
| Y/Y % Change                                    | 13.8 | 1.0   | -1.2  | -0.1  | 0.7   | 2.6   | 3.2   | 4.0   | 3.8   | <b>3.7</b>   |

## Forecast Tables

| Retail Sales                           |      |       |       |       |       |       |       |       |       |       |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| In Bn R\$ unless otherwise specified   |      |       |       |       |       |       |       |       |       |       |
| - Annual Data -                        |      |       |       |       |       |       |       |       |       |       |
|  | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033  |
| <b>Retail Sector</b>                   |      |       |       |       |       |       |       |       |       |       |
| <b>Retail Sales, Value (2022=100)</b>  | 87.6 | 100.0 | 105.0 | 108.4 | 116.6 | 125.5 | 134.9 | 144.6 | 154.6 | 199.1 |
| Y/Y % Change                           | 14.5 | 14.2  | 5.0   | 3.2   | 7.6   | 7.6   | 7.4   | 7.2   | 6.9   | 6.5   |
| <b>Retail Sales, Volume (2022=100)</b> | 99.1 | 100.0 | 102.3 | 103.1 | 105.6 | 107.9 | 110.3 | 112.9 | 115.4 | 126.1 |
| Y/Y % Change                           | 1.9  | 1.0   | 2.3   | 0.8   | 2.4   | 2.2   | 2.2   | 2.3   | 2.2   | 2.3   |
| <b>Retail Sales, Price (2022=100)</b>  | 88.4 | 100.0 | 102.6 | 105.1 | 110.4 | 116.3 | 122.3 | 128.1 | 134.0 | 157.9 |
| Y/Y % Change                           | 12.3 | 13.1  | 2.6   | 2.4   | 5.1   | 5.3   | 5.1   | 4.8   | 4.5   | 4.2   |

| Trade   |        |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| In Bn R\$ unless otherwise specified            |        |        |        |        |        |        |        |        |        |        |
| - Annual Data -                                 |        |        |        |        |        |        |        |        |        |        |
|   | 2021   | 2022   | 2023   | 2024   | 2025   | 2026   | 2027   | 2028   | 2029   | 2033   |
| <b>Balance of Payments</b>                      |        |        |        |        |        |        |        |        |        |        |
| <b>Current Account Balance</b>                  | -254.9 | -252.4 | -143.9 | -116.3 | -120.2 | 14.2   | 60.8   | 65.7   | 57.3   | -76.2  |
| % of GDP  | -2.8   | -2.5   | -1.3   | -1.0   | -1.0   | 0.1    | 0.4    | 0.4    | 0.3    | -0.3   |
| Current Account Balance (Bn US\$)               | -46.4  | -48.3  | -28.6  | -23.0  | -23.1  | 2.7    | 11.4   | 12.2   | 10.5   | -13.3  |
| <b>Trade Balance (Current Account), Nominal</b> | 196.1  | 228.1  | 402.5  | 510.1  | 599.9  | 738.5  | 784.9  | 791.9  | 786.1  | 669.2  |
| <b>Exports (Current Account)</b>                | 1532   | 1758   | 1720   | 1861   | 2011   | 2188   | 2310   | 2426   | 2534   | 2948   |
| Y/Y % Change                                    | 41.1   | 14.8   | -2.1   | 8.2    | 8.0    | 8.8    | 5.6    | 5.0    | 4.5    | 4.4    |
| <b>Imports (Current Account)</b>                | 1336   | 1530   | 1318   | 1351   | 1411   | 1449   | 1525   | 1634   | 1748   | 2279   |
| Y/Y % Change                                    | 45.3   | 14.5   | -13.9  | 2.5    | 4.4    | 2.7    | 5.2    | 7.2    | 7.0    | 7.2    |
| <b>Invisibles Balance</b>                       | -446.2 | -477.4 | -545.1 | -625.7 | -719.9 | -724.3 | -724.1 | -726.2 | -728.8 | -745.4 |
| <b>Foreign Trade (Merchandise)</b>              |        |        |        |        |        |        |        |        |        |        |
| <b>Trade Balance, Nominal</b>                   | 327.8  | 313.6  | 491.8  | 629.3  | 682.9  | 764.8  | 784.9  | 791.9  | 786.1  | 669.2  |
| <b>Exports, Free On Board (FOB)</b>             | 1512   | 1721   | 1695   | 1912   | 2042   | 2198   | 2310   | 2426   | 2534   | 2948   |
| Y/Y % Change                                    | 39.6   | 13.8   | -1.5   | 12.8   | 6.8    | 7.7    | 5.1    | 5.0    | 4.5    | 4.4    |
| <b>Imports, fob</b>                             | 1184   | 1408   | 1203   | 1282   | 1359   | 1434   | 1525   | 1634   | 1748   | 2279   |
| Y/Y % Change                                    | 45.9   | 18.9   | -14.5  | 6.6    | 6.0    | 5.5    | 6.4    | 7.2    | 7.0    | 7.2    |
| <b>Foreign Reserves</b>                         |        |        |        |        |        |        |        |        |        |        |
| <b>Foreign Res., Excl. Gold (Bn US\$)</b>       | 354.6  | 317.1  | 346.4  | 349.7  | 354.3  | 385.7  | 427.6  | 472.8  | 519.1  | 674.8  |
| Y/Y % Change                                    | 0.9    | -10.6  | 9.2    | 1.0    | 1.3    | 8.9    | 10.9   | 10.6   | 9.8    | 5.2    |

## Forecast Tables

| <b>Supply</b>                                     |       |       |      |       |       |       |       |       |       |              |
|---|-------|-------|------|-------|-------|-------|-------|-------|-------|--------------|
| In Bn R\$ unless otherwise specified              |       |       |      |       |       |       |       |       |       |              |
| - Annual Data -                                   |       |       |      |       |       |       |       |       |       |              |
|   | 2021  | 2022  | 2023 | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033         |
| <b>Production</b>                                 |       |       |      |       |       |       |       |       |       |              |
| <b>GDP, Real</b>                                  | 4207  | 4334  | 4460 | 4481  | 4532  | 4632  | 4749  | 4870  | 4985  | <b>5418</b>  |
| Y/Y % Change                                      | 4.8   | 3.0   | 2.9  | 0.5   | 1.2   | 2.2   | 2.5   | 2.6   | 2.4   | <b>2.1</b>   |
| <b>Net Production (2022=100)</b>                  | 100.3 | 100.0 | 99.1 | 100.6 | 103.1 | 104.7 | 106.4 | 108.0 | 109.5 | <b>115.3</b> |
| Y/Y % Change                                      | 4.6   | -0.3  | -0.9 | 1.5   | 2.5   | 1.6   | 1.6   | 1.5   | 1.4   | <b>1.2</b>   |
| <b>Capacity Utilization (%)</b>                   | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Origin of GDP, Gross Value Added by Sector</b> |       |       |      |       |       |       |       |       |       |              |
| <b>Total GVA - Whole Economy</b>                  | 3563  | 3680  | 3789 | 3807  | 3852  | 3938  | 4039  | 4144  | 4244  | <b>4628</b>  |
| Y/Y % Change                                      | 4.7   | 3.3   | 3.0  | 0.5   | 1.2   | 2.2   | 2.6   | 2.6   | 2.4   | <b>2.2</b>   |
| <b>Primary Sector</b>                             |       |       |      |       |       |       |       |       |       |              |
| <b>Agricult., Forestry &amp; Fishing</b>          | 216   | 214   | 246  | 251   | 258   | 267   | 278   | 290   | 301   | <b>348</b>   |
| Y/Y % Change                                      | 0.0   | -1.1  | 15.1 | 2.0   | 2.7   | 3.8   | 4.1   | 4.1   | 3.9   | <b>3.7</b>   |
| <b>Mining &amp; Quarrying</b>                     | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Secondary Sector</b>                           |       |       |      |       |       |       |       |       |       |              |
| <b>Manufacturing</b>                              | 431   | 429   | 424  | 430   | 441   | 448   | 455   | 462   | 468   | <b>493</b>   |
| Y/Y % Change                                      | 3.8   | -0.5  | -1.3 | 1.5   | 2.5   | 1.6   | 1.6   | 1.5   | 1.4   | <b>1.2</b>   |
| <b>Electricity, Gas &amp; Water</b>               | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Construction</b>                               | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Tertiary Sector</b>                            |       |       |      |       |       |       |       |       |       |              |
| <b>Wholesale &amp; Retail Trade</b>               | 431   | 435   | 438  | 439   | 442   | 450   | 460   | 470   | 480   | <b>515</b>   |
| Y/Y % Change                                      | 4.5   | 0.9   | 0.6  | 0.1   | 0.8   | 1.8   | 2.2   | 2.2   | 2.0   | <b>1.7</b>   |
| <b>Hotels &amp; Restaurants</b>                   | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Transport &amp; Storage</b>                    | 136   | 147   | 151  | 151   | 152   | 154   | 157   | 161   | 164   | <b>174</b>   |
| Y/Y % Change                                      | 6.5   | 8.1   | 2.6  | 0.0   | 0.6   | 1.7   | 2.0   | 2.0   | 1.8   | <b>1.6</b>   |
| <b>Financial Intermediation</b>                   | 242   | 242   | 258  | 262   | 268   | 277   | 288   | 299   | 309   | <b>353</b>   |
| Y/Y % Change                                      | -0.7  | -0.2  | 6.6  | 1.7   | 2.4   | 3.4   | 3.8   | 3.8   | 3.6   | <b>3.3</b>   |
| <b>Real Est., Rent. &amp; Bus. Act.</b>           | 584   | 650   | 669  | 674   | 683   | 700   | 720   | 740   | 760   | <b>835</b>   |
| Y/Y % Change                                      | 9.0   | 11.3  | 2.8  | 0.7   | 1.4   | 2.5   | 2.8   | 2.8   | 2.6   | <b>2.4</b>   |
| <b>Public Administration</b>                      | 558   | 567   | 574  | 572   | 575   | 583   | 593   | 604   | 613   | <b>647</b>   |
| Y/Y % Change                                      | 2.6   | 1.6   | 1.1  | -0.3  | 0.4   | 1.4   | 1.8   | 1.8   | 1.6   | <b>1.3</b>   |
| <b>Education</b>                                  | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Health &amp; Social Services</b>               | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Other Social &amp; Personal Services</b>       | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| <b>Private Households</b>                         | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |
| Y/Y % Change                                      | -     | -     | -    | -     | -     | -     | -     | -     | -     | -            |

## Forecast Tables

| <b>Public Sector</b>                 |       |       |       |       |       |       |       |       |       |       |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| In Bn R\$ unless otherwise specified |       |       |       |       |       |       |       |       |       |       |
| - Annual Data -                      |       |       |       |       |       |       |       |       |       |       |
|                                      | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033  |
| <b>Government Finance</b>            |       |       |       |       |       |       |       |       |       |       |
| <b>Public Balance</b>                | -226  | -308  | -783  | -764  | -716  | -705  | -644  | -716  | -770  | -997  |
| as % of GDP                          | -2.6  | -3.1  | -7.2  | -6.6  | -5.8  | -5.3  | -4.4  | -4.5  | -4.4  | -4.2  |
| <b>Expenditures</b>                  | 3870  | 4599  | 5147  | 5505  | 5694  | 5975  | 6245  | 6718  | 7310  | 9886  |
| Y/Y % Change                         | 1.9   | 18.8  | 11.9  | 7.0   | 3.4   | 4.9   | 4.5   | 7.6   | 8.8   | 7.6   |
| <b>Revenues</b>                      | 3644  | 4291  | 4363  | 4741  | 4978  | 5270  | 5601  | 6002  | 6539  | 8888  |
| Y/Y % Change                         | 25.9  | 17.8  | 1.7   | 8.7   | 5.0   | 5.9   | 6.3   | 7.2   | 8.9   | 7.8   |
| <b>Gross Public Debt</b>             | 8015  | 8461  | 9429  | 10391 | 11470 | 12552 | 13604 | 14764 | 16024 | 22081 |
| as % of GDP                          | 90.1  | 85.3  | 86.9  | 90.0  | 93.0  | 94.0  | 93.1  | 92.4  | 92.1  | 93.6  |
| <b>Public Expenditure Quota</b>      | 42.94 | 45.63 | 47.41 | 47.70 | 46.19 | 44.74 | 42.75 | 42.06 | 42.03 | 41.90 |
| Y/Y % Change                         | 0.0   | 6.2   | 3.9   | 0.6   | -3.2  | -3.1  | -4.5  | -1.6  | -0.1  | -0.1  |

## Forecast Tables

| <b>Labor Market and Income</b>                  |       |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| In Bn R\$ unless otherwise specified            |       |       |       |       |       |       |       |       |       |       |
| - Annual Data -                                 |       |       |       |       |       |       |       |       |       |       |
|   | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033  |
| <b>Labor Market</b>                             |       |       |       |       |       |       |       |       |       |       |
| <b>Wages, Real (2022=100)</b>                   | 102.4 | 100.0 | 105.9 | 109.5 | 110.4 | 111.6 | 113.0 | 114.4 | 115.8 | 123.2 |
| Y/Y % Change                                    | -7.0  | -2.3  | 5.9   | 3.4   | 0.9   | 1.1   | 1.2   | 1.2   | 1.3   | 1.7   |
| <b>Earnings (2022=100)</b>                      | 94.0  | 100.0 | 110.0 | 119.0 | 126.0 | 133.0 | 142.0 | 152.0 | 162.0 | 205.0 |
| Y/Y % Change                                    | 1.0   | 7.0   | 10.0  | 8.0   | 5.0   | 6.0   | 7.0   | 7.0   | 7.0   | 6.0   |
| <b>Productivity (1000 US\$)</b>                 | 11.3  | 10.7  | 10.9  | 10.8  | 11.0  | 11.4  | 11.6  | 11.9  | 12.1  | 13.1  |
| Y/Y % Change                                    | 1.4   | -4.6  | 1.5   | -0.8  | 2.1   | 3.3   | 1.9   | 2.2   | 2.1   | 2.0   |
| <b>Unit Labor Cost (2022=100)</b>               | 89.2  | 100.0 | 108.8 | 118.5 | 122.2 | 125.3 | 131.2 | 137.1 | 143.1 | 167.5 |
| Y/Y % Change                                    | -0.1  | 12.2  | 8.8   | 8.9   | 3.1   | 2.6   | 4.7   | 4.5   | 4.4   | 3.9   |
| <b>Employment (Mn)</b>                          | 90.5  | 97.8  | 99.2  | 100.5 | 99.6  | 98.5  | 99.1  | 99.4  | 99.7  | 100.1 |
| Y/Y Abs. Change                                 | 2.91  | 7.28  | 1.38  | 1.30  | -0.95 | -1.08 | 0.57  | 0.35  | 0.28  | 0.04  |
| <b>Unemployment (Mn)</b>                        | 14.1  | 10.3  | 8.7   | 8.2   | 8.6   | 9.0   | 8.7   | 8.6   | 8.5   | 8.6   |
| Y/Y Abs. Change                                 | 0.49  | -3.82 | -1.61 | -0.47 | 0.38  | 0.43  | -0.32 | -0.12 | -0.06 | 0.07  |
| <b>Unemployment Rate (%)</b>                    | 13.5  | 9.5   | 8.0   | 7.5   | 7.9   | 8.4   | 8.1   | 7.9   | 7.9   | 7.9   |
| <b>Private Households</b>                       |       |       |       |       |       |       |       |       |       |       |
| <b>NNP, Nominal at Factor Costs</b>             | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Compensation of Employees</b>                | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Gross Profits &amp; Rental Income</b>        | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Pers. Disposable Income, Nominal</b>         | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Private Consumption, Nominal</b>             | 5531  | 6357  | 6875  | 7171  | 7557  | 8088  | 8733  | 9438  | 10160 | 13272 |
| Y/Y % Change                                    | 15.1  | 14.9  | 8.2   | 4.3   | 5.4   | 7.0   | 8.0   | 8.1   | 7.7   | 6.8   |
| <b>Pers. Disposable Income, Real (2022=100)</b> | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Private Consumption, Real (2022=100)</b>     | 96    | 100   | 103   | 103   | 104   | 106   | 109   | 111   | 114   | 125   |
| Y/Y % Change                                    | 3.0   | 4.1   | 3.1   | -0.3  | 1.0   | 2.2   | 2.4   | 2.6   | 2.4   | 2.4   |
| <b>Personal Savings Ratio (%)</b>               | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Population (Mn)</b>                          | 214.3 | 215.3 | 216.4 | 217.6 | 218.8 | 219.9 | 221.0 | 222.0 | 223.0 | 226.4 |
| Y/Y Abs. Change                                 | 1.1   | 1.0   | 1.1   | 1.2   | 1.2   | 1.1   | 1.1   | 1.0   | 1.0   | 0.8   |
| <b>GDP Per Cap., Real (PPP, 2022=100)</b>       | 97.5  | 100.0 | 102.4 | 102.3 | 102.9 | 104.6 | 106.8 | 109.0 | 111.1 | 118.9 |
| Y/Y % Change                                    | 4.2   | 2.5   | 2.4   | -0.1  | 0.6   | 1.7   | 2.0   | 2.1   | 1.9   | 1.7   |

## Forecast Tables

| Prices, Interest and Exchange Rates         |      |       |       |       |       |       |       |       |       |       |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| In Bn R\$ unless otherwise specified        |      |       |       |       |       |       |       |       |       |       |
| - Annual Data -                             |      |       |       |       |       |       |       |       |       |       |
|   | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2033  |
| <b>Prices</b>                               |      |       |       |       |       |       |       |       |       |       |
| <b>Consumer Prices (2022=100)</b>           | 91.5 | 100.0 | 104.6 | 109.4 | 114.2 | 119.8 | 126.4 | 133.4 | 140.4 | 167.8 |
| Y/Y % Change                                | 8.3  | 9.3   | 4.6   | 4.6   | 4.4   | 4.9   | 5.6   | 5.5   | 5.3   | 4.4   |
| <b>Consumer Prices, Core (2022=100)</b>     | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Producer Prices (2022=100)</b>           | 87.6 | 100.0 | 93.7  | 95.3  | 100.6 | 105.4 | 110.4 | 116.0 | 122.0 | 148.8 |
| Y/Y % Change                                | 31.5 | 14.1  | -6.3  | 1.7   | 5.6   | 4.7   | 4.8   | 5.1   | 5.1   | 5.1   |
| <b>Export Prices (2022=100)</b>             | 91.9 | 100.0 | 90.4  | 92.1  | 98.4  | 104.2 | 107.8 | 112.4 | 117.0 | 136.0 |
| Y/Y % Change                                | 35.5 | 8.9   | -9.6  | 1.8   | 6.9   | 5.9   | 3.5   | 4.2   | 4.1   | 4.1   |
| <b>Import Prices (2022=100)</b>             | 85.3 | 100.0 | 88.3  | 84.5  | 88.6  | 92.0  | 94.9  | 98.1  | 101.5 | 116.3 |
| Y/Y % Change                                | 18.4 | 17.2  | -11.7 | -4.2  | 4.8   | 3.8   | 3.1   | 3.4   | 3.4   | 3.7   |
| <b>Monetary Policy and Monetary Supply</b>  |      |       |       |       |       |       |       |       |       |       |
| <b>Central Bank Rate (%)</b>                | 4.8  | 12.6  | 13.2  | 10.0  | 7.9   | 6.8   | 6.3   | 6.3   | 6.3   | 6.3   |
| <b>Money Supply M1</b>                      | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Money Supply M2</b>                      | 4320 | 5103  | 5913  | 6334  | 6734  | 7258  | 8033  | 8894  | 9781  | 13699 |
| Y/Y % Change                                | 8.1  | 18.1  | 15.9  | 7.1   | 6.3   | 7.8   | 10.7  | 10.7  | 10.0  | 8.6   |
| <b>Money Supply M3</b>                      | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Y/Y % Change                                | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Money Markets</b>                        |      |       |       |       |       |       |       |       |       |       |
| <b>Call Money Rate (%)</b>                  | 4.4  | 12.4  | 13.2  | 10.0  | 7.8   | 6.7   | 6.2   | 6.2   | 6.2   | 6.2   |
| <b>Interbank Rate, 1 Month (%)</b>          | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Interbank Rate, 3 Months (%)</b>         | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Interbank Rate, 6 Months (%)</b>         | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Bond Markets</b>                         |      |       |       |       |       |       |       |       |       |       |
| <b>Government Bond Yield, 1 Y. (%)</b>      | 7.1  | 13.3  | 12.1  | 9.2   | 8.3   | 7.8   | 7.4   | 7.3   | 7.1   | 6.8   |
| <b>Government Bond Yield, 3 Y. (%)</b>      | 8.7  | 12.3  | 11.3  | 9.6   | 9.2   | 9.0   | 8.7   | 8.6   | 8.5   | 8.2   |
| <b>Government Bond Yield, 5 Y. (%)</b>      | 8.8  | 12.2  | 11.6  | 9.9   | 9.8   | 9.5   | 9.4   | 9.3   | 9.2   | 9.0   |
| <b>Government Bond Yield, Avg. Mat. (%)</b> | 9.7  | 12.3  | 11.9  | 10.2  | 10.2  | 10.0  | 9.9   | 9.8   | 9.7   | 9.6   |
| <b>Exchange Rates (Avg.)</b>                |      |       |       |       |       |       |       |       |       |       |
| <b>BRL / €</b>                              | 6.38 | 5.44  | 5.40  | 5.35  | 5.74  | 6.47  | 7.28  | 7.51  | 7.72  | 8.25  |
| Y/Y % Change                                | 8.3  | -14.7 | -0.8  | -0.9  | 7.2   | 12.6  | 12.5  | 3.2   | 2.8   | 1.7   |
| <b>BRL / US\$</b>                           | 5.39 | 5.17  | 5.00  | 5.06  | 5.19  | 5.27  | 5.32  | 5.38  | 5.44  | 5.73  |
| Y/Y % Change                                | 4.7  | -4.2  | -3.3  | 1.3   | 2.5   | 1.6   | 0.9   | 1.2   | 1.2   | 1.6   |
| <b>Trade-Weighted Exch. Rate, Nom.</b>      | 94.6 | 107.5 | 119.7 | 139.0 | 139.6 | 134.5 | 126.7 | 125.0 | 122.7 | 117.3 |
| Y/Y % Change                                | -5.4 | 13.6  | 11.3  | 16.2  | 0.5   | -3.7  | -5.8  | -1.3  | -1.8  | -1.1  |
| <b>Trade-Weighted Exch. Rate, Real</b>      | 96.7 | 108.4 | 113.7 | 115.8 | 113.1 | 108.6 | 103.5 | 104.0 | 104.0 | 106.2 |
| Y/Y % Change                                | -3.3 | 12.1  | 4.8   | 1.9   | -2.4  | -4.0  | -4.6  | 0.5   | 0.0   | 0.5   |



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