



GREATER
REWARDS

DEEPER
INSIGHTS

FERI
Country Dossier
Economic Forecast

Brazil

July 2022



© 2022 FERI Trust GmbH, Bad Homburg.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise without the prior permission of the publisher.

Disclaimer:

All information included in this report has been cross-verified to the greatest extent possible. Although every attempt has been made to ensure the accuracy of the information included in this report, FERI Trust GmbH claims no responsibility for any loss or damage resulting from any publication, error or omission in this report.

Table of Contents

Executive Summary	5
Country Profile	7
Economic Forecast	11
Demand	12
Trade	14
Supply	16
Public	17
Labor Market & Income	18
Prices, Interest Rates & Exchange Rates	20
Forecast Tables	21
Contact Info	28

Executive Summary

From 2017 to 2019 Brazilian growth rates were below 2% - already weak rates compared to growth rates in other emerging markets. 2020, however, due to the COVID-19 pandemic and the restrictions imposed by the government, was even worse. As a result, GDP plummeted by 3.9%. In 2021, the economy was still shaped by the consequences of the coronavirus outbreak and the infection rates in Brazil have been high at least until mid-2021. Due to fiscal stimulus such as the "corona vouchers" cash handout scheme of 2020, which supported the economy also in 2021 as the congress announced a second tranche of the transfer scheme, the Brazilian economy continued to recover still in Q1 2021. However, the economy fell into a technical recession again in Q2 2021 as fixed investments weakened due to higher interest rates. Overall GDP recovered by 4.6% in 2021. Q1 2022 shows a moderate economic recovery of 1%.

As for inflation, consumer prices increased by 8.3% in 2021, and are expected to top 10% in 2022. Moreover, inflation is already at 11.8% in May 2022, and the Selic rate was raised to 12.75% in May 2022. As a consequence, we expect poor private consumption and investment growth and thus weak GDP growth in the rest of 2022. Regarding the labor market, after rising in 2020 to a peak of 14.9% in December 2020, the unemployment rate receded in 2021 and Q1 2022 and we see it continue declining in the next few years.

Politically, the incumbent 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 was an important step forward, the political stability in the country has been very uncertain, with continuing street protests and rising tensions between the executive authorities and the judiciary. Although inflation has an overall negative effect on the economy, it helped to push the high debt to GDP ratio lower in 2021. The central bank cut policy rates several times in 2020 to stimulate the economy and fight the negative effects of the disease, but finally raised it to even higher levels because of rising inflationary pressure. We forecast that the former inflation-target of 4.25% set in 2019 by the National Monetary Council will be significantly surpassed in 2022 with an inflation rate of more than 10%. The massive interest rate hikes might help to reach the inflation target in the long run. With the return of former President Lula da Silva to the forefront of politics, we expect polarization to intensify rather than recede ahead of the October 2022 general elections.

As an emerging industrialized country, the Brazilian economy is the eighth biggest 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.

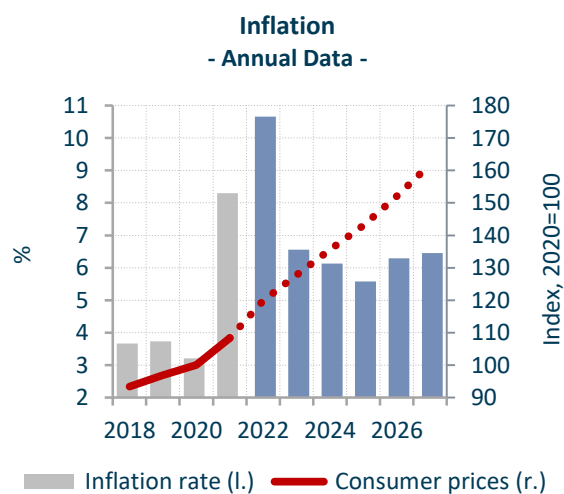
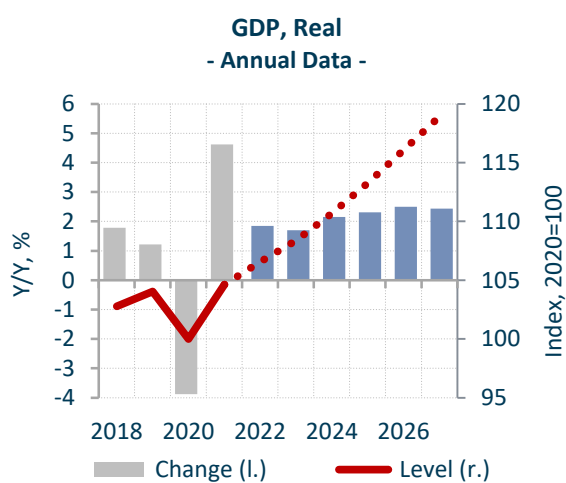
Given its orientation towards domestic demand, the economy was not as heavily affected by the global recession in 2009 as other countries: Although GDP did decline slightly, the recession was moderate. In the wake of globally weaker demand for raw materials, Brazil's main export goods, and the ongoing 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 and 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 reflects not 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.

Executive Summary

Summary Economic Forecast				
	2021	2022	2023	2024
GDP Per Cap., Nominal (1000 US\$ (PPP))	16.050	17.169	18.044	18.868
GDP, Real (% Change)	4.6	1.8	1.7	2.2
Consumer Prices (% Change)	8.3	10.7	6.6	6.1
Unemployment Rate (%)	13.5	9.9	7.7	7.8
Public Balance (% of GDP)	-4.4	-7.6	-7.6	-5.8
Gross Public Debt (% of GDP)	93.0	90.3	90.9	89.6
Current Account Balance (% of GDP)	-1.8	-2.8	-4.7	-4.2
Industrial Production (% Change)	3.9	1.5	2.8	2.7
Central Bank Rate (%)	4.8	12.4	11.8	8.5
Government Bond Yield, 10 Y. (%)	9.7	12.4	11.1	10.6
BRL / €	6.38	5.50	6.22	6.25
BRL / US\$	5.39	5.04	5.18	4.80



Country Profile



Profile Data*

Constitution		Life Expectancy, Years	76.1
Official Name	Federative Republic of Brazil	Life Expectancy, Male (Years)	72.5
Capital	Brasília	Life Expectancy, Female (Years)	79.736
Form of State	Federal Republic	Labor Market & Income	
Currency		Labor Force	99 427 940
Currency	Real (BRL)	Labor Force (% of Population)	47.0
Population & Demography		Female Labor Force (% of Total Labor Force)	43.2
Population (Mn.)	214.0	Foreign Labor Force (% of Total Labor Force)	0.1
Annual Population Growth (%)	0.7	Employment in the Public Sector (% of Employment)	14.99
Net Migration	106 000	Part-time Employment (% of Employment)	16.0
Area (sq. km)	8 515 770	Long-term Unemployment (% of Labor Force)	7.4
Population Density (People/sq. km)	25.4	Youth Unemployment (% of Youth Labor Force under the Age of 25)	27.5
Urban Population (% of Total)	87.1	Youth Exclusion (Share of Youth Population [15-24] not in Education, Employment or Training)	23.5
Population over 65 (% of Population)	9.6	Total Hourly Compensation in Manufacturing (USD)	2.929
Fertility Rate (Births per Woman)	1.7	Percentage of Household Incomes going to Highest (Richest) 10% of Households	42.5
Birth Rate (per 1,000 People)	13.5		
Death Rate (per 1,000 People)	6.6		

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

Country Profile

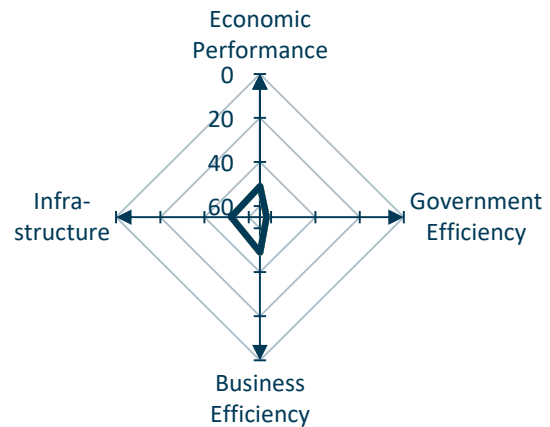
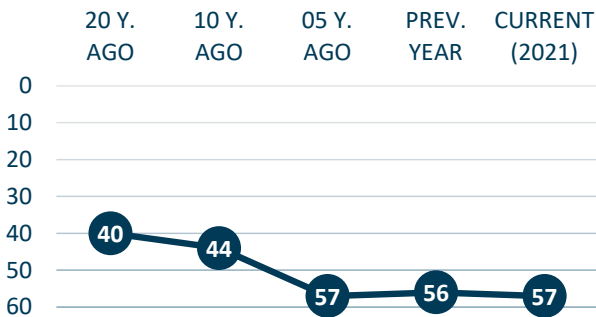
Socioeconomic Data*	
Energy & Environment	
Total Final Energy Consumption per Capita (MTOE)	1.1
Energy Consumed (MTOE) for each 1,000 USD of GDP	110.9
Total Indigenous Energy Production (%)	103.0
Electric Power Consumption (kWh per Capita)	2 620
Electric Power Transmission and Distribution Losses (% of Output)	15.8
Share of Renewables (%)	42.3
CO2 Emissions from Fuel Combustion (m3 per 1 Mio USD of GDP)	228.8
Mean Population Exposure to PM2.5 (Micrograms per m3)	11.7
Prices & Taxes	
Cost-of-living index (New York =100); Price of Basket of Goods and Services in Main City	65.1
Monthly 3-Room Apartment Rent in Major Cities (USD)	1 235
Collected Personal Income Taxes on Profits, Income and Capital Gains (% of GDP)	3.0
Collected Corporate Income Taxes on Profits, Income and Capital Gains (% of GDP)	2.8
Business	
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
Health	
Total Health Expenditure per Capita (USD)	852
Hospital Beds (per 1,000 People)	2.1
Inhabitants per Physician	536.6
Under 5 Mortality Rate per 1,000 Live Births	13.9
Healthy Life Expectancy (Years)	66.9
Infrastructure & Communication	
Arable Land (% of Land Area)	6.7
Kilometer Roads per Square km Land Area	0.20
Investment in Telecommunications (% of GDP)	0.50
Internet Users per 1,000 Inhabitants	698
Internet Average Bandwidth Speed (MBit/s)	36.3
International Trade	
Exports to top 5 Countries (% of Exports)	52.6
Top 5 Products (% of Exports)	50.3
High-tech Exports (% of Manufactured Goods)	13.3
Exports of Commercial Services (% of GDP)	1.9
Weighted Mean Import Tariff (%)	8.0
Container Port Traffic (TEU: 20 Foot Equivalent Units)	10 376 571
Education & Innovation	
Total Public Expenditure on Education per Capita (USD)	464
Secondary School Enrollment (% of Age Group)	75.4
University Degree (% of Population)	21.3
PISA Assessment (Points)	400.0
Patent Applications per 100,000 Inhabitants	3.5
Full Time Researchers in R&D per 1,000 Inhabitants	0.9

*) Source: World Bank Data, IMD

Country Profile

Competitiveness Ranking (IMD)

Overall Ranking



Economic Performance 51

(Relative) Strengths

Gross fixed capital formation - real growth	↑	Green
Employment		Green
GDP (PPP)		Light Green

(Relative) Weaknesses

Relocation threats of business	↓	Orange
Trade to GDP ratio		Orange
Employment - growth	↓	Orange

Strongest Improvement

Exports of commercial services - growth	↑	Yellow
---	---	--------

Strongest Worsening

Employment - growth	↓	Orange
---------------------	---	--------

Government Efficiency 62

(Relative) Strengths

Ageing of population		Light Green
Disposable Income		Yellow
Consumption tax rate		Yellow

(Relative) Weaknesses

Bureaucracy		Orange
Creation of firms		Orange
General government expenditure		Orange

Strongest Improvement

Interest payment (%)	↑	Orange
----------------------	---	--------

Strongest Worsening

Public finances	↓	Orange
-----------------	---	--------

Business Efficiency 49

(Relative) Strengths

Labor force		Green
Initial Public Offerings		Green
Flexibility and adaptability		Light Green

(Relative) Weaknesses

Credit		Orange
Workforce productivity		Orange
Image abroad or branding		Orange

Strongest Improvement

Employee training	↑	Orange
-------------------	---	--------

Strongest Worsening

Labor force growth	↓	Orange
--------------------	---	--------

Infrastructure 52

(Relative) Strengths

Total public expenditure on education	↑	Green
Secondary school enrollment		Green
Mobile Telephone costs		Light Green

(Relative) Weaknesses

Distribution infrastructure		Orange
Language skills		Orange
Primary and secondary education		Orange

Strongest Improvement

Electricity costs for industrial clients	↑	Light Green
--	---	-------------

Strongest Worsening

Cyber security	↓	Orange
----------------	---	--------

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

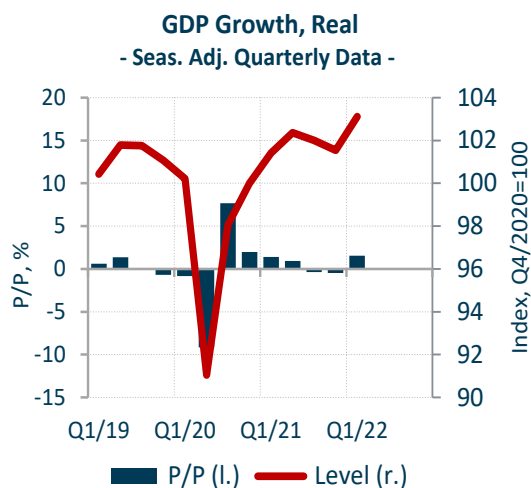
Shown are current ranks unless otherwise stated. The ranking is from 1 to 64. The arrows indicate an improvement (up arrow) or worsening (down arrow) of at least 5 ranks compared to the previous year.

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

Economic Forecast

Demand

Mainly due to strong private consumption, GDP growth will be positive in 2022. In 2023, GDP growth is expected to worsen due to weaker net exports. The overall economic growth rate in 2023 will be stronger than the historical average.



GDP Growth, Real - Annual Data in % -		
	Brazil	Emerging Countries
Previous 10 years (2011-2020)	0.3	4.1
2021	4.6	6.9
2022	1.8	3.6
2023	1.7	4.1
Next 10 years (2024-2033)	2.3	4.1

GDP growth in Brazil will be positive in 2022. This year, private consumption and net exports will be the main supportive drivers of the economic development. In 2023, GDP growth is expected to worsen. Now, weaker growth contributions from net exports and government consumption will be the driving forces of lower GDP growth. All in all, GDP growth in 2023 will be positive and much weaker than economic growth in the Emerging Countries. The precrisis GDP level of Q4/2019 has been surpassed already in 2021 again.

Brazil's GDP growth has been positive in the 10 years up to 2020. 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 4.1 percent per year, Brazil's economy is expected to grow by 2.3 per year in the next decade. Brazil's growth rate in the next 10 years will be stronger than historical economic growth up to 2020.

Demand

Growth of GDP Components - Annual Data in % -					
	2011-2020	2021	2022	2023	2024-2033
GDP Growth	0.3	4.6	1.8	1.7	2.3
Private Consumption	0.8	3.6	2.1	2.0	2.1
Government Consumption	0.1	2.0	2.5	1.9	1.5
Fixed Investment	-1.3	17.2	-4.2	2.0	2.2
Exports	1.8	5.8	3.0	2.4	3.0
Imports	-0.7	12.4	-6.4	5.2	2.5

Contribution to GDP Growth (Y/Y) by Components - In Percentage Points -					
	2011-2020	2021	2022	2023	2024-2033
GDP Growth	0.3	4.6	1.8	1.7	2.3
Private Consumption	0.5	2.3	1.3	1.3	1.3
Government Consumption	0.0	0.4	0.4	0.4	0.3
Fixed Investment	-0.2	3.0	-0.8	0.4	0.4
Net Exports	0.3	-0.6	1.1	-0.2	0.1
Chg. in Inv.	-0.3	-0.4	-0.2	-0.1	0.2

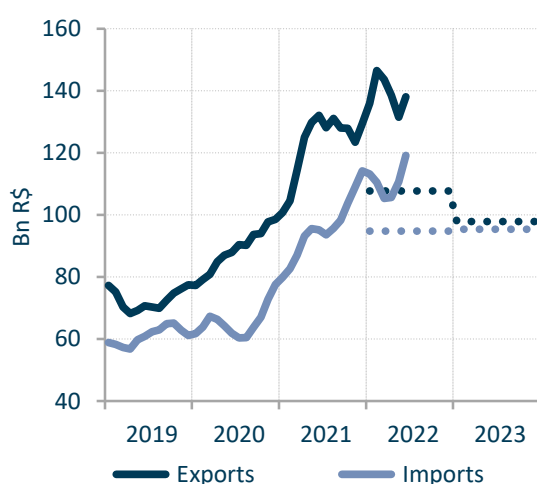
In 2022, GDP growth will be positive. Economic growth is mainly driven by strong private consumption and net exports. GDP growth in 2023 will worsen compared to the previous year due to weaker growth contributions especially from net exports and government consumption. In the long-term perspective economic growth in Brazil will be higher than in the decade up to 2020. Stronger private consumption growth will be the main driver of higher GDP growth in the next 10 years up to 2033.

Trade

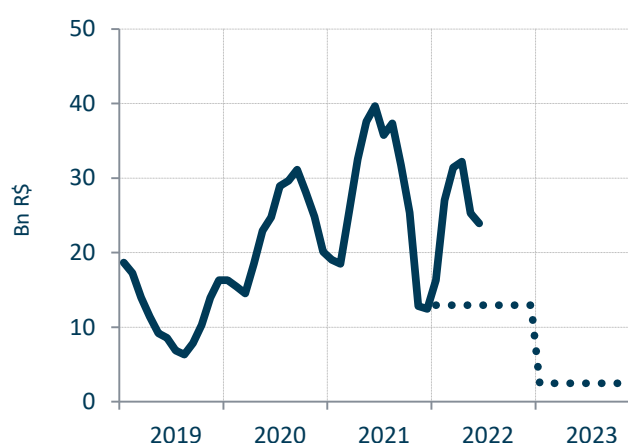
The level of merchandise exports has been higher than that of imports in recent months. This trend is expected to apply for 2022 as a whole. Net exports, which include not only merchandise goods, but also services, are expected to be positive in 2022.

The current account balance that includes also net income from abroad and net current transfers, is expected to be negative in 2022. The current account deficit implies that Brazil is a net borrower from the rest of the world.

Merchandise Trade
- Monthly, Nom. Data, Season. Adj., 3-Month-Avg. -



Merchandise Trade Balance
- Monthly, Nom. Data, Season. Adj., 3-Month-Avg. -



Foreign Trade Forecast
- Annual Data -

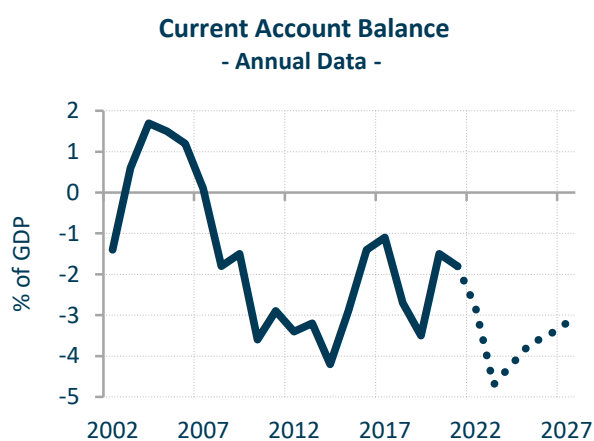
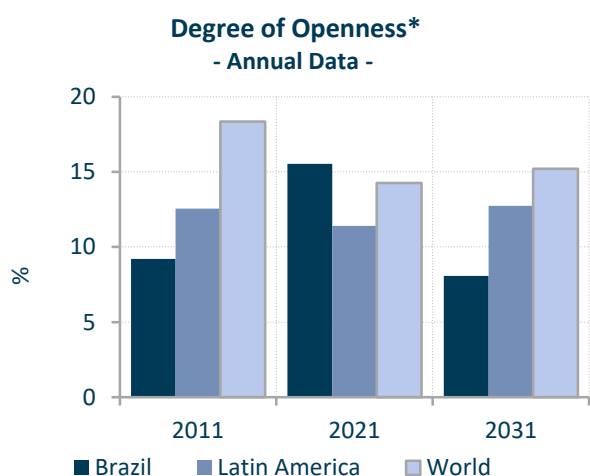
	2011-2020	2021	2022	2023	2024-2033
Merchandise Exports (Bn R\$)	665	1 512	1 292	1 175	1 464
Merchandise Imports (Bn R\$)	567	1 184	1 137	1 145	1 613
Merch. Trade Bal.* (Bn R\$)	98.3	327.8	155.2	29.4	-149.5
Exports, real (G+S*), % Y/Y	1.8	5.8	3.0	2.4	3.0
Imports, real (G+S*), % Y/Y	-0.7	12.4	-6.4	5.2	2.5
CAB* (Bn. US\$)	-58.5	-27.9	-55.4	-99.3	-111.3
CAB* (% of GDP)	-2.7	-1.8	-2.8	-4.7	-3.1

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

Trade

Main Trading Partners - Share in Total Trade in % -			
Exports	2021	Imports	2021
China	31.4	China	21.7
USA	11.2	USA	18.1
Argentina	4.3	Argentina	5.4
Netherlands	3.3	Germany	5.2
Chile	2.5	India	3.1

Items of Trade - Share in Total Trade of Goods in % -			
Exports	2018	Imports	2018
Metal Ores	21.9	Chemicals	22.0
Food	20.3	Computers	11.2
Oil & Gas	13.8	Other Mach.	10.4
Basic Metals	11.3	Petro. Prod.	7.3
Chemicals	5.0	Automotives	6.9

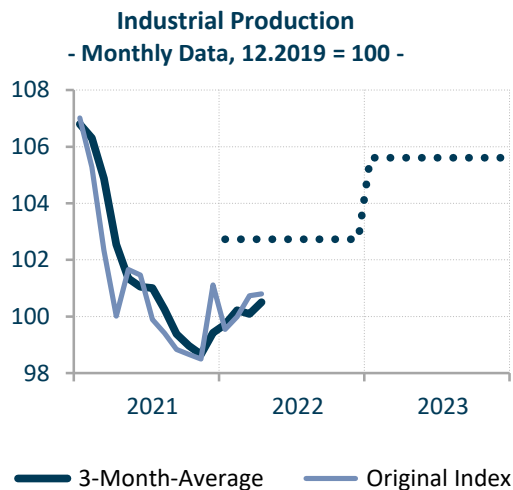


* Degree of Openness = 0.5*(Exports+Imports) / nominal GDP
The degree of openness measures the extent to which the country depends on trade with other countries. A level of 100% means that the trade volume equals the level of economic output.

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 more significant up to 2032. 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.



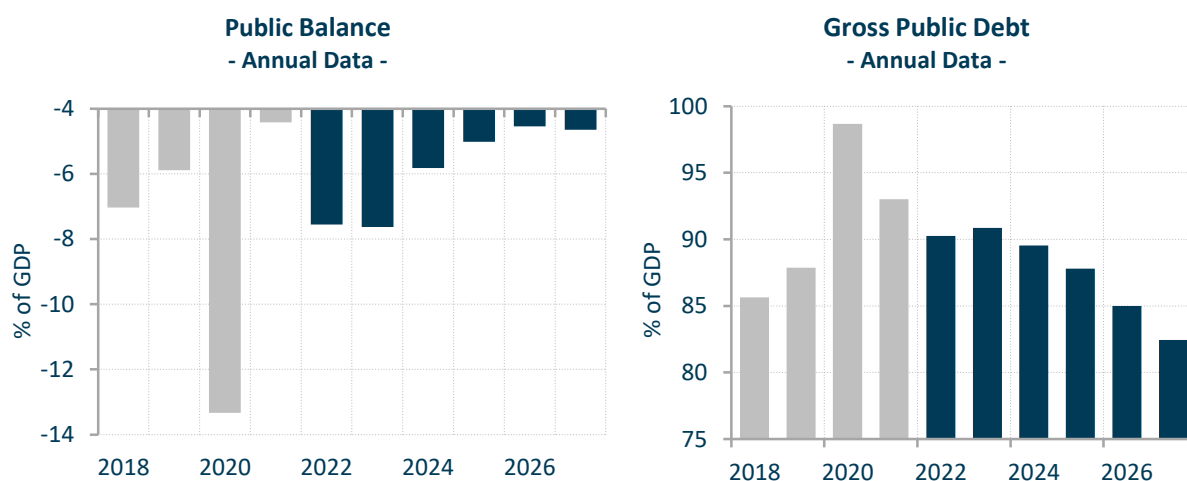
- Production has been rising in the last three months. We expect industrial production to be higher in 2022 compared to the previous year.

	GDP Composition, Real			Growth by Sectors	
	- Share of GDP; Annual Data in % -			- Annual Growth in % -	
	2012	2022	2032	2011-2020	2024-2033
Primary Sector	4.7	6.2	7.0	3.0	3.7
Secondary Sector	14.2	12.1	12.3	-1.7	2.3
Tertiary Sector	81.1	81.7	80.8	0.1	2.2
Business Rel. Svs.	16.1	15.7	15.3	0.0	2.0
Personal Rel. Svs.	16.0	15.5	14.4	0.1	1.6
Trade	12.5	12.1	11.9	-0.3	2.1
Other Services	36.5	38.4	39.2	0.9	2.6

Public Sector

In 2021, the level of public debt in percent of GDP was very large. In the next three years, the debt ratio will be lower. Brazil will have a high public deficit and very strong nominal GDP growth. Within the next three years, the public balance is thus expected to worsen.

Brazil will have a moderate public expenditure quota in 2022. A moderate public expenditure quota means that the government interferes moderately in the economy.



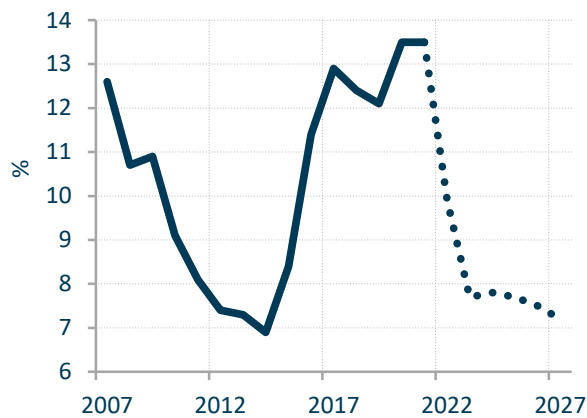
Public Finance Forecast - Annual Data -			
	2012	2022	2032
Public Expenditure / GDP (%)	37.2	38.1	33.2
Interest Expend. / Receipts (%)	12.8	12.2	12.9
Receipts (% Y/Y)	8.8	10.3	8.3
Expenditures (% Y/Y)	9.0	20.6	8.7
Primary Balance (% of GDP)	-2.5	-3.8	-1.5

Labor Market & Income

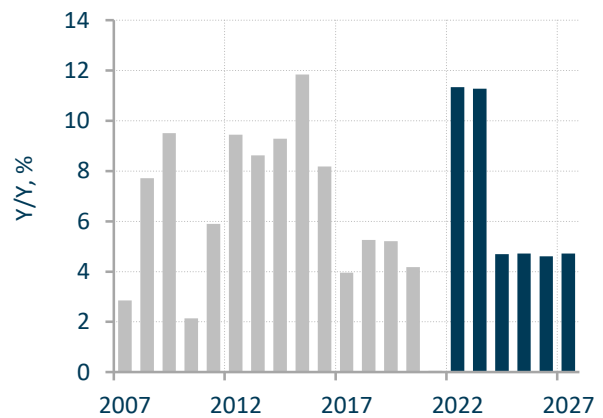
In 2021, the unemployment rate in Brazil was very high. In 2022 and the following years, the rate will tend lower because of positive employment growth.

Real wages grew weaker than productivity between 2016 and 2021. In the next five years, real wages will grow stronger than productivity. Insofar, the competitiveness of the companies in Brazil will suffer.

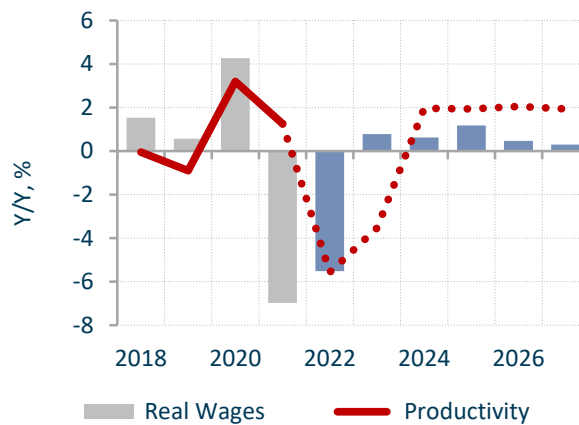
Unemployment Rate
- Annual Data -



Unit Labor Costs
- Annual Data -

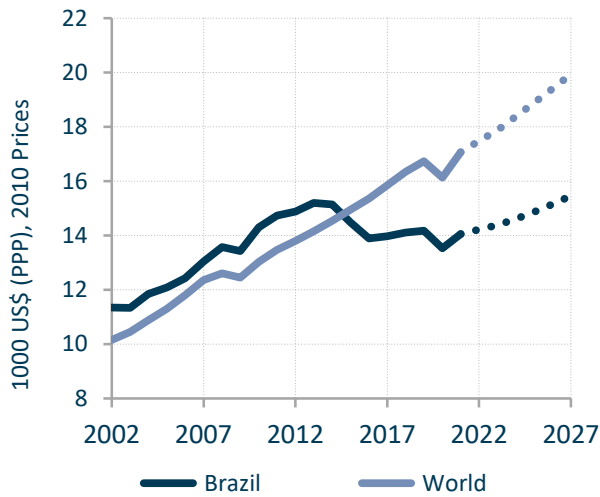


Real Wages & Productivity
- Annual Data -



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 - Annual Data in % -	
	Current Value
Gini Coefficient*	49

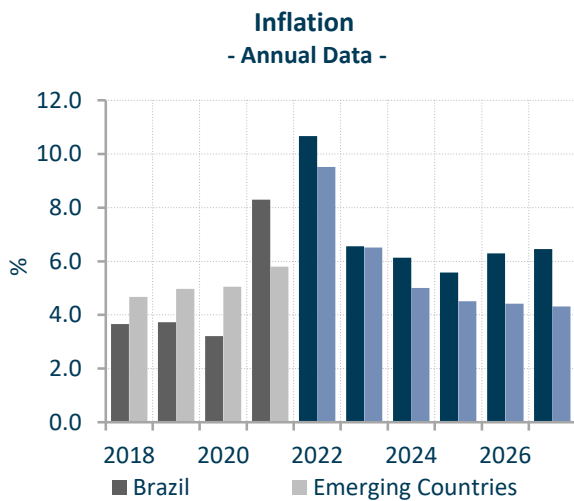
- The Gini coefficient in Brazil shows a high inequality of income distribution in the country.

***Gini Coefficient:**

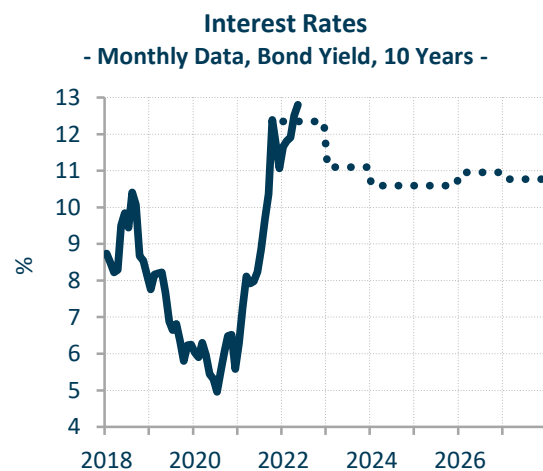
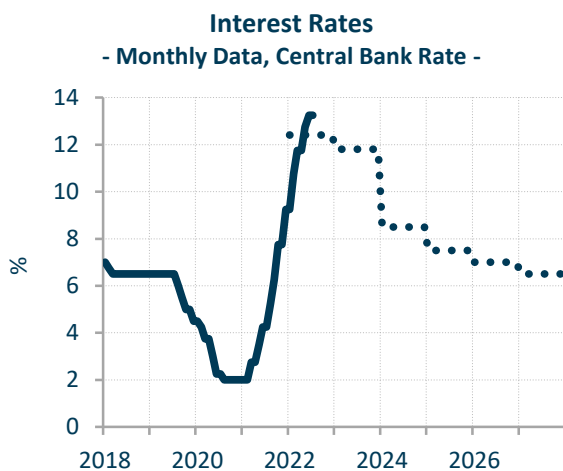
The Gini coefficient is a measure of statistical dispersion reflecting the income distribution of the residents within a country. A Gini coefficient of 0% means perfect income equality in a country, where all residents have the same income, whereas a Gini coefficient of 100% expresses maximal income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

Prices, Interest Rates & Exchange Rates

Inflation has been very high in Brazil in 2021. In 2022, the inflation rate is expected to increase temporarily. While the inflation rate in Brazil will fall by 1.7 percentage points from 2021 to 2023, the inflation rate in the Emerging Countries is expected to grow by 0.7 percentage points.



Prices		
- Annual Growth in % -		
	Consumer Prices	Producer Prices
2021	8.3	31.5
2022	10.7	16.1
2023	6.6	7.2
2024	6.1	3.3
2025	5.6	2.9



Exchange Rate Forecast				
- Annual Data -				
	2020	2021	2022	2023
Local Currency / US\$	5.2	5.4	5.0	weaker
Local Currency / Euro	5.9	6.4	5.5	weaker
Trade Weighted Exchange Rate (real) Appreciation Y/Y	-20.6	-3.3	15.5	weaker

Forecast Tables

Demand: GDP and Components										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Gross Domestic Product (GDP)										
GDP, Nominal	7389	7468	8679	9875	10810	11836	12912	14203	15639	22422
Y/Y % Change	5.5	1.1	16.2	13.8	9.5	9.5	9.1	10.0	10.1	8.9
GDP, Real (2020=100)	104.0	100.0	104.6	106.5	108.4	110.7	113.2	116.1	118.9	129.8
Y/Y % Change	1.2	-3.9	4.6	1.8	1.7	2.2	2.3	2.5	2.4	2.2
GDP, Nominal (Bn US\$ (PPP))	3241	3152	3435	3697	3909	4111	4329	4586	4845	5828
Y/Y % Change	3.0	-2.7	9.0	7.7	5.7	5.2	5.3	5.9	5.7	4.2
GDP Per Cap., Nominal (1000 US\$ (PPP))	15.4	14.8	16.1	17.2	18.0	18.9	19.8	20.8	21.9	25.9
Y/Y % Change	2.3	-3.4	8.2	7.0	5.1	4.6	4.7	5.4	5.2	3.8
GDP Per Cap., Real (1000 US\$ (PPP))	14.2	13.5	14.1	14.2	14.4	14.6	14.9	15.2	15.5	16.6
Y/Y % Change	0.5	-4.6	3.9	1.2	1.1	1.6	1.8	2.0	2.0	1.8
Components of GDP										
Consumption										
Private Consumption, Real	2677	2532	2622	2677	2732	2796	2861	2919	2977	3215
Y/Y % Change	2.6	-5.4	3.6	2.1	2.0	2.3	2.3	2.0	2.0	2.0
Government Consumption, Real	778	743	758	776	791	803	815	827	840	891
Y/Y % Change	-0.5	-4.5	2.0	2.5	1.9	1.5	1.5	1.5	1.5	1.5
Investment										
Fixed Investment, Real	702	699	819	784	800	812	829	850	872	955
Y/Y % Change	4.0	-0.5	17.2	-4.2	2.0	1.5	2.1	2.6	2.6	2.2
Construction, Real	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Construction, Resid., Real	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Machinery & Equipment, Real	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Other, Real	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Change in Stocks	-39	-54	-71	-80	-83	-64	-42	-29	-18	-1
Trade										
Net Exports (Goods & Services), Real	34	71	47	94	84	70	56	64	74	121
Exports (Goods & Services), Real	512	502	532	548	561	566	575	595	617	705
Y/Y % Change	-2.6	-1.8	5.8	3.0	2.4	1.0	1.5	3.5	3.6	3.4
Imports (Goods & Services), Real	478	431	485	453	477	496	519	531	543	584
Y/Y % Change	1.3	-9.8	12.4	-6.4	5.2	4.1	4.6	2.3	2.2	1.8

Forecast Tables

Retail Sales										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Retail Sector										
Retail Sales, Value (2020=100)	96.8	100.0	111.0	127.3	138.3	149.2	160.6	173.3	187.2	250.1
Y/Y % Change	5.7	3.3	11.0	14.7	8.7	7.9	7.6	7.9	8.0	7.2
Retail Sales, Volume (2020=100)	99.2	100.0	102.7	106.4	109.4	112.1	114.9	117.3	119.7	129.7
Y/Y % Change	2.3	0.8	2.7	3.6	2.8	2.5	2.5	2.1	2.1	2.1
Retail Sales, Price (2020=100)	97.6	100.0	108.1	119.6	126.5	133.1	139.8	147.7	156.3	192.8
Y/Y % Change	3.3	2.5	8.1	10.7	5.7	5.3	5.0	5.7	5.8	5.0

Trade										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Balance of Payments										
Current Account Balance	-257.4	-114.3	-155.4	-278.4	-512.9	-494.2	-482.8	-494.3	-507.9	-597.7
% of GDP	-3.5	-1.5	-1.8	-2.8	-4.7	-4.2	-3.7	-3.5	-3.2	-2.7
Current Account Balance (Bn US\$)	-65.0	-24.5	-27.9	-55.4	-99.3	-103.3	-108.6	-108.7	-108.8	-113.9
Trade Balance (Current Account), Nominal	104.7	166.8	196.1	155.7	39.8	-7.4	-52.3	-75.7	-98.9	-221.3
Exports (Current Account)	890.5	1086	1532	1297	1185	1149	1116	1192	1280	1698
Y/Y % Change	1.7	21.9	41.1	-15.3	-8.6	-3.1	-2.8	6.8	7.4	7.2
Imports (Current Account)	785.8	919.1	1336	1141	1145	1156	1169	1268	1379	1919
Y/Y % Change	9.6	17.0	45.3	-14.6	0.4	0.9	1.1	8.5	8.8	8.6
Invisibles Balance	-361.1	-293	-346.8	-436	-554.4	-488.4	-432	-420.3	-410.6	-378.3
Foreign Trade (Merchandise)										
Trade Balance, Nominal	140.1	271.4	327.8	155.2	29.4	-7.4	-52.3	-75.7	-98.9	-221.3
Exports, Free On Board (FOB)	873.1	1083	1512	1292	1175	1149	1116	1192	1280	1698
Y/Y % Change	2.7	24.1	39.6	-14.5	-9.1	-2.2	-2.8	6.8	7.4	7.2
Imports, fob	733	811.7	1184	1137	1145	1156	1169	1268	1379	1919
Y/Y % Change	7.8	10.7	45.9	-4.0	0.7	0.9	1.1	8.5	8.8	8.6
Foreign Reserves										
Foreign Res., Excl. Gold (Bn US\$)	353.6	351.5	354.6	310.2	224.2	135.2	42.5	0	0	0
Y/Y % Change	-4.9	-0.6	0.9	-12.5	-27.7	-39.7	-68.6	-100.0	-	-

Forecast Tables

Supply										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Production										
GDP, Real	4152	3991	4175	4252	4324	4417	4519	4632	4745	5181
Y/Y % Change	1.2	-3.9	4.6	1.8	1.7	2.2	2.3	2.5	2.4	2.2
Net Production (2020=100)	105.0	100.0	104.6	104.8	107.7	110.3	112.6	115.0	117.5	128.3
Y/Y % Change	0.2	-4.8	4.6	0.2	2.8	2.5	2.0	2.2	2.2	2.2
Capacity Utilization (%)	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Origin of GDP, Gross Value Added by Sector										
Total GVA - Whole Economy	3509	3385	3536	3601	3662	3742	3829	3926	4023	4406
Y/Y % Change	0.9	-3.5	4.5	1.8	1.7	2.2	2.3	2.5	2.5	2.3
Primary Sector										
Agricult., Forestry & Fishing	207	215	215	222	228	236	245	255	264	304
Y/Y % Change	0.4	3.8	-0.2	3.2	3.1	3.5	3.7	3.9	3.8	3.5
Mining & Quarrying	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Secondary Sector										
Manufacturing	436	417	436	437	449	460	470	481	492	540
Y/Y % Change	-0.4	-4.4	4.5	0.2	2.8	2.5	2.2	2.2	2.3	2.4
Electricity, Gas & Water	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Tertiary Sector										
Wholesale & Retail Trade	419	406	428	436	442	451	461	472	483	524
Y/Y % Change	1.6	-3.1	5.5	1.7	1.6	2.0	2.2	2.4	2.3	2.0
Hotels & Restaurants	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Transport & Storage	146	134	149	152	154	157	160	163	167	180
Y/Y % Change	0.1	-8.4	11.4	1.6	1.4	1.9	2.0	2.2	2.1	1.9
Financial Intermediation	236	247	248	257	265	275	285	297	308	357
Y/Y % Change	1.1	4.5	0.7	3.4	3.2	3.7	3.8	4.0	4.0	3.7
Real Est., Rent. & Bus. Act.	591	518	557	566	574	585	597	611	624	675
Y/Y % Change	2.8	-12.3	7.6	1.6	1.5	1.9	2.1	2.2	2.2	1.9
Public Administration	570	544	552	558	564	572	582	592	603	641
Y/Y % Change	-0.4	-4.5	1.5	1.2	1.0	1.5	1.6	1.8	1.8	1.5
Education	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Health & Social Services	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Other Social & Personal Services	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Private Households	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-

Forecast Tables

Public Sector										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Government Finance										
Public Balance	-434	-996	-383	-745	-825	-689	-647	-645	-726	-1131
as % of GDP	-5.9	-13.3	-4.4	-7.6	-7.6	-5.8	-5.0	-4.5	-4.6	-5.1
Expenditures	2761	3201	3119	3763	4089	4166	4379	4702	5179	7434
Y/Y % Change	4.6	15.9	-2.6	20.6	8.7	1.9	5.1	7.4	10.1	9.0
Revenues	2327	2206	2736	3018	3265	3477	3732	4057	4453	6302
Y/Y % Change	8.3	-5.2	24.1	10.3	8.2	6.5	7.4	8.7	9.8	8.6
Gross Public Debt	6493	7369	8073	8913	9823	10600	11339	12071	12894	17229
as % of GDP	87.9	98.7	93.0	90.3	90.9	89.6	87.8	85.0	82.5	76.8
Public Expenditure Quota	37.37	42.87	35.94	38.11	37.83	35.20	33.92	33.11	33.12	33.15
Y/Y % Change	0.0	14.7	-16.2	6.0	-0.7	-7.0	-3.6	-2.4	0.0	0.0

Forecast Tables

Labor Market and Income										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Labor Market										
Wages, Real (2020=100)	95.9	100.0	93.0	87.9	88.6	89.1	90.1	90.6	90.8	92.3
Y/Y % Change	0.6	4.3	-7.0	-5.5	0.8	0.6	1.2	0.5	0.3	0.5
Earnings (2020=100)	93.0	100.0	101.0	107.0	114.0	122.0	130.0	139.0	148.0	190.0
Y/Y % Change	4.0	7.0	1.0	5.0	7.0	7.0	7.0	7.0	7.0	6.0
Productivity (1000 US\$)	10.7	11.0	11.2	10.5	10.2	10.4	10.6	10.8	11.0	11.9
Y/Y % Change	-0.9	3.2	1.3	-5.6	-3.5	2.0	1.9	2.0	1.9	2.1
Unit Labor Cost (2020=100)	96.0	100.0	100.1	111.4	124.0	129.8	135.9	142.2	148.9	175.9
Y/Y % Change	5.2	4.2	0.1	11.3	11.3	4.7	4.7	4.6	4.7	3.9
Employment (Mn)	94.1	87.6	90.5	97.7	103.0	103.2	103.5	104.0	104.5	105.2
Y/Y Abs. Change	1.97	-6.45	2.91	7.11	5.31	0.19	0.38	0.45	0.51	0.10
Unemployment (Mn)	12.9	13.6	14.1	10.7	8.6	8.7	8.6	8.5	8.2	7.9
Y/Y Abs. Change	-0.13	0.73	0.49	-3.43	-2.12	0.17	-0.08	-0.18	-0.30	0.00
Unemployment Rate (%)	12.1	13.5	13.5	9.9	7.7	7.8	7.7	7.5	7.2	7.0
Private Households										
NNP, Nominal at Factor Costs	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Compensation of Employees	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Gross Profits & Rental Income	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Pers. Disposable Income, Nominal	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Private Consumption, Nominal	4814	4696	5292	5967	6480	7029	7585	8216	8910	12089
Y/Y % Change	6.4	-2.4	12.7	12.8	8.6	8.5	7.9	8.3	8.4	7.5
Pers. Disposable Income, Real (2020=100)	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Private Consumption, Real (2020=100)	106	100	104	106	108	110	113	115	118	127
Y/Y % Change	2.6	-5.4	3.6	2.1	2.0	2.3	2.3	2.0	2.0	2.0
Personal Savings Ratio (%)	-	-	-	-	-	-	-	-	-	-
Population (Mn)	211.1	212.6	214.0	215.4	216.6	217.9	219.0	220.1	221.1	224.6
Y/Y Abs. Change	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.0	0.8
GDP Per Cap., Real (PPP, 2020=100)	104.8	100.0	103.9	105.2	106.3	108.0	109.9	112.1	114.3	122.9
Y/Y % Change	0.5	-4.6	3.9	1.2	1.1	1.6	1.8	2.0	2.0	1.8

Forecast Tables

Prices, Interest and Exchange Rates										
In Bn R\$ unless otherwise specified										
- Annual Data -										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2031
Prices										
Consumer Prices (2020=100)	96.9	100.0	108.3	119.8	127.7	135.5	143.1	152.1	161.9	204.3
Y/Y % Change	3.7	3.2	8.3	10.7	6.6	6.1	5.6	6.3	6.5	5.6
Consumer Prices, Core (2020=100)	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Producer Prices (2020=100)	89.9	100.0	131.5	152.6	163.6	169.1	173.9	182.7	192.4	237.9
Y/Y % Change	4.5	11.2	31.5	16.1	7.2	3.3	2.9	5.0	5.3	5.4
Export Prices (2020=100)	82.1	100.0	135.5	144.7	158.0	151.4	143.4	152.6	163.3	214.9
Y/Y % Change	3.9	21.9	35.5	6.8	9.2	-4.2	-5.3	6.4	7.0	7.0
Import Prices (2020=100)	82.5	100.0	118.4	131.9	141.0	133.8	127.5	133.8	141.0	175.2
Y/Y % Change	3.7	21.2	18.4	11.4	6.9	-5.1	-4.7	4.9	5.4	5.6
Monetary Policy and Monetary Supply										
Central Bank Rate (%)	6.0	2.8	4.8	12.4	11.8	8.5	7.5	7.0	6.5	6.5
Money Supply M1	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Money Supply M2	3099	3998	4298	4591	4870	5429	6030	6747	7567	11355
Y/Y % Change	8.7	29.0	7.5	6.8	6.1	11.5	11.1	11.9	12.2	8.0
Money Supply M3	-	-	-	-	-	-	-	-	-	-
Y/Y % Change	-	-	-	-	-	-	-	-	-	-
Money Markets										
Call Money Rate (%)	5.9	2.8	4.4	12.2	11.9	8.4	7.4	6.9	6.4	6.4
Interbank Rate, 1 Month (%)	-	-	-	-	-	-	-	-	-	-
Interbank Rate, 3 Months (%)	-	-	-	-	-	-	-	-	-	-
Interbank Rate, 6 Months (%)	-	-	-	-	-	-	-	-	-	-
Bond Markets										
Government Bond Yield, 1 Y. (%)	5.7	3.2	7.1	13.6	11.3	9.0	8.5	8.8	8.4	7.5
Government Bond Yield, 3 Y. (%)	6.7	5.2	8.7	13.0	11.2	9.8	9.6	9.9	9.7	8.6
Government Bond Yield, 5 Y. (%)	7.3	6.1	8.8	12.6	11.1	10.2	10.1	10.5	10.3	9.2
Government Bond Yield, Avg. Mat. (%)	7.9	7.2	9.7	12.4	11.1	10.6	10.6	11.0	10.8	9.7
Exchange Rates (Avg.)										
BRL / €	4.41	5.89	6.38	5.50	6.22	6.25	5.97	6.14	6.33	7.15
Y/Y % Change	2.4	33.4	8.3	-13.8	13.1	0.5	-4.5	2.8	3.1	3.3
BRL / US\$	3.94	5.15	5.39	5.04	5.18	4.80	4.46	4.56	4.69	5.27
Y/Y % Change	7.9	30.7	4.7	-6.5	2.8	-7.4	-7.0	2.3	2.7	3.1
Trade-Weighted Exch. Rate, Nom. (2010=100)	63.5	51.0	48.4	54.9	52.3	56.6	61.8	60.8	59.3	53.3
Y/Y % Change	0.1	-19.6	-5.1	13.3	-4.6	8.2	9.3	-1.6	-2.5	-2.6
Trade-Weighted Exch. Rate, Real (2010=100)	75.8	60.2	58.2	67.2	64.5	70.5	77.9	78.3	78.6	79.6
Y/Y % Change	-1.8	-20.6	-3.3	15.5	-4.1	9.3	10.5	0.6	0.4	0.2

FERI Trust GmbH

Haus am Park
Rathausplatz 8-10
61348 Bad Homburg
Germany

Phone: +49 (0) 6172 916-3050

E-Mail: economics@feri.de

This presentation contains information, analysis, forecasts and concepts that serve only your non-binding information. The presentation is not a tax, legal or other advice and does not constitute an offer for the management of assets or recommendation / advice on asset dispositions.

The presentation has been prepared on the basis of subjective assessments by us. Some information contained in the presentation is based on and / or derived from information which has been provided by independent third parties. We always act on the assumption that such information is accurate and complete and comes from trusted sources. A guarantee for the correctness and completeness of the information contained in the presentation will not be borne by us.

The presentation does not replace individual advice. Anyone interested should make any decision only after carefully considering the risks associated with a particular contract and seek legal and tax advice and – if necessary - other advice. We do not take over any responsibility towards either the recipient of this presentation or third persons in respect of actions that are taken on the basis of this presentation.

The opinions mentioned in this presentation are current opinions as of the date listed in this document. The presentation is to be treated strictly confidential and may be used only by the person for whom it was created and solely for their internal purposes. Reproductions of any kind are permitted only upon our prior written consent and upon the exact acknowledgement of the source.