

## ANALYSIS

SEPTEMBER 2024

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# Brazil—Baseline Outlook and Alternative Scenarios

*for ISI Emerging Markets Group*

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# Baseline Forecast

## Recent Performance

- » **Return to growth:** Brazil's economy returned to growth in the first quarter after flatlining in the second half of last year. The bounce back was largely on the consumer front, where lower inflation has bolstered real incomes and confidence, propelling a rebound in spending. Trade has also helped, but more because of subdued imports than a surge in exports. Despite a better performance in the first quarter, our forecast for the year calls for only modest growth, with stubborn inflation, fiscal deterioration, and recent floods in the state of Rio Grande do Sul all weighing on the outlook.
- » **Floods and fiscal deterioration:** Agricultural exports will once again bolster growth after the dry period following last year's record harvest, but devastating floods in the southern state of Rio Grande do Sul, an agricultural powerhouse, will make for a more modest boost. The state is a key corn producer and contributes around 10% of the country's agricultural output. Fiscal deterioration is another concern, with recent revenue declines making the government's aim to eliminate the primary deficit all but out of reach.
- » **Fiddling with the fiscal framework:** Brazil's new fiscal framework, approved in August of last year, provides the government with countercyclical spending power while enforcing discipline through revenue restraints and a legally mandated shift toward a primary surplus. However, recent tax breaks and a fall in revenues darken the outlook and make it more likely that the fiscal framework will be stretched. Along with plans for increased social spending, the deterioration in fiscal accounts has put upward pressure on inflation expectations and raises the odds that the central bank will need to pause for an extended period or even raise rates.
- » **Inflation inside target range but moving up:** In May, annual inflation adjusted slightly up as consumer prices reported a positive advance and the annual growth rate faced an unfavorable base effect. Moreover, inflation remained inside the 3%-4% target's upper range for the third consecutive month. Prices started to feel some heat coming from the recent currency depreciation, which pushes the annual inflation rate up.
- » **Monetary pause arrived:** Brazil's policymakers decided to reduce the speed of the monetary relaxation by reducing the magnitude of the rate cut in May. The decision was taken even though inflation has returned to the target's range, although it started a mild rebound in April and May, thus showing resilience to fall further. However, the bank reiterated that conditions should remain restrictive until inflation's declining trend consolidates.
- » **Trade provides additional help:** An additional push to the economy is provided by the trade balance as the surplus continues to swell, also helping government revenues. The trade surplus accumulated \$27.7 billion in the first four months of 2024 compared with \$23.5 billion a year earlier.

## Key assumptions

- » **Monetary policy:** Conditions remain restrictive for some time in 2024, with the policy interest rate staying above neutrality but approaching the line gradually as inflation returns to the target range. Policy returns to neutrality in the medium term, allowing the economy to perform at potential. Inflation remains the main monetary mandate.
- » **U.S. and China:** The two main markets for Brazilian exports continue to perform positively and will keep Brazil's economy performing well in the medium term.
- » **Russia-Ukraine and Middle East:** The Russian-Ukraine war continues but remains localized to Ukraine. Its impact on the global economy remains limited. The war between Israel and Hamas-Iran is not assumed to have any material impact on the outlook.
- » **Fiscal policy:** Policy normalizes and remains prudent. Spending flexibility will be provided as the economy recovers. Discipline will be preserved in the medium term, and the deficit stays at financeable levels.
- » **Free-market model:** The current leftist government implements free-market policies with social content. Structural changes are necessary to remove limitations to production capacity.
- » **Long term:** The economy will remain on the road to recovery. The economy's capacity will increase in the longer term as the economy adds structural changes.

## The outlook

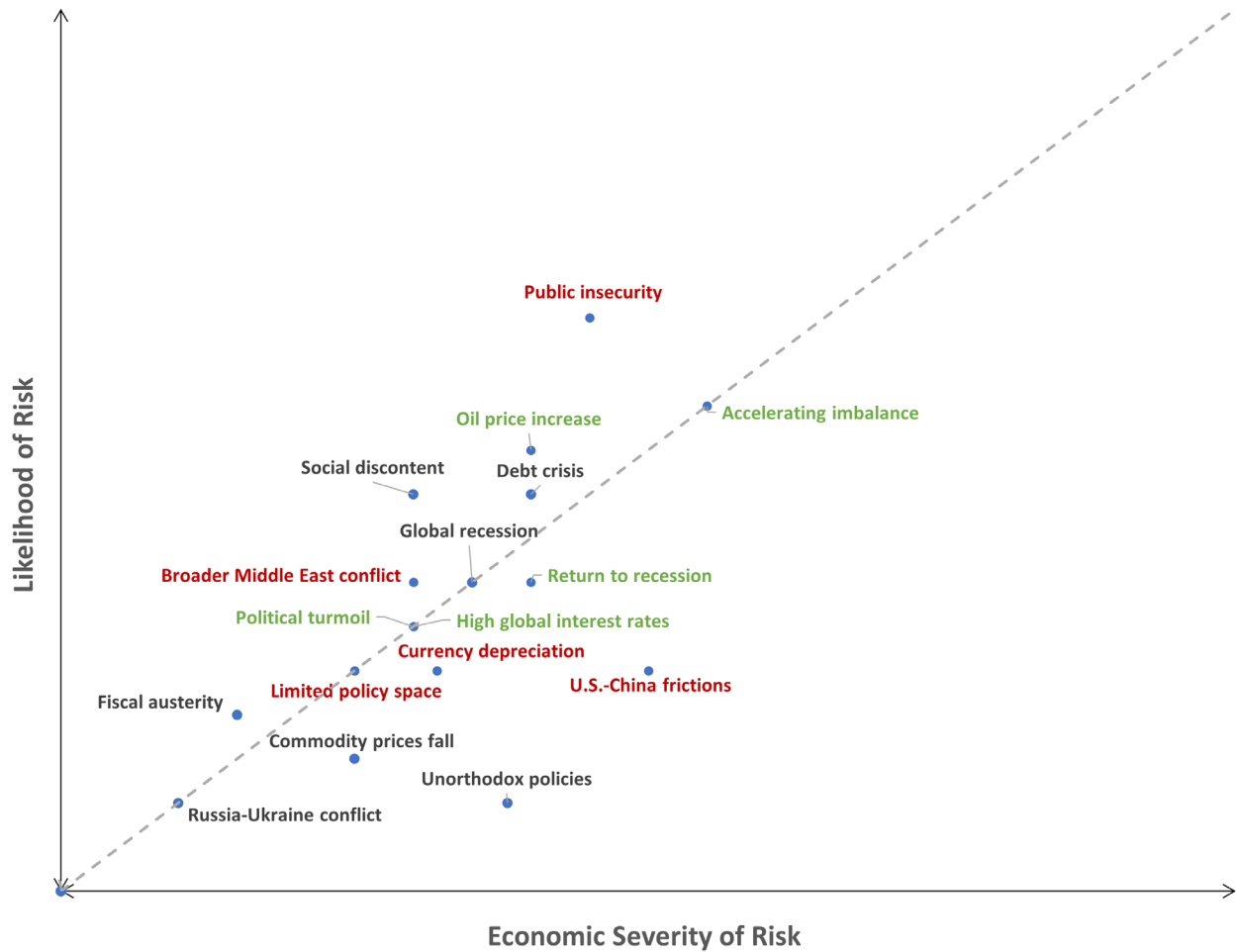
- » **Moderation and recovery:** The economy is on track to repeat another positive performance in 2024. Activity will still feel some degree of monetary restriction in the short term, but the domestic market will continue to recover. In the medium term, the economy will perform around its steady state as production capacity increases. Brazil's long-term economic performance depends on strengthening the structural sources of growth by increasing investment in physical and human capital.
- » **Moderate labor market gains:** Job creation will advance gradually as the economy performs positively in 2024, although the unemployment rate will stay above historical lows in the year. The unemployment rate will trend down in the medium term as the economy advances in accordance with its potential.
- » **Inflation around target:** Inflation will stay within the target's upper range of 3% to 4% in the short term and will remain around the central bank's target rate of 3% in the medium term. A more stable currency and consumer prices will help to keep inflation in line.
- » **Return to monetary neutrality:** Anchoring inflation around target will ease pressures and allow the central bank to keep reducing the nominal policy rate. However, monetary conditions

will remain tight until the policy rate returns to its neutral rate in late 2024. In the case of resilient inflation, the central bank will maintain monetary restrictions for longer.

- » **Financial market exposure:** Brazil's financial markets will remain subject to external volatility resulting from global risk aversion and the tight monetary conditions across the

globe. Equity markets are vulnerable to external shocks, particularly because Brazil's main trading partners, U.S. and China, influence expectations for growth and ultimately asset prices. Local markets will also be subject to the ups and downs dictated by the domestic political environment and major geopolitical events across the world.

# The Risk Matrix



**Note:** Changes in **red** are either an increase in the odds of the event occurring or a new downside risk. Changes in **green** reflect a decline in the probability of the event occurring.

# Recent Performance Dashboard

Brazil	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24
Unemployment rate, %	7.5	7.5	7.6	7.8	7.7	7.5	7.2	6.9	ND
Employment, m/m diff, ths	125.9	45.3	223.1	630.3	866.2	905.7	529.1	151.2	ND
Consumer price index, y/y % chg	4.7	4.6	4.5	4.3	4.0	3.8	3.9	4.2	4.3
Retail sales, m/m % chg	7.8	0.5	-3.1	-4.5	0.2	3.9	-1.0	2.3	ND
IP, m/m % chg	-4.3	-4.2	-3.4	1.4	2.1	3.9	2.9	4.0	ND
Merchandise trade balance, level USD bil	9.1	8.1	6.9	6.2	6.9	8.0	7.7	7.4	6.3
Policy rate, %	12.3	11.9	11.6	11.3	10.9	10.7	10.6	10.5	10.5
10-yr bond rate, %	11.3	10.9	10.7	10.7	11.0	11.3	11.7	11.9	11.9
Stock exchange index, m/m % chg	3.6	4.3	1.7	-0.5	-0.9	-0.6	-1.7	0.3	1.6

Stronger than prior 3-mo MA

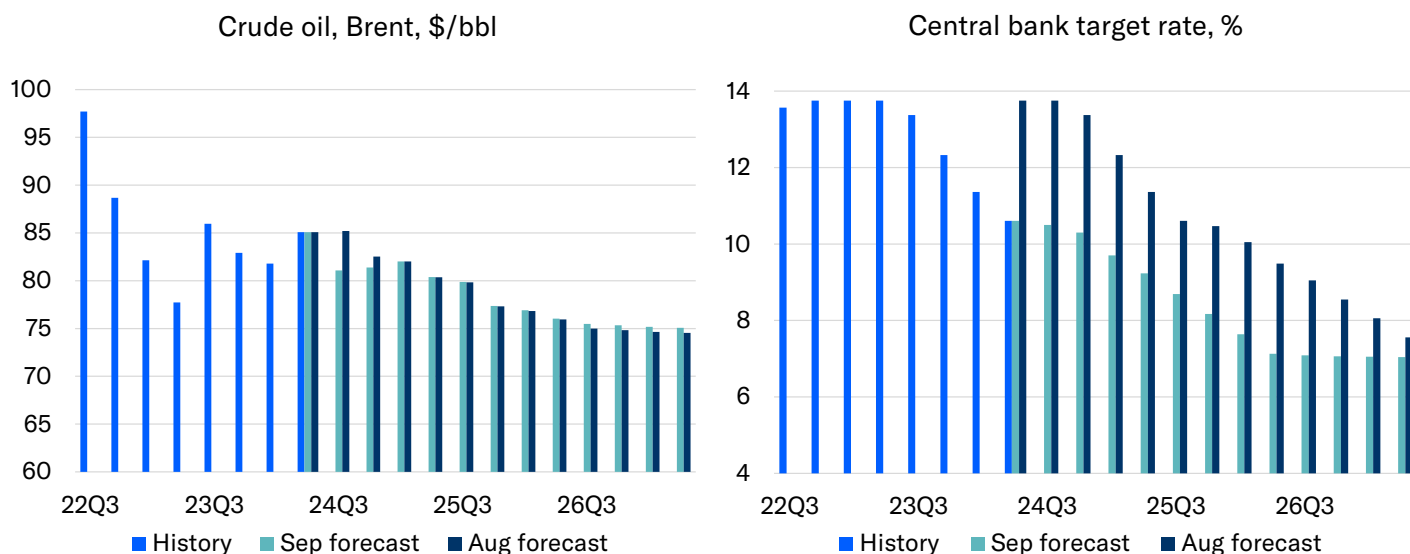
Unchanged from prior 3-mo MA

Weaker than prior 3-mo MA

Sources: Brazilian Institute of Geography and Statistics (IBGE), The World Bank: World Development Indicators, Ministry of Economy, Central Bank of Brazil, National Treasury, SIX Financial Information, Moody's Analytics

## Conditioning Assumptions

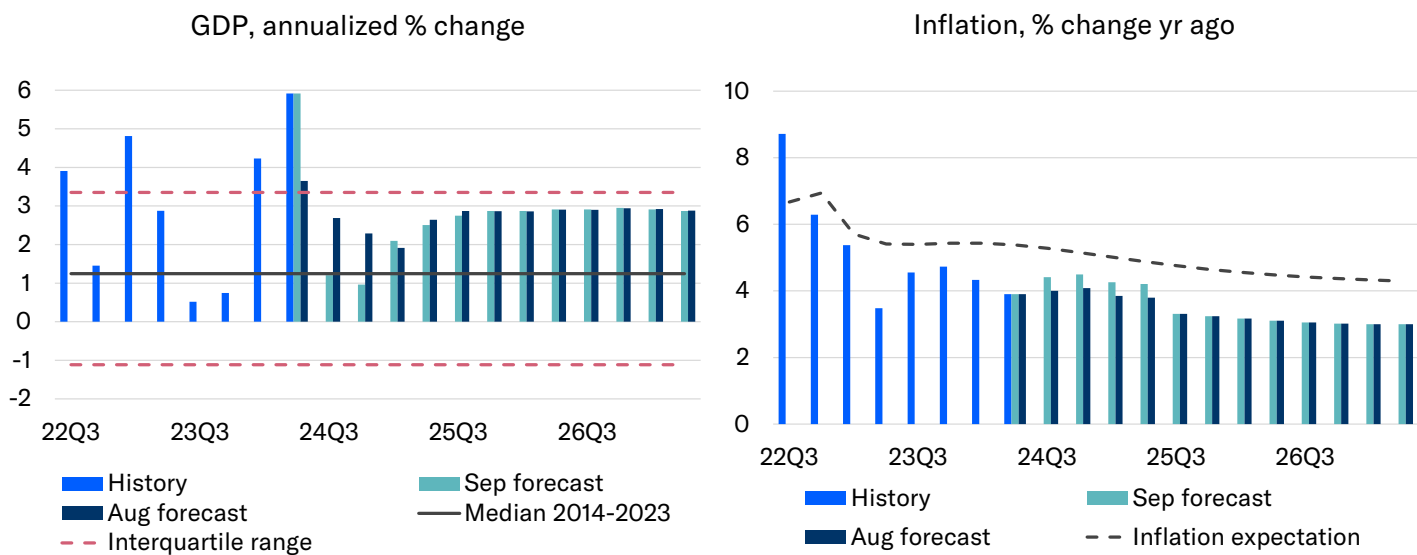
### Oil and Monetary Policy



Source: Moody's Analytics

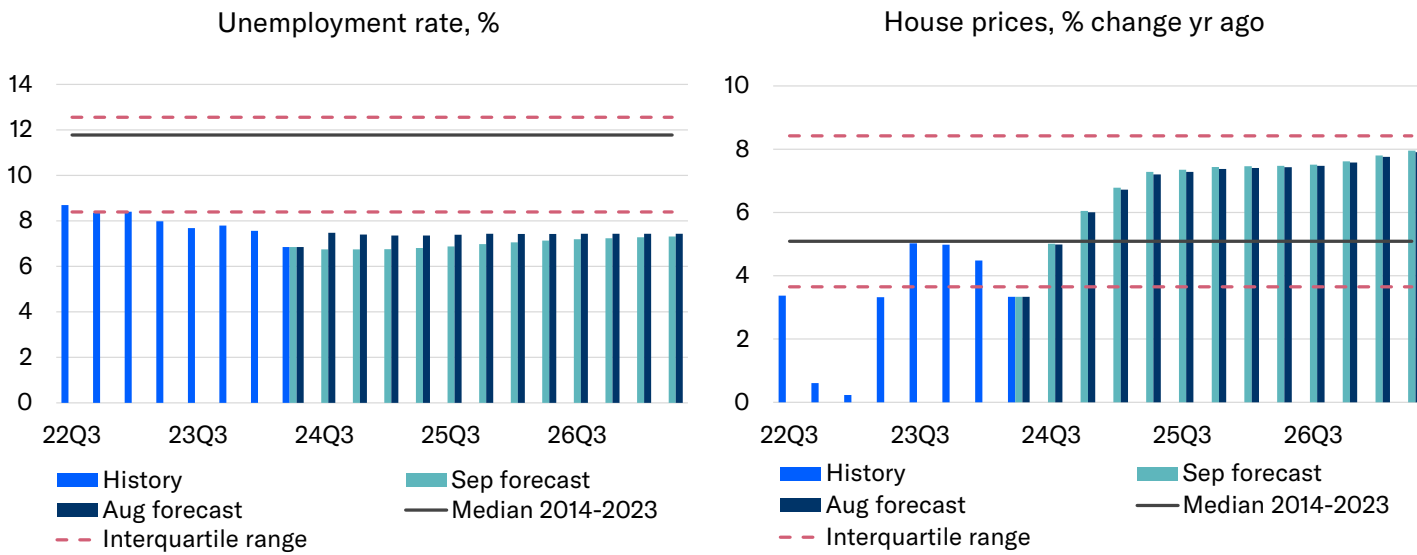
# Key Forecasts

## GDP and Inflation



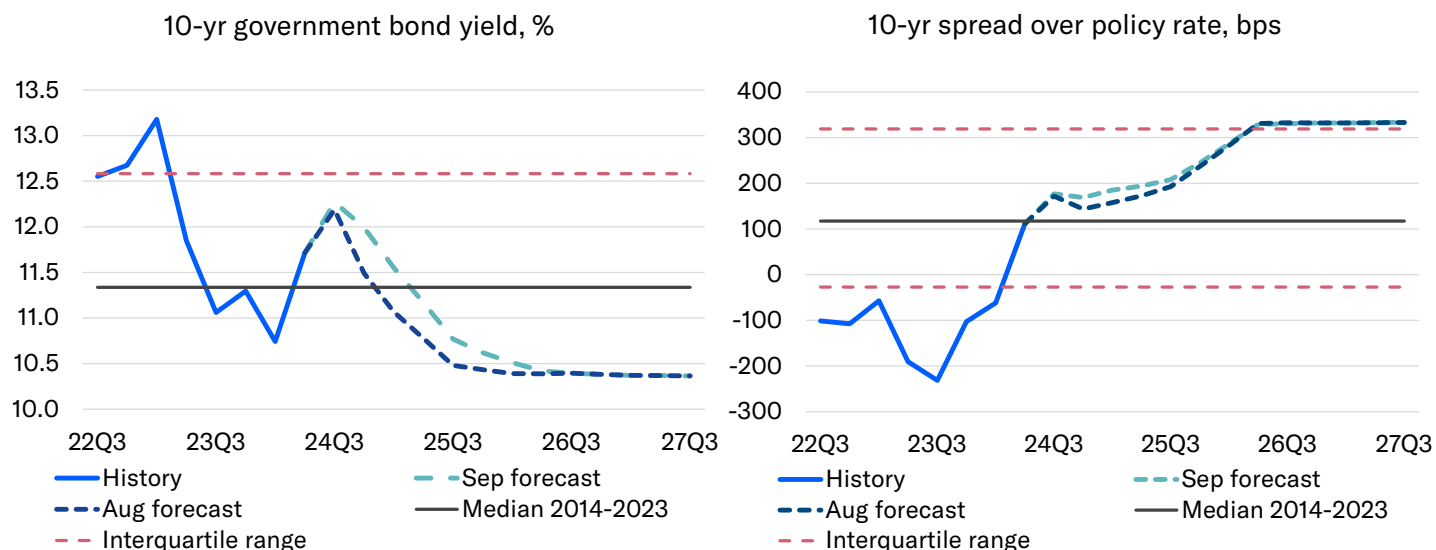
Source: Moody's Analytics

## Unemployment Rate and House Prices



Source: Moody's Analytics

## Bond Yields and Spreads



### BRAZIL MACRO BASELINE SCENARIO—FORECAST SUMMARY—SEPTEMBER 2024

	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Real GDP	95 BRL bil, SAAR	1,333.21	1,337.21	1,340.42	1,347.39	1,355.75	1,364.96	1,374.66	1,384.42	1,394.38
Change	%YA	2.83	3.00	3.06	2.53	1.69	2.08	2.55	2.75	2.85
Total Employment	Mil, SA	102.78	102.58	102.02	101.91	101.97	102.08	102.18	102.32	102.46
Change	%YA	2.93	2.59	2.45	1.43	-0.79	-0.49	0.16	0.40	0.48
Unemployment Rate	%, SA	6.85	6.75	6.75	6.76	6.81	6.88	6.98	7.06	7.13
Consumer Price Index	%YA	3.90	4.41	4.50	4.26	4.21	3.31	3.24	3.17	3.10
Official Discount Rate	%	10.60	10.50	10.30	9.70	9.23	8.69	8.17	7.64	7.13
Exchange Rate	BRL/USD	5.22	5.55	5.56	5.58	5.59	5.60	5.61	5.62	5.63
BOVESPA Index	Index	124,906.23	130,045.44	131,592.15	133,086.87	134,655.51	136,365.85	138,080.02	139,793.58	141,239.65
Change	%YA	13.65	10.26	7.80	3.29	7.81	4.86	4.93	5.04	4.89

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Real GDP	95 BRL bil, SAAR	1,161.59	1,220.88	1,259.12	1,295.70	1,331.26	1,360.69	1,399.47	1,440.29	1,482.25
Change	%YA	-3.57	5.10	3.13	2.91	2.74	2.21	2.85	2.92	2.91
Total Employment	Mil, SA	86.95	91.28	98.04	99.38	101.96	102.04	102.54	103.18	103.85
Change	%YA	-7.75	4.97	7.41	1.37	2.60	0.07	0.49	0.63	0.64
Unemployment Rate	%, SA	13.77	13.19	9.24	7.97	6.98	6.86	7.16	7.33	7.46
Consumer Price Index	%YA	3.22	8.29	9.35	4.53	4.29	3.75	3.09	3.00	3.00
Official Discount Rate	%	2.89	4.52	12.54	13.30	10.69	8.95	7.23	7.04	7.00
Exchange Rate	BRL/USD	5.16	5.40	5.17	4.99	5.32	5.60	5.64	5.68	5.72
BOVESPA Index	Index	98,656.76	116,826.42	109,667.01	114,240.33	128,848.89	135,547.06	142,126.22	148,643.97	155,056.11
Change	%YA	-1.96	18.42	-6.13	4.17	12.79	5.20	4.85	4.59	4.31



# Alternative Scenario S0—Upside—4th Percentile

**The probability that the economy will outperform this scenario is 4%. The probability that the economy will underperform this scenario is 96%.**

## Scenario Description

This scenario assumes that the Russia-Ukraine war does not cause meaningful interruptions of oil and other commodities supplies. Global supply-chain disruptions resolve faster as China's recovery outperforms expectations. The faster global recovery, and particularly expansion in China and the U.S., Brazil's main trade partners, stimulates the economy. The positive external shock provides a significant boost to the economy but also generates inflation pressures. Brazilian equity prices rise rapidly, improving consumer and investor sentiment. Brazil benefits mainly from China's increased demand for commodities; manufacturing exports remain a small slice of total shipments and are destined primarily for markets in Latin America. The military conflict between Israel and Hamas and the Iranian attack on Israel is a short-lived event with no regional proliferation.

## General Assumptions

- » The war between Russia and Ukraine and the between Israel and Hamas resolve quickly and concerns recede.
- » The standoff between Israel and Hezbollah and Israel and Houthi militants also ameliorates, and the impact on the global economy is not meaningful.
- » The conflict and supply disruptions are resolved faster.

## Economic Impact

- » The creation of employment accelerates, generating a continuous decline in the unemployment rate. Gains in productivity and better wages keep household consumption improving.
- » Brazilian stocks respond to the economy's positive performance and in synchronicity with gains in U.S. markets. Decreasing risk aversion and improving confidence propel capital flows to Brazilian markets, driving gains in the equity market.
- » The Brazilian currency depreciates at a rate necessary to offset the inflation differential.
- » Brazil's economy benefits from the steady recovery in China and the U.S., boosting Brazilian exports and investments.
- » Investor and consumer confidence recovers quickly, strengthening domestic demand. The positive supply shock unleashes Brazil's economic potential through the acceleration of capital accumulation and gains in productivity.
- » Monetary policy normalization is slower than in the baseline given that faster growth results in slightly higher inflation. The Central Bank of Brazil takes its time to slowly calibrate the policy rate as the economy advances at above potential.
- » Fiscal policy acts in a procyclical fashion, given the expansion of revenues in an overperforming economy. The fiscal balance improves quickly, opening more space for spending flexibility.
- » With the war resolved and supply chains improving, Brazil's economy starts down a path of accelerating economic growth, even beyond potential capacity. Domestic demand recovers with the expansion of spending and the acceleration of investment.
- » The fast economic expansion and the accelerating domestic absorption contribute to the development of demand pressures. As a result, inflation increases at a rate faster than that in the baseline during the first few years, which prompts a slower monetary normalization from the central bank.

# Alternative Scenario S4—Downside—96th Percentile

***This is the most extreme downside scenario. The probability that the economy will perform worse than in this scenario is 4%. The probability that it will perform better is 96%.***

## Scenario Description

The S4: Alternative Scenario 4 - Downside - 96th Percentile begins with an intensification of the war in Ukraine that spurs more serious concerns that the conflict will envelop NATO states. Tensions between the U.S. and China amplify, resulting in a months-long blockage of the Taiwan Strait. Fears of a more protracted and deadly conflict between Israel and Hamas, as well as Israel and Iran and Israel and Hezbollah, add to geopolitical tensions. The severe blow to stock markets and sentiment sends the U.S. and global economies into recession, resulting in a sharp decline in Brazilian exports and equity prices. Meanwhile, risk aversion and global capital flight hammer the Brazilian real. These events set the stage for a more severe and prolonged recession in Brazil.

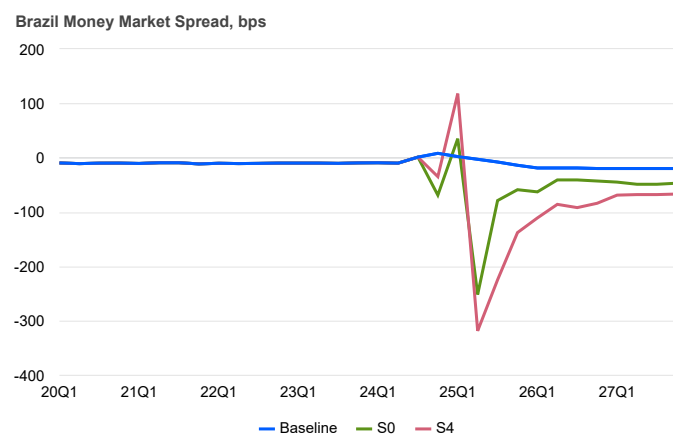
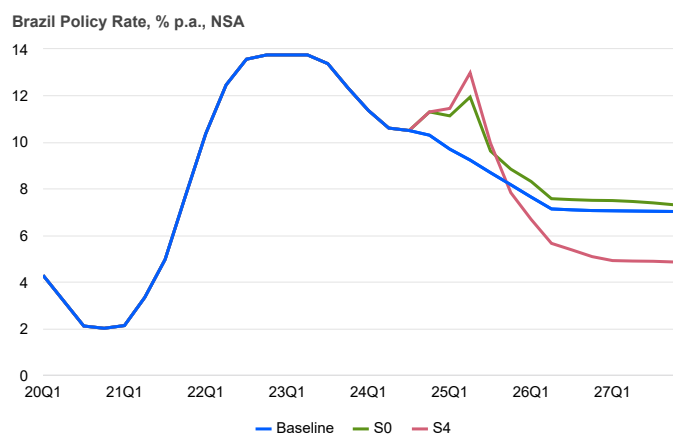
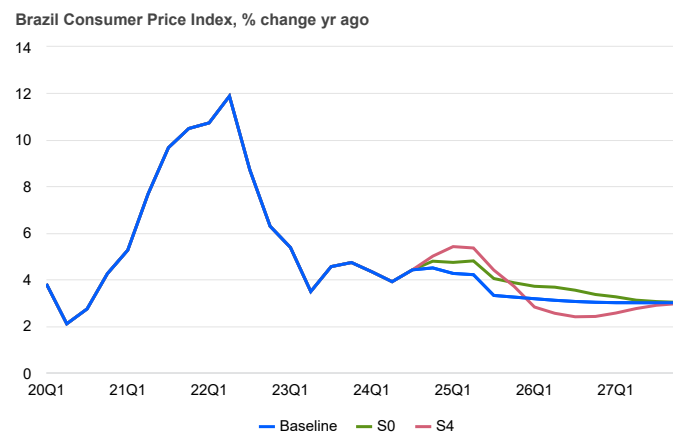
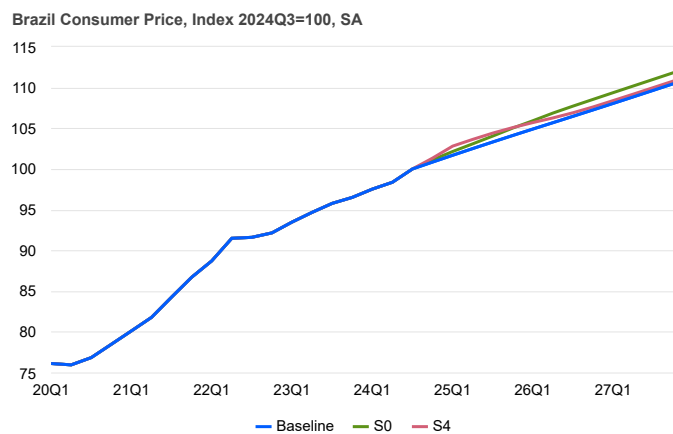
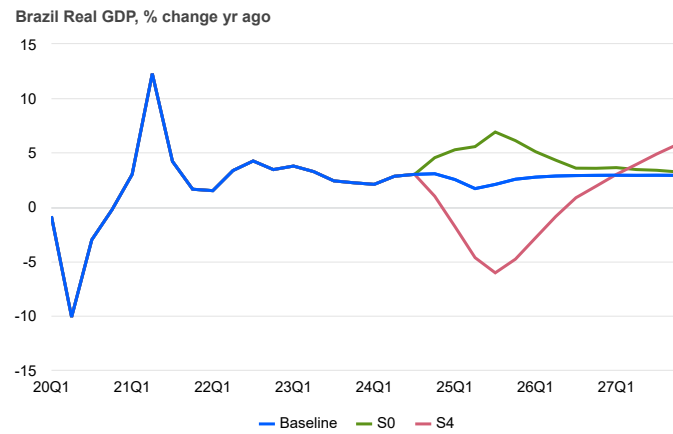
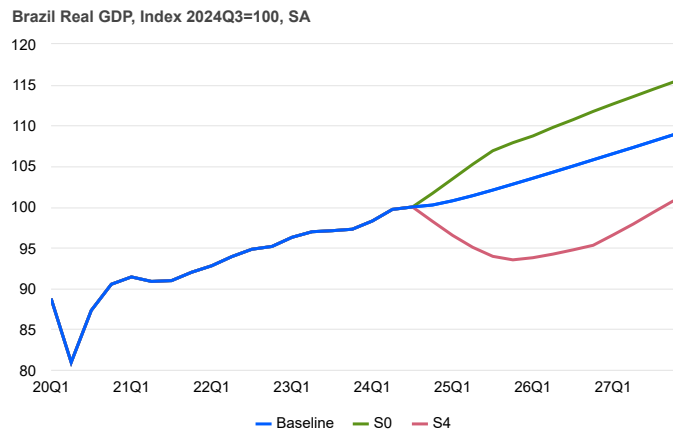
## General Assumptions

- » The war between Russia and Ukraine worsens more significantly and raises the risk of expanding beyond Ukraine.
- » Worries grow that the between Israel and Hamas and that escalation between Israel and Lebanon and Israel and Iran will lead to a wider conflict.
- » Tensions between China and Taiwan heighten and cause longer-lasting global trade disruptions.
- » Supply-chain disruptions deepen and extend, with significant effects on the global economy.
- » Global risk aversion increases as economic conditions deteriorate, affecting emerging market currencies, and producing the traditional overshooting in financial variables and key prices in the economy.
- » Monetary policy tightens as inflation persists and aggravates to the point of triggering a significant reaction from the Central Bank of Brazil.
- » Brazil's fiscal policy is procyclical by nature, implementing adjustment measures as economic conditions deteriorate and government accounts disarrange.

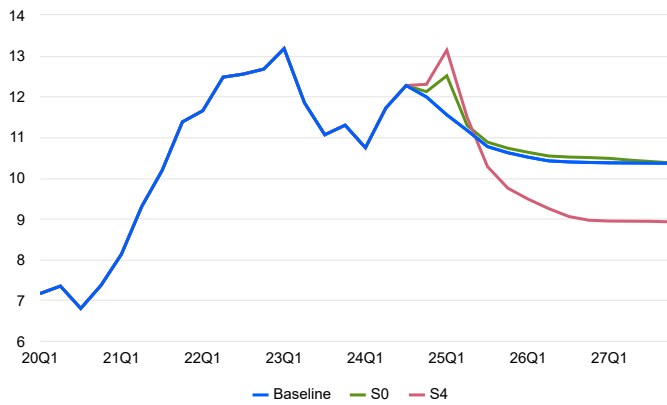
## Economic Impact

- » The Brazilian economy experiences a more significant downturn as Brazil's economy receives two shocks, external and domestic.
- » Unemployment rebounds and stays high and above baseline for some time because of the employment adjustment implemented by private and public sectors.
- » The Brazilian real reports an overshooting of different magnitude, which lasts for the first few quarters after the shock starts.
- » Inflation rebounds strongly in the short run as international prices jump much higher and the Brazilian currency overshoots more significantly.
- » Increasing global risks and significant concerns about an extended and aggravated war contaminate Brazil's financial markets.
- » As a policy reaction to the financial deterioration, the central bank is forced to act by tightening conditions in the short term to restore market stability.
- » After the shock vanishes, Brazil's economy starts to recover and rebounds significantly in the following few years as the international environment improves and the U.S. and Chinese economies advance faster.

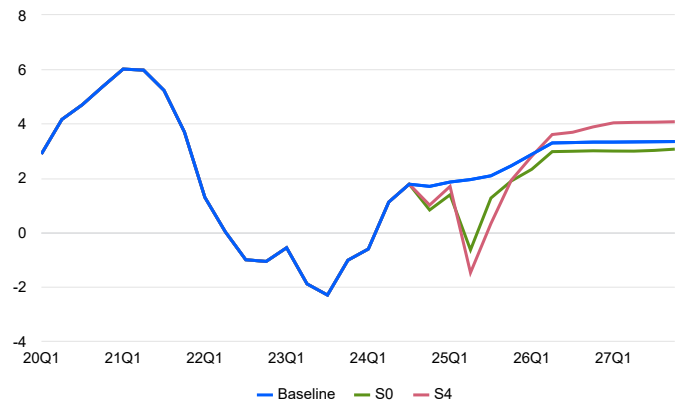
# Alternative Scenarios: Charts



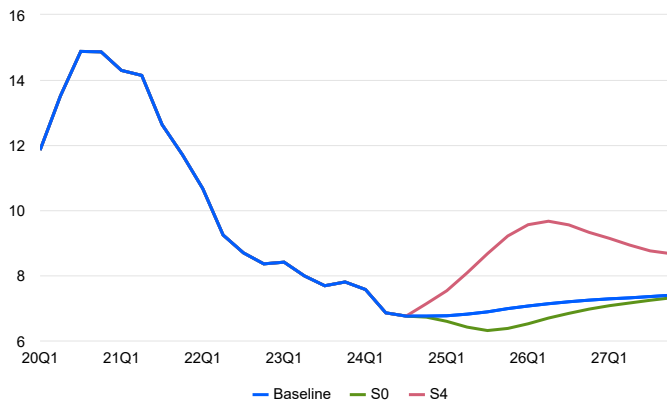
Brazil 10-Yr Government Bond Yield, % p.a., NSA



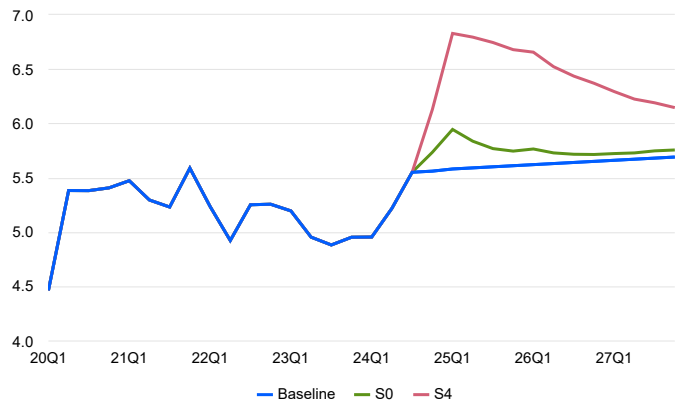
Brazil 10-yr Bond Spread, % p.a., NSA



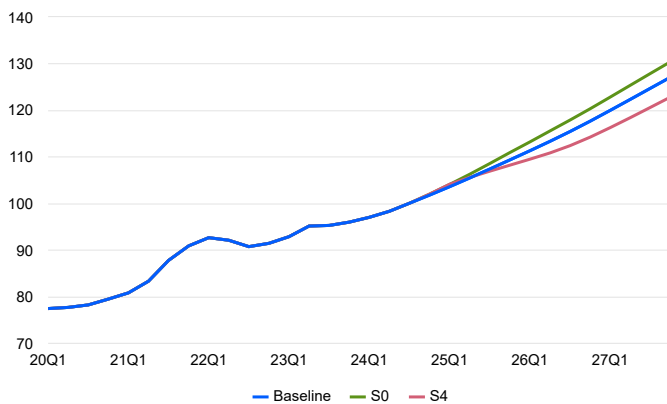
Brazil Unemployment Rate, %, SA



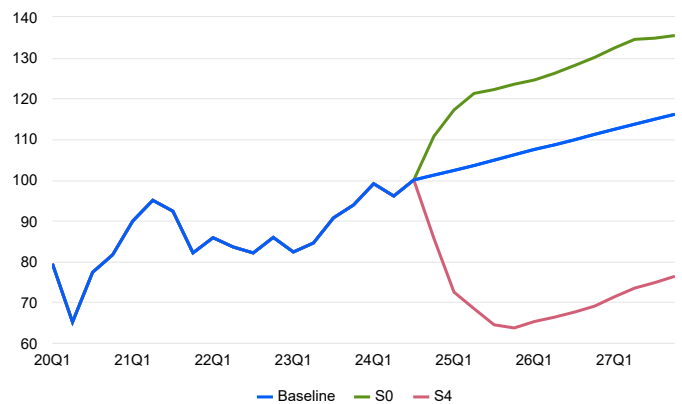
Brazil Exchange Rate, BRL per USD, NSA



Brazil House Price, Index 2024Q3=100, SA



Brazil Stock Price, Index 2024Q3=100, NSA



## Alternative Scenarios: Severity

Variable	Metric	BL -	S0 4%	S4 96%
GDP	Deviation from baseline, %	-	4.4	-8.1
	Max/min growth rate, %	3.6/1.9	6.9	-6.1
	# of quarters to max/min growth	1/3	4	4
Unemployment rate	Deviation from baseline, ppt	-	-0.3	1.7
	Max/min level, %	7.5/6.8	6.3	9.7
	# of quarters to max/min level	15/1	4	7
CPI	Deviation from baseline, %	-	0.9	0.6
	Max/min growth rate, %	4.5/3.0	4.8	2.4
	# of quarters to max/min growth	1/9	1	8
Bond yields	Deviation from baseline, ppt	-	-0.1	-1.0
	Max/min level, %	12.7/10.3	12.5	8.9
	# of quarters to max/min level	1/17	2	10
House prices	Deviation from baseline, %	-	1.3	-1.9
	Max/min growth rate, %	7.8/6.1	8.8	5.0
	# of quarters to max/min growth	5/1	5	7

### Notes:

Deviation from baseline refers to the percentage deviation from the baseline averaged over the first three years of the forecast. For rates, it is in terms of percentage points.

Growth rate refers to the year-over-year growth rate calculated from quarterly data. Green values indicate that the maximum is used (upside scenarios) and red values indicate that the minimum is used (downside scenarios).

Source: Moody's Analytics

# BRAZIL MACRO S0 SCENARIO—FORECAST SUMMARY—SEPTEMBER 2024

	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Real GDP	95 BRL bil, SAAR	1,333.21	1,337.21	1,359.66	1,383.42	1,407.30	1,429.50	1,442.74	1,453.83	1,467.90
Change	%YA	2.83	3.00	4.54	5.27	5.56	6.90	6.11	5.09	4.31
Total Employment	Mil, SA	102.78	102.58	102.05	102.10	102.41	102.71	102.85	102.92	102.95
Change	%YA	2.93	2.59	2.49	1.62	-0.36	0.12	0.78	0.80	0.53
Unemployment Rate	%, SA	6.85	6.75	6.72	6.59	6.41	6.31	6.37	6.51	6.69
Consumer Price Index	%YA	3.90	4.41	4.79	4.73	4.80	4.04	3.86	3.71	3.67
Official Discount Rate	%	10.60	10.50	11.30	11.13	11.94	9.62	8.84	8.31	7.57
Exchange Rate	BRL/USD	5.22	5.55	5.73	5.94	5.84	5.77	5.74	5.76	5.73
BOVESPA Index	Index	124,906.23	130,045.44	143,997.30	152,395.90	157,687.10	158,931.50	160,624.10	161,965.30	164,081.40
Change	%YA	13.65	10.26	17.96	18.27	26.24	22.21	11.55	6.28	4.06

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Real GDP	95 BRL bil, SAAR	1,161.59	1,220.88	1,259.12	1,295.70	1,336.07	1,415.74	1,474.10	1,524.49	1,567.27
Change	%YA	-3.57	5.10	3.13	2.91	3.12	5.96	4.12	3.42	2.81
Total Employment	Mil, SA	86.95	91.28	98.04	99.38	101.97	102.52	102.99	103.34	103.97
Change	%YA	-7.75	4.97	7.41	1.37	2.61	0.53	0.46	0.34	0.61
Unemployment Rate	%, SA	13.77	13.19	9.24	7.97	6.97	6.42	6.75	7.19	7.35
Consumer Price Index	%YA	3.22	8.29	9.35	4.53	4.36	4.35	3.57	3.11	3.00
Official Discount Rate	%	2.89	4.52	12.54	13.30	10.94	10.38	7.73	7.41	7.01
Exchange Rate	BRL/USD	5.16	5.40	5.17	4.99	5.36	5.82	5.73	5.74	5.79
BOVESPA Index	Index	98,656.76	116,826.42	109,667.01	114,240.33	131,950.18	157,409.65	165,452.78	174,671.05	178,591.58
Change	%YA	-1.96	18.42	-6.13	4.17	15.50	19.29	5.11	5.57	2.24

# BRAZIL MACRO S4 SCENARIO—FORECAST SUMMARY—SEPTEMBER 2024

	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Real GDP	95 BRL bil, SAAR	1,333.21	1,337.21	1,313.50	1,290.51	1,270.95	1,256.10	1,250.36	1,253.90	1,259.80
Change	%YA	2.83	3.00	0.99	-1.80	-4.67	-6.07	-4.81	-2.84	-0.88
Total Employment	Mil, SA	102.78	102.58	101.60	101.07	100.58	100.12	99.74	99.57	99.67
Change	%YA	2.93	2.59	2.03	0.59	-2.14	-2.40	-1.84	-1.49	-0.91
Unemployment Rate	%, SA	6.85	6.75	7.13	7.53	8.08	8.67	9.21	9.56	9.66
Consumer Price Index	%YA	3.90	4.41	5.00	5.41	5.35	4.40	3.70	2.82	2.55
Official Discount Rate	%	10.60	10.50	11.30	11.45	12.98	9.96	7.83	6.68	5.65
Exchange Rate	BRL/USD	5.22	5.55	6.13	6.83	6.79	6.74	6.68	6.66	6.52
BOVESPA Index	Index	124,906.23	130,045.44	111,381.00	94,225.44	88,934.97	83,779.03	82,777.55	84,816.43	86,211.96
Change	%YA	13.65	10.26	-8.76	-26.87	-28.80	-35.58	-25.68	-9.99	-3.06

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Real GDP	95 BRL bil, SAAR	1,161.59	1,220.88	1,259.12	1,295.70	1,324.53	1,266.98	1,263.69	1,319.14	1,388.55
Change	%YA	-3.57	5.10	3.13	2.91	2.22	-4.34	-0.26	4.39	5.26
Total Employment	Mil, SA	86.95	91.28	98.04	99.38	101.86	100.38	99.92	101.47	102.88
Change	%YA	-7.75	4.97	7.41	1.37	2.50	-1.45	-0.45	1.54	1.39
Unemployment Rate	%, SA	13.77	13.19	9.24	7.97	7.07	8.37	9.52	8.87	8.32
Consumer Price Index	%YA	3.22	8.29	9.35	4.53	4.42	4.71	2.54	2.79	2.98
Official Discount Rate	%	2.89	4.52	12.54	13.30	10.94	10.56	5.70	4.88	4.70
Exchange Rate	BRL/USD	5.16	5.40	5.17	4.99	5.46	6.76	6.50	6.21	6.14
BOVESPA Index	Index	98,656.76	116,826.42	109,667.01	114,240.33	123,796.11	87,429.25	87,148.13	96,191.69	106,102.50
Change	%YA	-1.96	18.42	-6.13	4.17	8.36	-29.38	-0.32	10.38	10.30

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