# BRAZIL: MAIN MACRO-FINANCIAL INDICATORS

International Economics and Euro Area
Department





Table 1

# Brazil: main economic and social indicators

| 222  | 2022                 | 116                  |                      | 2021                 |       |       |       |
|--|----------------------|----------------------|----------------------|----------------------|-------|-------|-------|
| GDP per capita (constant \$)                     | 8,803                | Life expectance      |                      | 72.8                 |       |       |       |
| GDP per capita (PPP)                             | 14,744               | Poverty rate (9      | 11.3                 |                      |       |       |       |
| GDP (\$bn)                                       | 1,922                | Inequality (Gin      |                      | 52.9                 |       |       |       |
| Population (million)                             | 215.8                | Inflation target     | 3.2                  | 25% (± 1.5%)         |       |       |       |
| Monetary and real sector, and prices             | 2000-2004<br>average | 2005-2009<br>average | 2010-2014<br>average | 2015-2019<br>average | 2020  | 2021  | 2022  |
| GDP (year-on-year rate)                          | 3.1                  | 3.7                  | 3.4                  | -0.5                 | -3.6  | 5.3   | 3.0   |
| CPI (year-on-year rate)                          | 8.7                  | 5.1                  | 5.9                  | 5.7                  | 3.2   | 8.3   | 9.3   |
| Underlying CPI (year-on-year rate)               | 8.2                  | 5.1                  | 5.9                  | 5.5                  | 2.2   | 5.1   | 8.8   |
| Policy interest rate (%)                         | 18.8                 | 13.0                 | 10.2                 | 9.2                  | 2.0   | 9.3   | 13.8  |
| Unemployment rate (%)                            | 11.6                 | 8.6                  | 7.1                  | 11.3                 | 13.5  | 13.5  | 9.5   |
| Budget balance (% of GDP)                        | -5.3                 | -3.0                 | -3.2                 | -7.9                 | -13.3 | -4.3  | -4.6  |
| Primary balance (% of GDP)                       | 2.5                  | 3.1                  | 1.8                  | -1.7                 | -9.2  | 0.7   | 1.3   |
| Public debt (% of GDP)                           | 60.9                 | 57.1                 | 52.9                 | 71.7                 | 86.9  | 78.3  | 72.9  |
| External sector                                  |                      |                      |                      |                      |       |       |       |
| Trade openness (% of GDP)                        | 27.4                 | 25.4                 | 24.6                 | 26.7                 | 32.3  | 38.2  | 39.3  |
| Current account balance (% of GDP)               | -1.4                 | -0.1                 | -3.5                 | -2.3                 | -1.8  | -2.8  | -2.9  |
| Foreign direct investment received (% of GDP)    | 3.4                  | 2.3                  | 3.6                  | 3.8                  | 2.5   | 2.8   | 4.8   |
| Portfolio capital inflows (% of GDP)             | 0.2                  | 1.6                  | 1.7                  | -0.3                 | -0.1  | 1.4   | -0.2  |
| Reserves (months of imports)                     | 9.1                  | 13.3                 | 18.1                 | 25.6                 | 23.2  | 16.3  | 12.5  |
| Reserves (% of GDP)                              | 7.0                  | 10.3                 | 14.1                 | 19.1                 | 23.7  | 21.5  | 16.5  |
| ARA metrics (IMF) (b)                            | 0.7                  | 1.1                  | 1.5                  | 1.7                  | 1.6   | 1.7   | 1.4   |
| External debt (% of GDP)                         | 39.1                 | 16.2                 | 18.1                 | 29.4                 | 36.6  | 34.3  | 29.3  |
| Domestic debt held by non-residents (% of total) | _                    | 7.7                  | 14.5                 | 12.9                 | 9.2   | 9.5   | 9.7   |
| inancial markets                                 |                      |                      |                      |                      |       |       |       |
| Exchange rate against the euro                   | 2.7                  | 2.9                  | 2.6                  | 4.0                  | 5.9   | 6.4   | 5.4   |
| Exchange rate against the dollar                 | 2.6                  | 2.4                  | 2.0                  | 3.5                  | 5.2   | 5.4   | 5.2   |
| 10-year government debt yield (%)                | 12.6                 | 12.3                 | 11.6                 | 10.8                 | 7.1   | 9.7   | 12.3  |
| Average government debt maturity (months)        | 34                   | 34                   | 46                   | 51                   | 41    | 41    | 41    |
| Sovereign CDS (basis points)                     | _                    | 168                  | 140                  | 241                  | 209   | 191   | 248   |
| Petrobras CDS (basis points)                     | _                    | 170                  | 195                  | 410                  | 300   | 224   | 291   |
| Banking sector                                   |                      |                      |                      |                      |       |       |       |
| Size of the sector (% of GDP)                    | 109.2                | 139.9                | 186.7                | 203.9                | 205.5 | 229.2 | 218.4 |
| Credit to the private sector (% of GDP)          | 28.9                 | 40.2                 | 60.7                 | 62.3                 | 62.8  | 68.7  | 69.7  |
| Basel credit-to-GDP gap (c)                      | _                    | 3.9                  | 7.3                  | 5.0                  | 0.0   | 6.2   | 3.0   |
| Housing prices (year-on-year)                    | -1.1                 | 11.5                 | 8.0                  | -5.4                 | -0.2  | 4.5   | -0.2  |
| Regulatory capital/RWAs                          | 16.3                 | 17.3                 | 16.6                 | 17.0                 | 16.9  | 16.5  | 16.0  |
| Tier 1   | _                    | 14.1                 | 12.9                 | 13.6                 | 14.6  | 14.5  | 14.0  |
| RWAs/total assets                                |                      | 81.3                 | 85.3                 | 68.1                 | 60.5  | 62.0  | 63.4  |
| Non-performing loans (% of portfolio)            | 6.6                  | 4.4                  | 3.8                  | 3.2                  | 3.0   | 2.8   | 2.3   |
| ROA (d)  | 1.3                  | 2.3                  | 1.6                  | 1.5                  | 1.2   | 1.5   |       |
| ROE (e)  | 12.9                 | 21.2                 | 14.7                 | 14.2                 | 12.3  | 15.0  |       |
| Liquidity ratio                                  | -                    | _                    | 1.8                  | 2.2                  | 2.9   | 1.8   | 1.7   |
| Primary expenditure (% of total revenues)        |                      | 56.8                 | 53.1                 | 50.8                 | 49.2  | 50.6  | 49.5  |
| Net interest income (% of gross revenues) (f)    | -                    | 78.0                 | 76.3                 | 71.1                 | 60.8  | 69.6  | 71.2  |

**SOURCES:** IMF, Thomson Reuters and national statistics.

- ${\bf a} \ \ {\sf Percentage \ of \ population \ with \ income \ of \ less \ than \ \$3.65 \ (purchasing \ power \ parity \ in \ 2017 \ dollars) \ per \ day.}$
- b Drawing on the IMF's calculations for assessing reserve adequacy, which take into account the level of reserves relative to different aggregates and the related opportunity cost.
- c Difference between the actual level and the trend in credit to the private sector as a percentage of GDP.
- d Return on Assets (ROA) is defined as profit as a percentage of assets in the banking sector portfolio.
- e Return on Equity (ROE) is defined as profit as a percentage of capital in the banking sector.
- f Defined as the ratio of net income from financial intermediation to operating income. Provisioning expenses are not included in the numerator. Operating income comprises income from financial intermediation, income from services, income from shares and other operating income/expenditure, except for administration expenses.

# Table 2

# Brazil: situation of vulnerability (a)

Time series

With respect to other emerging market

|  |      |       |       |       |       |       |      |    |      |       |       | economies     |  |  |
|--|------|-------|-------|-------|-------|-------|------|----|------|-------|-------|---------------|--|--|
|  | 2018 |       | 2019  |       | 2020  |       | 2021 |    | 2022 |       | 2023  | Latest figure |  |  |
|  | H1   | H2    | H1    | H2    | H1    | H2    | H1   | H2 | H1   | H2    | H1    |               |  |  |
| Sovereign spread (bp)                      |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Stock market (quarterly change)            |      |       |       |       |       |       |      |    |      |       | 0.731 |               |  |  |
| Exchange rate (quarterly change)           |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Sovereign spread (quarterly change)        |      |       |       |       | 0.731 |       |      |    |      |       |       |               |  |  |
| GDP (year-on-year)                         |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Inflation                                  |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Industrial output                          |      |       |       | 0.723 |       |       |      |    |      |       |       |               |  |  |
| Currency overvaluation                     |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Budget balance (% of GDP)                  |      |       | 0.721 |       |       |       |      |    |      |       |       |               |  |  |
| Gross public sector debt (% of GDP)        |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Credit (real, year-on-year)                |      | 0.749 |       |       |       |       |      |    |      |       |       |               |  |  |
| Deposits (real, year-on-year)              |      |       |       |       | 0.745 |       |      |    |      |       |       |               |  |  |
| Net foreign assets of banks (% of GDP)     |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Non-performing loans (% of portfolio)      |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Loan-to-deposit ratio                      |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Banks' equity index (quarterly change)     |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Banks' external debt spread                |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Interbank interest rate                    |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Net interest income                        |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Banking risk (BICRA)                       |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Banking risk (IHS)                         |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Current account balance (% of GDP)         |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Foreign direct investment (% of GDP)       |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| External debt (% of GDP)                   |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Short-term external debt (% of reserves)   |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Reserves (% of GDP)                        |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| External debt service (% of exports)       |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| Portfolio investment (% of GDP)            |      |       |       |       |       |       |      |    |      |       |       |               |  |  |
| GDP per capita (change)                    |      |       |       |       |       |       |      |    |      |       | _     |               |  |  |
| Political risk (IHS)                       |      |       |       |       |       |       |      |    |      |       | 0.712 |               |  |  |
| Geopolitical risk (GPR)                    |      |       |       |       |       | 0.711 |      |    | 0.75 |       |       |               |  |  |
| Sovereign rating                           |      |       |       |       |       |       |      |    |      | 0.702 | 0.707 |               |  |  |
| Stability/Absence of violence (percentile) |      |       |       |       |       |       |      |    | _    | _     | _     |               |  |  |

SOURCE: Irma Alonso and Luis Molina. (2021). "A GPS navigator to monitor risks in emerging economies: the vulnerability dashboard". Documentos Ocasionales, 2111, Banco de España. https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosOcasionales/21/Files/do2111e.pdf

a The risk level is indicated with shades of green (associated with lower levels of vulnerability), yellow (medium vulnerability) and red (variables in the highest risk percentiles).

Table 3

Spain and euro area exposure to Brazil (2022, unless otherwise stated)

|   | \$bn      |       | Percentage of GDP |       | Percentage of total |       | Ranking   |       |
|---|-----------|-------|-------------------|-------|---------------------|-------|-----------|-------|
|   | Euro area | Spain | Euro area         | Spain | Euro area           | Spain | Euro area | Spain |
| Exports of goods (2022)   | 40.6      | 3.7   | 0.3               | 0.3   | 0.7                 | 0.9   | 28        | 16    |
| Imports of goods (2022)   | 48.7      | 9.4   | 0.3               | 0.7   | 0.8                 | 1.9   | 24        | 12    |
| Exports of services (2021)  | 13.0      | 1.1   | 0.1               | 0.1   | 0.6                 | 0.9   | 30        | 17    |
| Imports of services (2021)  | 6.0       | 0.5   | 0.0               | 0.0   | 0.3                 | 0.7   | 42        | 18    |
| International Investment Position:<br>Foreign direct investment. Assets (2021)              | 303.5     | 42.7  | 2.1               | 3.0   | 1.7                 | 7.1   | 13        | 4     |
| International Investment Position: Foreign direct investment. Liabilities (2021)            | -6.8      | 5.3   | 0.0               | 0.4   | 0.0                 | 0.6   | 236       | 18    |
| International Investment Position:<br>Portfolio investment. Assets (June 2022)              | 70.1      | 2.2   | 0.5               | 0.2   | 0.3                 | 0.3   | 29        | 23    |
| International Investment Position:<br>Portfolio investment. Liabilities (June 2022)         | 15.0      | 5.6   | 0.1               | 0.4   | 0.1                 | 0.5   | 33        | 18    |
| Credit exposure to Brazil of BIS reporting banks (a) (September 2022)                       | 204.7     | 171.2 | 1.4               | 12.0  | 1.9                 | 9.0   | 16        | 6     |
| Claims of Brazilian banks vis-à-vis residents<br>of the euro area or Spain (September 2022) | 4.7       | 0.8   | 0.0               | 0.1   | 0.1                 | 0.2   | 21        | 16    |
| Debt of Brazilian residents to banks from the euro area or Spain (b) (September 2022)       | 204.7     | 171.2 | 12.4              | 10.4  | 53.3                | 44.6  | _         | 1     |

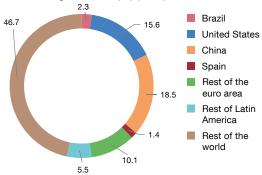
SOURCES: IMF, OECD, Eurostat, BIS and national statistics.

a With respect to euro area and Spanish figures.

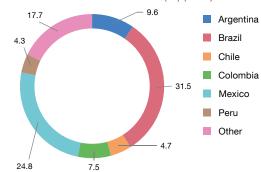
**b** With respect to Brazilian figures.

# Brazil: structural economic data

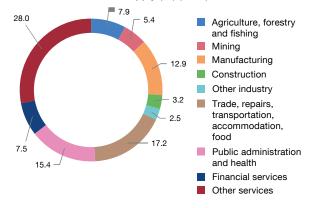




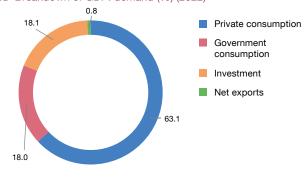
# 1.b Share of Latin American GDP (%) (2022)



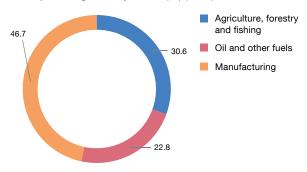
# 1.c Breakdown of GDP: supply (%) (2022)



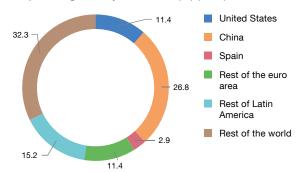
# 1.d Breakdown of GDP: demand (%) (2022)



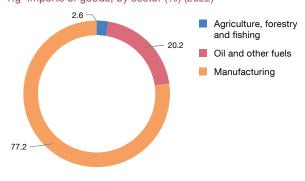
# 1.e Exports of goods, by sector (%) (2022)



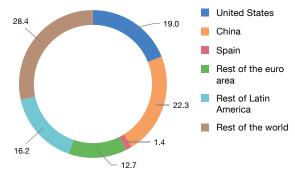
# 1.f Exports of goods, by destination (%) (2022)



# 1.g Imports of goods, by sector (%) (2022)



# 1.h Imports of goods, by origin (%) (2022)



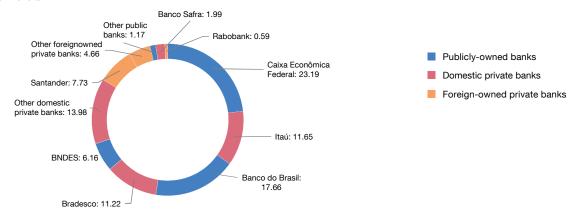
SOURCES: OECD and IMF.



# Brazil: structure of the banking sector and relevance for Spain

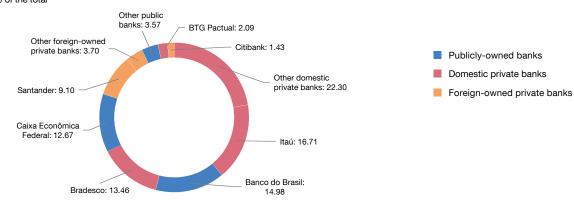
# 2.a Breakdown of the banking sector (March 2023): loans

#### % of the total

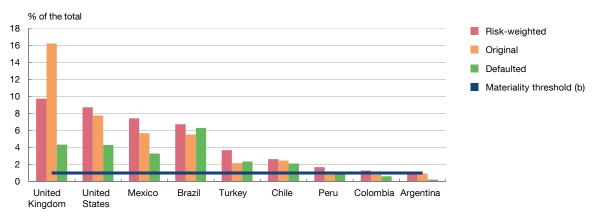


# 2.b Breakdown of the banking sector (March 2023): deposits

#### % of the total



# 2.c Exposures to material third countries, by type of exposure (December 2022) (a)



SOURCES: Banco Central do Brasil and Banco de España.

a Credit and other claims on households and non-financial corporations, excluding public entities and financial institutions.

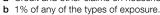
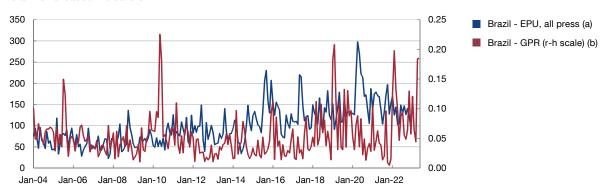




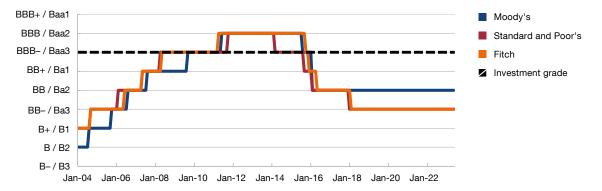
Chart 3

# Brazil: uncertainty and geopolitical risk indicators and sovereign ratings

# 3.a News-based indicators



#### 3.b Sovereign ratings



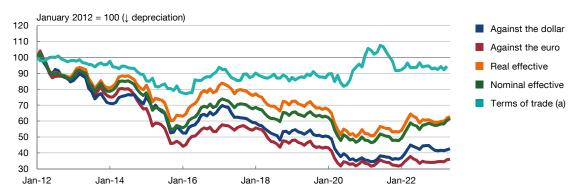
SOURCES: Banco de España, Moody's, Standard and Poor's and Fitch, in addition to: Dario Caldara and Matteo Iacoviello. (2021). "Measuring Geopolitical Risk". International Finance Discussion Papers - Board of Governors of the Federal Reserve System; Corinna Ghirelli, Javier J. Pérez and Alberto Urtasun. (2021). "The spillover effects of economic policy uncertainty in Latin America on the Spanish economy". Latin American Journal of Central Banking, 2(2); and Erik Andres-Escayola, Corinna Ghirelli, Luis Molina, Javier J. Pérez and Elena Vidal. (2022). "Using newspapers for textual indicators: which and how many?". Banco de España - Documentos de Trabajo, 2235. https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosTrabajo/22/Files/dt2235e.pdf.

- a The Economic Policy Uncertainty (EPU) index is constructed drawing on the local and international press using words related to uncertainty over economic policies, based on the following methodology: Scott R. Baker, Nicholas Bloom and Steven J. Davis. (2016). "Measuring economic policy uncertainty". Quarterly Journal of Economics, 131(4), pp. 1593-1636.
- **b** The Geopolitical Risk (GPR) Index is a measure of adverse geopolitical events based on a survey of newspaper articles in the English-speaking press covering geopolitical unrest.

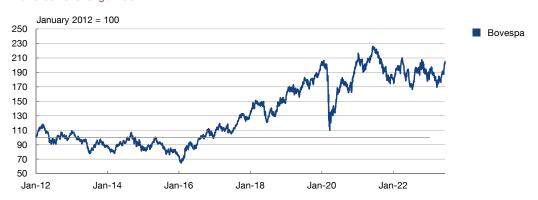


Brazil: exchange rates, stock market, sovereign spreads, long-term interest rates, financial conditions and financial stress

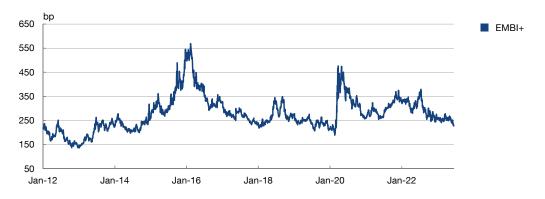
# 4.a Exchange rates of the Brazilian real



# 4.b Stock exchange index



# 4.c Sovereign spread



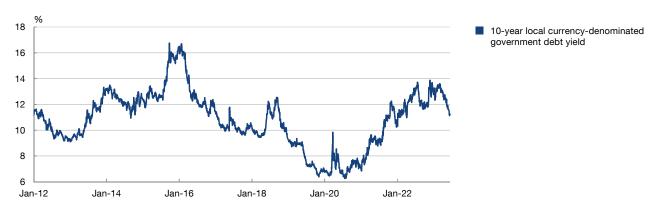
SOURCES: Banco de España and Refinitiv.

a Ratio of export prices to import prices.

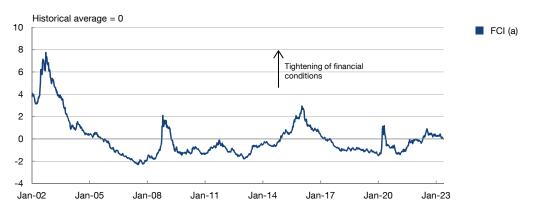


Brazil: exchange rates, stock market, sovereign spreads, long-term interest rates, financial conditions and financial stress (cont'd)

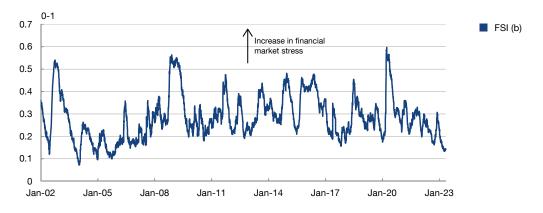
# 4.d Long-term interest rate in local currency



#### 4.e Financial conditions index



# 4.f Financial stress index



# SOURCES: Banco de España and Refinitiv.

- a Estimated using a principal component methodology drawing on changes in the stock market, short and long-term interest rates, the price of commodities and exchange rate fluctuations.
- **b** Calculated on the basis of volatilities and spreads of six market segments, standardised and grouped discounting any cross-correlations between indicators.

