Covid-19: new deaths slowly decreasing

Daily new confirmed deaths, rolling 7-day average
The disease across Brazilian regions

New daily cases per million, 7 - days moving average, 04/Apr – 19/Sep

Source: Health Ministry

North

Northeast

Midwest

Southeast

South

North

Northeast

Midwest

Southeast

South

Total

Metropolitan region

Countryside
United States

Strong decline in economic activity in the 2nd quarter. Recent data suggest consumer spending is returning to the pre-crisis levels.

GLOBAL ECONOMY
Covid-19: Shock and impacts

United States

Strong decline in economic activity in the 2nd quarter. Recent data suggest consumer spending is returning to the pre-crisis levels.

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Covid-19: Shock and impacts

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GLOBAL ECONOMY
Covid-19: Shock and impacts
The Covid-19 shock was simultaneous, but it affected countries and sectors asymmetrically. Recovery began in May, after severe losses in April.

Global Economy: Covid-19: Shock and Impacts

Source: OECD Statistics and Bloomberg forecasts at September 29th, 2020. Data are seasonally adjusted.
China

Fast recovery, although incomplete. Investment is the main driver.

GLOBAL ECONOMY
Covid-19: Shock and impacts

Retail Sales (% YoY)

New credit transactions RMB trillion

Banking credit

Others*

*corporate and government bonds, new equity issuances, trusted and entrusted loans

Sources: NBS, Bloomberg

GDP

Consumption (2.3 p.p.)
Investment (5.0 p.p.)
Exports (0.5 p.p.)
GDP (3.2%)
Inflation

Rise in food prices and education

**GLOBAL ECONOMY**
Covid-19: Shock and impacts

**Difference between meat inflation and CPI (p.p.)**
- US
- Euro area
- India
- Colombia
- Chile
- China

**Difference between rice inflation and CPI (p.p.)**
- US
- India
- Mexico
- Colombia
- Chile
- China

**Difference between education inflation and CPI (p.p.)**

Source: Google, Thomson Reuters

bcb.gov.br
Emerging Markets

Signs of recovery

PMI Manufacturing

Retail sales

GDP Forecasts

Sources: Markit; Focus Market expectations in Aug 28th for Brazil and June IMF forecasts for the other countries; Bloomberg

bcb.gov.br
Financial conditions

Financial conditions still restrictive for emerging countries with unfavorable economic fundamentals

Group 1:
Malaysia, Indonesia, Poland, Chile and Russia.
Gross Debt/GDP (average) = 35.7%

Group 2:
Brazil, South Africa, Turkey, Colombia, Mexico and India.
Gross Debt/GDP (average) = 61.1%

* Data until Sept 11th.
Top 5 show strength in the stock market, despite the recent drop. Recovery is uneven. Low interest and default risks harm the financial sector.
Increase in loss provisions still suggests caution

Loss Provisions (US$ bn)

US

Europe

Source: Bloomberg
Credit growth for business

<table>
<thead>
<tr>
<th></th>
<th>EMEs (% Y/Y)</th>
<th>AEs (% Y/Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(26.5% 26.9%)</td>
<td>(13.6% 15%)</td>
</tr>
<tr>
<td></td>
<td>19.1%</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>11.4%</td>
<td>6.6%</td>
</tr>
<tr>
<td></td>
<td>7.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td></td>
<td>-5%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Sources: BCB, Datastream, Bloomberg. Brazilian data refers to nonmarket credit to business.
Announced measures – comparative view

% GDP

GLOBAL ECONOMY
Fiscal policy responses

Source: IMF
GDP: Fiscal policy responses

Reduction in the expected growth for 2020-2021 (before - after the crisis)

Fiscal answers (announced measures, % of GDP)

Source: IMF. Expected growth before the pandemics: WEO October 2019.; Brazilian growth = Focus
The roles of monetary and fiscal policies

Monetary and fiscal policies have well-defined roles

Monetary Policy
Liquidity

Fiscal Policy
Solvency

If not properly managed, liquidity problems can become solvency problems
The roles of monetary and fiscal policies
Central Bank of Brazil and Ministry of Finance measures

Central Bank of Brazil
- Monetary and FX policies
- Liquidity and Capital

Ministry of Finance
- Credit measures
- Direct transfers
- Tax reliefs and deferrals
# Summary of measures: BCB

## Measures’ impacts

<table>
<thead>
<tr>
<th>Measure</th>
<th>Potential</th>
<th>Implemented</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquidity support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve requirementes + change in LCR regulation</td>
<td>R$ 135 bn</td>
<td>R$ 135 bn</td>
<td>–</td>
</tr>
<tr>
<td>Additional reduction in reserve requirements</td>
<td>R$ 70 bn</td>
<td>R$ 70 bn</td>
<td>R$ 82 bn</td>
</tr>
<tr>
<td>More flexibility on LCR regulation</td>
<td>R$ 2.2 bn</td>
<td>R$ 2.2 bn</td>
<td>–</td>
</tr>
<tr>
<td>Loan backed by LPS guaranteed by credit operations</td>
<td>R$ 670 bn</td>
<td>R$ 50.5 bn</td>
<td>–</td>
</tr>
<tr>
<td>One-year term repos backed by federal govt. Bonds</td>
<td>R$ 50 bn</td>
<td>R$ 23.2 bn</td>
<td>R$ 25 bn</td>
</tr>
<tr>
<td>New Term Deposit with Special Guarantees (NDPGE)</td>
<td>R$ 200 bn</td>
<td>R$ 18 bn</td>
<td>R$ 10 bn</td>
</tr>
<tr>
<td>Loans backed by debentures</td>
<td>R$ 91 bn</td>
<td>R$ 3 bn</td>
<td>–</td>
</tr>
<tr>
<td>Change in reserve requirements on savings deposits</td>
<td>R$ 55.8 bn</td>
<td>R$ 40 bn</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>R$ 1274 bn</td>
<td>R$ 341.9 bn</td>
<td>R$ 117 bn</td>
</tr>
</tbody>
</table>

| **Capital Relief**                                                 |           |             |      |
| Over Admiral                                                          | R$ 520 bn | R$ 520 bn   | –    |
| Reduction of the Additional Principal Capital (ACP) factor            | R$ 637 bn | R$ 637 bn   | –    |
| Reduction in the capital for credit operations for SMEs              | R$ 35 bn  | R$ 35 bn    | –    |
| Reduction in capital for S5 segment                                   | R$ 16.5 bn| R$ 16.5 bn  | –    |
| Reduction in capital for DPGE exposures                              | R$ 12.7 bn| R$ 1.9 bn   | –    |
| Working capital for business preservation (CGPE)                     | R$ 127 bn | R$ 3.8 bn   | –    |
| **Total**                                                            | R$  bn    |             | –    |
| More flexibility for credit renegotiations                           | *R$ 3200 bn| R$ 857.9 bn | –    |

| **Asset Purchases**                                          |           |             |      |
| Asset purchases in secondary markets                              | N.D.      | **          | –    |

| **Other measures**                                   |           |             |      |
| Swap lines with the Federal Reserve                      | US$ 60 bn | US$ 30 bn   | –    |
| Creation of special credit lines for SMEs               | R$ 40 bn  | R$ 5.3 bn   | –    |
| Real estate backed loans                                  | R$ 60 bn  | **          | –    |

¹Potencial impact on credit provision.
* Credit operations volume potentially benefited by the measure.
** New measures.

Updated to 09/25
BCB’s response

EMEs’ Comparative Overview

**Liquidity Support**
(% of GDP)

- Brazil: 17.5%
- India: 9.1%
- Indonesia: 8.0%
- Malaysia: 5.1%
- Mexico: 3.1%
- Turkey: 2.0%
- Colombia: 0.0%

**Credit Support**
(% of GDP)

- Brazil: 20.0%
- Malaysia: 18.3%
- Korea: 15.4%
- Turkey: 14.9%
- Argentina: 5.3%
- Russia: 3.9%
- Mexico: 1.4%
- India: 1.1%
- Colombia: 0.2%

Sources: FSB/BCB – up to September 22nd
Room for conventional policies

Brazil: cautious MP actions

DOMESTIC ECONOMY
Fiscal and monetary policies interaction

1 Year Rate
Structural reductions

Real Public Spending
yoy % change

Source: Bloomberg, BCB, 2020 forecast
Volatility in the FX market

- In other markets, the growth of mini-contracts usually increases liquidity and reduces bid / offer spreads.
- In the local FX market, there has been a coincident increase in volatility and the proportion of mini-contracts in the total volume. There is not necessarily a causal relationship.
Strong fall in 2Q2020 GDP

Consumption and investment fell

Contribution to real GDP growth (p.p.)
Impact of Covid-19: economic activity

Partial recovery of activity. Sectors most directly affected by social distancing remain depressed.

Confidence indicators

Seasonally adjusted data.

Retail Sales – Cielo*

Sources: FGV and Cielo

*Change in revenues in relation to the same days of Feb/20, with calendar adjustments.
Nonearmarked credit

Credit increase amid the crisis. Corporate credit rises faster than household credit.

**Weekly new credit transactions***

<table>
<thead>
<tr>
<th>Weeks of the year</th>
<th>Corporate 2019</th>
<th>Corporate 2020</th>
<th>Household 2019</th>
<th>Household 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>33</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>38</td>
<td>43</td>
<td>15</td>
<td>13</td>
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<tr>
<td>3</td>
<td>48</td>
<td>53</td>
<td>17</td>
<td>17</td>
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<tr>
<td>4</td>
<td>53</td>
<td>53</td>
<td>19</td>
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<td>5</td>
<td>48</td>
<td>48</td>
<td>21</td>
<td>21</td>
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<td>6</td>
<td>43</td>
<td>43</td>
<td>23</td>
<td>23</td>
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<tr>
<td>7</td>
<td>38</td>
<td>38</td>
<td>25</td>
<td>25</td>
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<tr>
<td>8</td>
<td>33</td>
<td>33</td>
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<td>27</td>
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<td>9</td>
<td>28</td>
<td>28</td>
<td>29</td>
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<td>10</td>
<td>23</td>
<td>23</td>
<td>31</td>
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<td>11</td>
<td>18</td>
<td>18</td>
<td>33</td>
<td>33</td>
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<tr>
<td>12</td>
<td>13</td>
<td>13</td>
<td>35</td>
<td>35</td>
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<tr>
<td>13</td>
<td>8</td>
<td>8</td>
<td>37</td>
<td>37</td>
</tr>
</tbody>
</table>

**Outstanding credit (% m/m(-12))**

- **Corporate 2020**: 26.9%
- **Corporate 2019**: 16.4%
- **Household 2020**: 8.3%
- **Household 2019**: -11%

*Not including overdraft and credit card. Weekly data, accumulated over the last five working days, up to September 11th.
Interest rates: new credit transactions

Interest rates are falling

- **Interest rate (% per year)**
  - Households
  - Corporate
  - Total

- **By line of credit**
  - **Households**
    - Payroll deducted loans
    - Vehicles financing
    - Personal credit except payroll deducted (right)
  - **Corporate**
    - Discount of trade bills
    - Working capital
    - Guaranteed overdraft account (right)

Source: BCB. Data refer to average interest rate in non-earmarked new credit transactions.

DOMESTIC ECONOMY
Outcomes: credit cost
## New transactions and credit renewals

From March 16th to September 18th, in BRL billions

<table>
<thead>
<tr>
<th>Type of financial institution</th>
<th>Segment</th>
<th>New transactions (1)</th>
<th>Credit renewals (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Corporate</td>
<td>Middle</td>
</tr>
<tr>
<td>Banks</td>
<td>S1 - public</td>
<td>48.9</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>S1 - private</td>
<td>304.4</td>
<td>70.4</td>
</tr>
<tr>
<td></td>
<td>S2</td>
<td>66.2</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>S3</td>
<td>63.9</td>
<td>27.7</td>
</tr>
<tr>
<td></td>
<td>S4</td>
<td>19.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>S3, S4 and S5</td>
<td>2.7</td>
<td>18.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>505.5</td>
<td>173.7</td>
</tr>
</tbody>
</table>

### By type of financial institution
- **S1 - public**: 28%
- **S1 - private**: 45%
- **S2**: 27%
- **S3**: Others
- **S4**: Others

### By type of client
- **Corporate**: 37%
- **Middle and SME**: 36%
- **Household**: 27%

(1) Includes debentures totaling BRL 46.2 billions. (2) Includes: full renewal of the credit operation, including new credit; as well as renegotiations with changes in interest rate and guarantees.
Banking System

Opportunity cost and funding

**Opportunity costs - credit vs GB**
Accumulated in the last 3 months

**Funding costs – Banking System**
Accumulated in the last 3 months

- Opportunity cost (left)
- Selic 12M
- Difference between net margins % (credit vs GB)

* Government bonds

Source: BCB
INCLUSION
Cooperative credit
Microcredit
Currency conversibility
Initiatives for capital market

COMPETITIVENESS
Innovation
Market efficiency
International reserves

TRANSPARENCY
Rural credit
Housing credit
Relationship with Congress
Transparency of Monetary Policy
Communication plan for BCB actions
Relationship with foreign investors

EDUCATION
Financial education
Means of payment - Pix

- Financial and payment institutions applied to membership and started homologation cycle
- Regulation approved
- To be launched in November 2020
Convergence

Texting

Payment

Content

Financial Innovation
Innovation in the financial system

Open Banking

Innovation in the currency

2021/2022
- Simplification
- Internationalization
- Convertibility

Digital currency

AGENDA BC#
Open banking

• Operating rules approved
• Implementation schedule

How does it work today?
Highlights for 2020

- Measures to fight the economic effects of the Covid-19 crisis
- Regulation on issuance of electronic trade receivables
- Open banking regulation
- PIX - BCB’s means of payment
  - Brand launch
  - Homologation phase; public release expected for November/2020
- Credit cooperatives allowed to issue Real Estate Credit Bills (LCI)
- Agreement between BCB and the National Treasury Secretariat (STN) to use instant payments
Measures:

- BCB’s S&E Responsibility
- Partnerships
- Policies
- Supervision
- Regulation
#Sustainability: highlights

BCB’s social and environmental responsibility
- Strengthening internal environmental awareness
- Inclusion of the theme in the Museum of Economy
- Reduction of the environmental impact of the money cycle
- Review of the BCB’s S&E Responsibility Policy
- Implementation of TCFD* recommendations’
- Integrated risk management at the BCB

Partnerships
- BCB joins the Network for Greening the Financial System (NGFS)
- Memorandum of Understanding with the Climate Bonds Initiative (CBI)

* TCFD - Task Force on Climate-related Financial Disclosures
#Sustainability: highlights

**Policies**
- Creation of the ‘Green liquidity facility’
- Inclusion of sustainability criteria in the management of international reserves

**Supervision**
- Structuring and broadening the scope for collecting information on S&E risks
- Monitoring of climate risks and stress tests
#Sustainability: highlights

**Regulation**

- Management of S&E risks by financial institutions – Regulatory enhancement of Resolution No. 4.327/2014
- Improved transparency based on TCFD recommendations
- Creation of the ‘Green Bureau’ for rural credit
- Establishing incentives for green rural credit
Additional challenges in the post-Covid-19 period
Common factors in the recovery

More sustainable and more inclusive growth
More technology

The epidemic has accelerated technological change in medicine, education, finance, and communication.
World trade

Changes in global value chains
Low interest rates and high liquidity in the world

There are challenges, but also opportunities to reinvent the economy with private resources.
A changing world

Technology

Change in standards of consumption and production

Government actions

Secular change in the workforce
Thank you!

Roberto Campos Neto
Governor of Banco Central do Brasil
September 30, 2020