MACROECONOMIC OUTLOOK & BRAZILIAN REFORMS

ROBERTO CAMPOS NETO
Governor of the Banco Central do Brasil

17 January 2020
Expected slowdown

Global Economy

Source: Bloomberg
US Elections

Who's ahead? Democrats' Primaries

Leader in Dec

Biden 26.2%
Sanders 17.0%
Warren 14.9%
Buttigieg 9.8%
Bloomberg 4.7%
Yang 3.4%

Weakening Correlation

Macroeconomic Outlook
Global Economy
Imports from EMEs – China and US

Growth rate of China imports from EMEs (%)

Growth rate of US imports from EMEs (%)

-12 0 6 12 18 24

2017 2018 2019

US
Asia (ex-CN)
Latin America
EME other
Central and eastern Europe
Total

-12 0 6 12

2017 2018 2019

China
EME other
Asia (ex-CN)
Latin America
Central and eastern Europe
Total
EMEs in the global trade

Trade elasticity

Trade invoicing currencies in inflation targeting countries (%)

Tariffs in AEs and EMEs
Increasing share of lower rating issuers

**US IG Corporate Market Cap**

- **US$ trillions**
- **Types:** AAA, AA, A, BBB

**Source:** Bloomberg, Fed – Financial Stability Report Nov/19

**US IG Corporate Market Cap**

- **US IG bonds outstanding as a share of all global IG bonds outstanding**

**Source:** Bloomberg, ICE BoFAM and DB.
### Negative yields worldwide

<table>
<thead>
<tr>
<th>Country</th>
<th>Target rate</th>
<th>6m</th>
<th>1y</th>
<th>2y</th>
<th>3y</th>
<th>5y</th>
<th>7y</th>
<th>10y</th>
<th>15y</th>
<th>30y</th>
<th>% with CBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>-0.75</td>
<td>-0.62</td>
<td>-0.80</td>
<td>-0.77</td>
<td>-0.75</td>
<td>-0.66</td>
<td>-0.60</td>
<td>-0.50</td>
<td>-0.32</td>
<td>-0.17</td>
<td>2%</td>
</tr>
<tr>
<td>Denmark</td>
<td>-0.65</td>
<td>-0.75</td>
<td>-0.74</td>
<td>-0.60</td>
<td>-0.59</td>
<td>-0.41</td>
<td>-0.39</td>
<td>-0.17</td>
<td>0.00</td>
<td>0.10</td>
<td>0%</td>
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<tr>
<td>Germany</td>
<td>-0.50</td>
<td>-0.65</td>
<td>-0.67</td>
<td>-0.62</td>
<td>-0.59</td>
<td>-0.48</td>
<td>-0.39</td>
<td>-0.19</td>
<td>-0.04</td>
<td>0.34</td>
<td>29%</td>
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<tr>
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<td>-0.50</td>
<td>-0.64</td>
<td>-0.67</td>
<td>-0.62</td>
<td>-0.60</td>
<td>-0.43</td>
<td>-0.29</td>
<td>-0.06</td>
<td>0.07</td>
<td>0.34</td>
<td>28%</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.00</td>
<td>-0.24</td>
<td>-0.38</td>
<td>-0.32</td>
<td>-0.32</td>
<td>-0.25</td>
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<td>0.15</td>
<td>0.32</td>
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<td>-0.67</td>
<td>-0.61</td>
<td>-0.61</td>
<td>-0.56</td>
<td>-0.42</td>
<td>-0.22</td>
<td>0.04</td>
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<tr>
<td>Japan</td>
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<td>-0.14</td>
<td>-0.13</td>
<td>-0.13</td>
<td>-0.13</td>
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<td>-0.02</td>
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<td>0.41</td>
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<td>-0.50</td>
<td>-0.69</td>
<td>-0.63</td>
<td>-0.59</td>
<td>-0.56</td>
<td>-0.35</td>
<td>-0.19</td>
<td>0.02</td>
<td>0.29</td>
<td>0.62</td>
<td>24%</td>
</tr>
<tr>
<td>France</td>
<td>-0.50</td>
<td>-0.63</td>
<td>-0.60</td>
<td>-0.60</td>
<td>-0.54</td>
<td>-0.31</td>
<td>-0.16</td>
<td>0.11</td>
<td>0.38</td>
<td>0.91</td>
<td>21%</td>
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<tr>
<td>Belgium</td>
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<td>-0.60</td>
<td>-0.61</td>
<td>-0.57</td>
<td>-0.33</td>
<td>-0.18</td>
<td>0.08</td>
<td>0.37</td>
<td>0.92</td>
<td>17%</td>
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<tr>
<td>Ireland</td>
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<td>-0.58</td>
<td>-0.61</td>
<td>-0.48</td>
<td>-0.42</td>
<td>-0.32</td>
<td>-0.12</td>
<td>0.10</td>
<td>0.39</td>
<td>0.93</td>
<td>30%</td>
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<tr>
<td>Portugal</td>
<td>-0.50</td>
<td>-0.52</td>
<td>-0.54</td>
<td>-0.57</td>
<td>-0.35</td>
<td>-0.13</td>
<td>0.16</td>
<td>0.42</td>
<td>0.79</td>
<td>1.33</td>
<td>27%</td>
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<tr>
<td>Spain</td>
<td>-0.50</td>
<td>-0.46</td>
<td>-0.46</td>
<td>-0.40</td>
<td>-0.38</td>
<td>-0.09</td>
<td>0.15</td>
<td>0.45</td>
<td>0.85</td>
<td>1.31</td>
<td>26%</td>
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<tr>
<td>Italy</td>
<td>-0.50</td>
<td>-0.26</td>
<td>-0.20</td>
<td>-0.06</td>
<td>0.21</td>
<td>0.67</td>
<td>0.93</td>
<td>1.40</td>
<td>1.87</td>
<td>2.45</td>
<td>23%</td>
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<tr>
<td>UK</td>
<td>0.75</td>
<td>0.76</td>
<td>0.64</td>
<td>0.58</td>
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<td>0.64</td>
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<tr>
<td>New Zealand</td>
<td>1.00</td>
<td>0.97</td>
<td>1.00</td>
<td>1.11</td>
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<td>1.64</td>
<td>2.07</td>
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<td>0%</td>
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<tr>
<td>Canada</td>
<td>1.75</td>
<td>1.72</td>
<td>1.74</td>
<td>1.69</td>
<td>1.68</td>
<td>1.67</td>
<td>1.67</td>
<td>1.66</td>
<td>1.58</td>
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<tr>
<td>USA</td>
<td>1.75</td>
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<td>1.60</td>
<td>1.62</td>
<td>1.71</td>
<td>1.84</td>
<td>1.93</td>
<td>2.11</td>
<td>2.37</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Bloomberg
Negative yielding debt – global bond market
EMEs: outflows recovery

EME Fixed Income (USD bi)

- Hard
- Local

Equities EME (USD bi)

Equity total
4w moving average

Fonte: Bloomberg, JPMorgan, EPFR
EMEs flows: equity and fixed income
12 months accumulated
GDP forecast 2020: Brazil x Latin America
Recent surveys show Brazil outperforming LatAm in 2020

GDP Growth Forecast for 2020 (%)

Source: Bloomberg
Brazil: manufacturing and services expansion
Recent numbers point to growth in activity
Brazil leads in manufacturing

Source: Bloomberg
Accumulated flows vs Ibovespa
Foreign Investors

Source: B3
Local equity market vs Ibovespa
Accumulated flows by investors type

Source: B3
Monetary policy

Improvement in the transmission channel increases the power of monetary policy

- Displacement of government funding debt by private funding
- Agenda of microreforms for the financial system
- Better resource allocation
- The power of monetary policy
Monetary policy

• Copom unanimously decided in its latest meeting to lower the Selic rate by 50 bps, to 4.50%.

• Economic conditions prescribe stimulative monetary policy, i.e., interest rates below the structural level.

• The current stage of the business cycle recommends caution in the conduct of monetary policy.

• The next steps will continue to depend on the evolution of economic activity, the balance of risks, and inflation projections and expectations.
This time is different

2009: risk measures helped understanding the FX rate

2015 and 16: positive correlation despite a lot of uncertainty

2018: usual understanding prevails

2019: inverted relationship

Source: BCB

* normalized values to compare to the FX rate
Recent events that affected the Real

Macroeconomic Outlook
Brazilian Economy

Source: BCB
Brazilian average CDS while it was IG (178 bps)

Source: Bloomberg
Real exchange rate (BRL/USD)
42% devaluation compared to 2005 - 2014

Macroeconomic Outlook
Brazilian Economy

Real Exchange Rate

1 year ahead real interest rate
(-) country risk
(-) US real interest rate

Source: Bloomberg
Impact of meat on prices

Recent local price reversion

Beef Prices Wholesale
Z-Score, local currency

Source: USDA oct/19, Bloomberg
Real interest rate – ex-ante

Source: BC, IBGE, B3
Delinquency rate – SPC/CNDL

• Interannual drop in the number of delinquencies

• Reversion of the unfavorable trend observed in 2018
  • FGTS resources release program
  • Better economic environment
  • Special events for debt renegotiation

* Compared to the same month in the previous year (%)
Credit market recovery
Earmarked and non-earmarked markets: different behaviors

Net new transactions – corporates and households

-400 -300 -200 -100 0 100 200 300

-110 72 -176 57 183 -64 -71
-100 98

Non-earmarked
Earmarked
Net Credit

Demais modalidades de crédito (ex-direcionado)
Crédito direcionado
Crédito Consolidado
Non banking corporate bonds issuance

Growth of outstanding non banking corporate bonds stands out

Macroeconomic Outlook
Brazilian Economy

R$ bi

Accumulated outstanding variation – non-banking

Source: Cetip

*Real Estate Receivables Certificates (CRI)
**Agri business Receivables Certificates (CRA)
Brazil: Economic activity recovery

GDP growth at more than 1% yoy*

Highlights

• Government spending cutback has not prevented recovery
• GDP growth and investment recovery
• Construction sector leads manufacturing growth
• Positive surprise at 2018:Q3

Source: IBGE
Labor income and credit for households

Expansion of labor income and credit growth

Real labor income
Seasonally adjusted, quarter Q-1 = 100

Credit granting and balance (households) – ex revolving credit
Credit granting quarterly (R$ bi)

Change in credit balance Q/Q(-1) (%)
Improvement in the fiscal balance
General Government Gross Debt

Debt growth

<table>
<thead>
<tr>
<th>Year</th>
<th>% GDP</th>
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</thead>
<tbody>
<tr>
<td>2018</td>
<td>2.8 p.p.</td>
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<tr>
<td>2019</td>
<td>0.4 p.p.</td>
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</table>

Source: STN

Debt projections

<table>
<thead>
<tr>
<th>Year</th>
<th>% GDP</th>
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<tbody>
<tr>
<td>2016</td>
<td>65.5%</td>
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<tr>
<td>2017</td>
<td>73.7%</td>
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<tr>
<td>2018</td>
<td>77.2%</td>
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<tr>
<td>2019</td>
<td>80.8%</td>
</tr>
<tr>
<td>2020</td>
<td>81.7%</td>
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<tr>
<td>2021</td>
<td>81.8%</td>
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<tr>
<td>2022</td>
<td>81.4%</td>
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<tr>
<td>2023</td>
<td>80.7%</td>
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<td>2024</td>
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<td>75.7%</td>
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<tr>
<td>2027</td>
<td>73.5%</td>
</tr>
<tr>
<td>2028</td>
<td>70.4%</td>
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</tbody>
</table>

Source: STN

Macroeconomic Outlook
Brazilian Economy
INCLUSION

COMPETITIVENESS

TRANSPARENCY

EDUCATION
2019

- Ongoing: 57.8%
- Concluded: 42.2%

275 Actions
<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Competitiveness</th>
<th>Transparency</th>
<th>Education</th>
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<tr>
<td>Cooperative Credit</td>
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<td></td>
<td></td>
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<tr>
<td>Microcredit</td>
<td></td>
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<tr>
<td>Currency Conversibility</td>
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<td>Initiatives for Capital Market (IMK)</td>
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<td>Innovation</td>
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<td>Market Efficiency</td>
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<td>Housing Credit</td>
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<td>Relationship with Congress</td>
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<tr>
<td>Transparency of Monetary Policy</td>
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<td>Communication of BCB Actions</td>
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<td>Relationship with Foreign Investors</td>
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<tr>
<td>Financial Education</td>
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</tbody>
</table>

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AGENDA BC#
HIGHLIGHTS FOR 2020
Agenda BC – Instant payments

Availability
Speed
Convenience
Open environment

• P2P
• P2B
• B2B
• GOV

Highlights for 2020
What is Open Banking?

How it works today

Open Banking

Highlights for 2020

Agenda BC# – Open banking
## Agenda BC# – Liquidity Financial Line (LFL)

### Highlights for 2020

#### Definition of strategic guidelines

<table>
<thead>
<tr>
<th>Old model</th>
<th>New model</th>
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<tbody>
<tr>
<td>Assistance in case of need</td>
<td>Standing assistance</td>
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<tr>
<td>Government bonds as collateral</td>
<td>Public and private securities as collateral</td>
</tr>
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</table>

**Lower reserve requirement need**

**Space for the local capital market to grow**
Agenda BC#: FX Simplification

Main Goals

Modernization

Simplification

Legal Security

Alignment to international best practices

Highlights for 2020

- Single and embracing Law
  - Consolidation and revocation (more than 40 instruments created after 1920)

- Rationalized and principle-oriented regulation
  - End of antiquated requirements, searching for more efficiency

- Flexibility to incorporate technological innovations
  - Possibility of incorporating new business models and agents

Alignment to international best practices
Countries with more autonomous CBs have lower inflation level and volatility

# WHAT WE WANT TO ACHIEVE
Motivation

What we want to achieve

Lower entry cost and more inclusion and participation

Lower long interest rate allows private financing for large players

More public support for small and medium players

Modernization to increase the amount of resources to society

Technology to streamline and cheapen transactions
What we want to achieve

- More resources
- Better allocation

- Capital market
- Housing market
- Cooperative credit
- Microcredit
- Financial citizenship
- Private debt
What we want to achieve
What we want to achieve

Main channels

Housing market

- Home equity
- Income/wealth effect
- CPI & fixed interest rate
- Long interest rate and securitization
Use of CPI to index real estate financing contracts

# The projected amount for one year was reached in 45 days
# + R$6 bi granted
# + R$15 bi approved
Long interest rate and securitization – yield curve

Source: BCB

What we want to achieve

Main channels

Housing market

01/20/2016

09/05/2018

11/22/2016

01/07/2020

Years

Interest rate (%)

Source: BCB
Income/wealth effect

Potential of income effect:
- R$1.9 bi/year (whole economy)
- R$1,210/year (household)
- Portability is still low → Amount: R$170 mi

Income effect and portability – a virtuous cycle

Main channels
Housing market
Home equity: high potential

# Home equity grew 55% in 2019 until September, reaching a volume of over R$300 million.
# Around R$ 500 bi can be injected in the market, almost the total current real estate credit stock.
# The interest rate has reached around 14% p.y.
# Big traditional financial institutions have been increasing the supply and reducing rates, while fintechs increase the volume of resources for this modality.
Construction sector in recovery
Contribution of each State to employment in construction

What we want to achieve
What we want to achieve
Main channels

Cooperative credit

Credit unions

Better resources allocation

New funding

Governance

What we want to achieve
New instruments
# Financial letter
# Savings deposits
# Brazilian covered bond – LIG
Main channels

Cooperative credit

Governance of FGCoop

Sindicated loans

Intercooperative deposit

Savings deposits in single credit cooperatives

Constitutional funds (funding)

Operating area

Virtual assemblies of cooperative members

Admission area

Interventions: central cooperatives and confederations

Governance

What we want to achieve

Governance

Cooperative credit

Virtual assemblies of cooperative members
What we want to achieve

Better resources allocation

Higher share (%)

Cooperative members in the SNCC

Credit Cooperatives

Low income cooperative members

Main channels

Cooperative credit

Cooperative credit

Left bar: in value
Right bar: in number
Cooperative credit

What we want to achieve
What we want to achieve
Main channels

Microcredit

What we want to achieve

Microcredit

Microcredit for productive activities

Digital platforms

Traditional banks

Fintechs
Main channels

Microcredit

Microcredit for productive activities

Microcredit for productive activities – MPO
1. Annual revenue limits raised from R$200k R$360k
2. Face-to-face meeting to start credit process no longer required
3. Permission for specialized entities to offer credit assistance services

Earmarking destination of demand deposits funds
4. More agile policy instrument to avoid non-utilized funds

Microcredit operations
5. Higher share of earmarked funds (5%)
6. Facilitates support to micro-enterprises
Credmei: quais são instituições financeiras participantes

Neste momento, estão credenciadas no Programa as seguintes instituições:

AGÊNCIA DE FOMENTO DO PARANÁ S/A
CAIXA ECONÔMICA FEDERAL - CEF
CENTRAL COOPERATIVA DE CRÉDITO NO ESTADO DO ESPÍRITO SANTO - CECOOP
HSCM - SOCIEDADE DE CRÉDITO AO MICROEMPREENDEDOR E À EMPRESA DE PEQUENO PORTE
Main channels

Microcredit

What we want to achieve

Traditional banks have focused more on microcredit
What we want to achieve

Digital platforms
Credit fintechs
Segment dynamism
300% yearly growth
Microcredit for productive activities

Effect of initiatives for the segment

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit outstanding (left)</td>
<td>$2 billion</td>
<td>$3.5 billion</td>
</tr>
<tr>
<td>Number of borrowers</td>
<td>6 million</td>
<td>0.5 million</td>
</tr>
</tbody>
</table>
What we want to achieve
Main channels

Private debt

What we want to achieve

Private debt

Reduction of the need for liquidity

Liquidity financial line

Lower fundraising premiums
Lower issuance costs
Private debt market
Better pricing
Greater liquidity
+ secondary market
+ repo market
Unfreezes liquidity value
Main channels

Private debt

What we want to achieve

Lower fundraising premiums
Lower issuance costs

Non-bank fundraising
Accumulated change on outstanding instruments

High potential
Recent changes have fueled growth on this market
Main channels

Private debt

What we want to achieve

Reduce the need for liquidity

Reserve requirements

R$ billions


Demand deposits

Time deposits

Savings deposits

Additional

Total


444 (100%)

239 (54%)

165 (37%)

39 (9%)
Main channels

Private debt

What we want to achieve

More funds in the market
Better pricing
Better resource allocation
Lower fundraising costs for businesses

Number of issued contracts (corporate bonds)

What we want to achieve
Main channels

Financial citizenship
Technology promoting citizenship

What we want to achieve

Financial citizenship

Conscious spending

Budget control

Savings culture
Budget control

Main channels

Financial citizenship
Technology promoting citizenship

What we want to achieve

Understanding personal and household budgets
What we want to achieve

Savings culture

Savings culture

Main channels

Financial citizenship
Technology promoting citizenship

Save to make projects and dreams come true
What we want to achieve

Conscious spending

Main channels

Financial citizenship
Technology promoting citizenship

Always using the most **suitable** financial product.
What we want to achieve

Financial citizenship

Individual control over one’s own financial life.

Main channels

Financial citizenship
Technology promoting citizenship
How to make things happen?

• “Learn Value” project
  Educating 22 million students across Brazil
• Renegotiation campaigns for household debt twice a year
  Aims at 1 million people per campaign
• Personalized platform for financial education
  In association with Febraban
• Incentive program
  Financial education activities generate “reward points”
  which are then used to improve one’s credit score
• Fighting over-indebtedness
  Action plan for target audiences
• Solutions for low-income households
  Personalized products and communication
• Innovation
  Awards to foster the development of financial education solutions

Main channels
Financial citizenship
Technology promoting citizenship

What we want to achieve
What we want to achieve

# INITIATIVES FOR CAPITAL MARKET (IMK)
Initiatives for capital market

Increased access to markets

Reinvention of markets with private money

Disintermediation and reduction of issuance costs

Main channels

Capital Markets
Reinvention of markets with private money

Net new transactions – corporates and households

Source: BCB
Disintermediation and reduction of issuance costs

- Reduction of hedging costs for the infrastructure sector
- Expansion of credit backed by real-estate collateral
- New debt instruments for small and medium businesses
- Clearer rules for the taxation of foreign investors
- Creation of mechanisms for overseas distribution of bonds issued by Brazilian companies (LIG & CRA)
- Incentives for innovation and new business models (regulatory sandbox)
- Promotion of real-estate funds
- Promotion of long-term funding
Increased access to markets

Individuals in the stock market

Broader participation

Corporate bonds
Issuances (12 months accumulated)

Main channels
Capital Markets

Number of individuals investing in the stock market

Source: BCB / B3
Initiatives for capital market

Main channels
Capital Markets

Market capitalization index (% GDP)
# HOW THINGS CONNECT
How things connect
+ Credit - Cost

Resolution
Liquidity
Financial Line
Initiatives for capital market

Stronger financial system
More private credit
Lower intermediation cost
How things connect
+ Credit - Cost

Lower long interest rates

Cooperativism

Microcredit

New rural credit policy

Lower long interest rates allow private financing for large players

Lower credit cost for small and medium players
How things connect
+ Credit - Cost

- Initiatives for capital market
- FX market
- Regulatory improvement
- New system of guarantees
- Lower cost of financial intermediation
How things connect
+ Credit - Cost

- Instant payments
- Open banking
- Incentives to new fintechs

+ Interoperability
Instantaneity
A more open system
THANK YOU

ROBERTO CAMPOS NETO
Governor of the Banco Central do Brasil

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