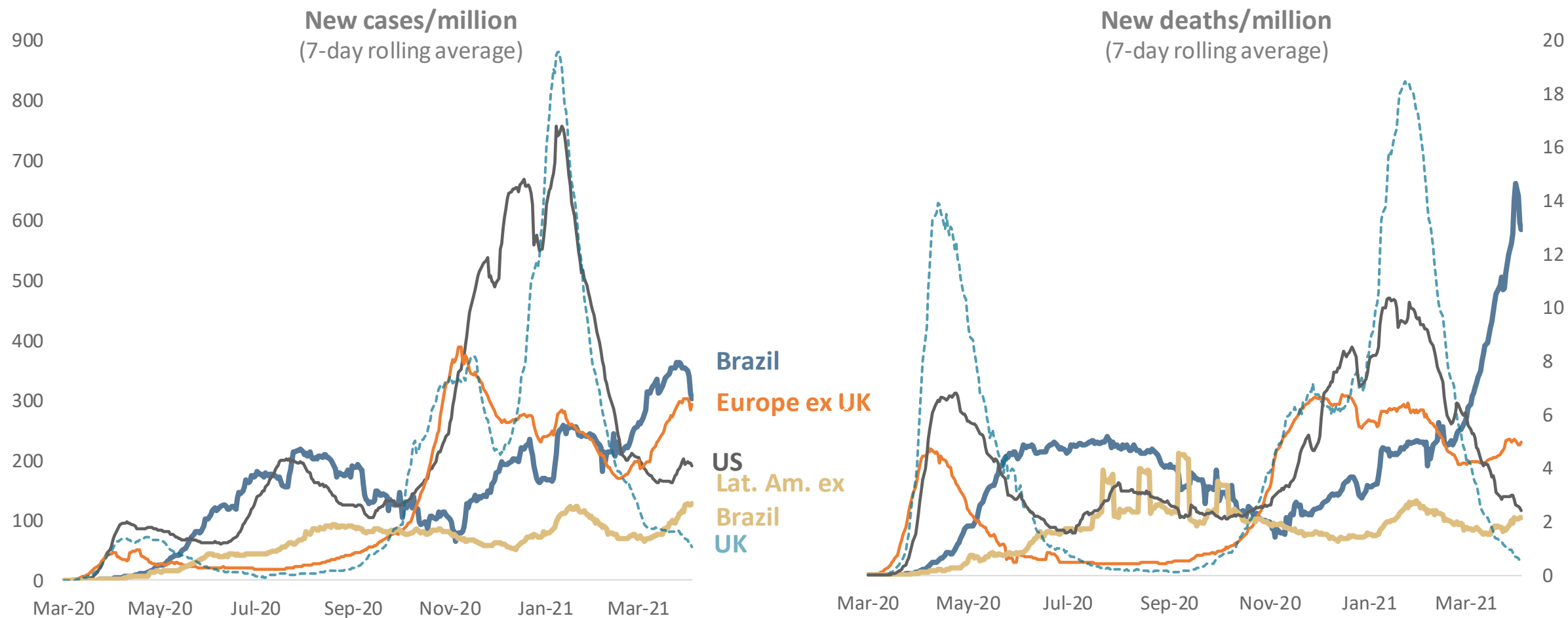


Itaú Latam – IMF Meetings

Brazil's Economic Outlook and Agenda BC#

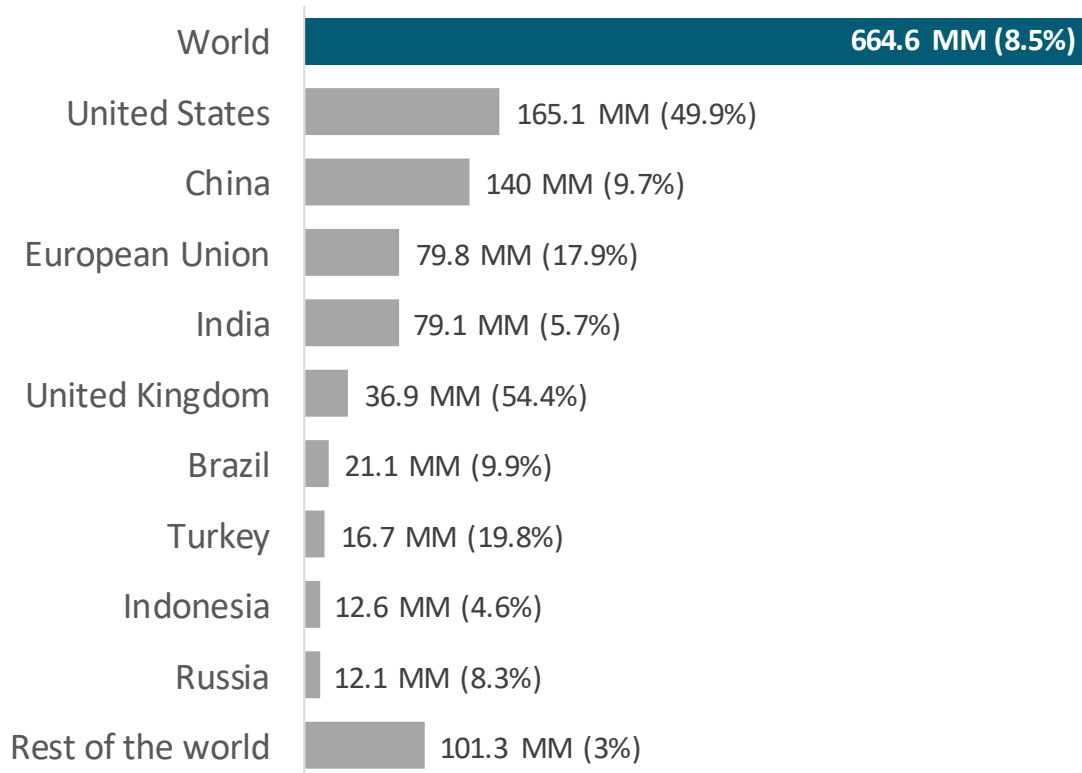
Roberto Campos Neto
Governor of Banco Central do Brasil



Source: Our World in Data. Last data available: Apr 04, 2021.

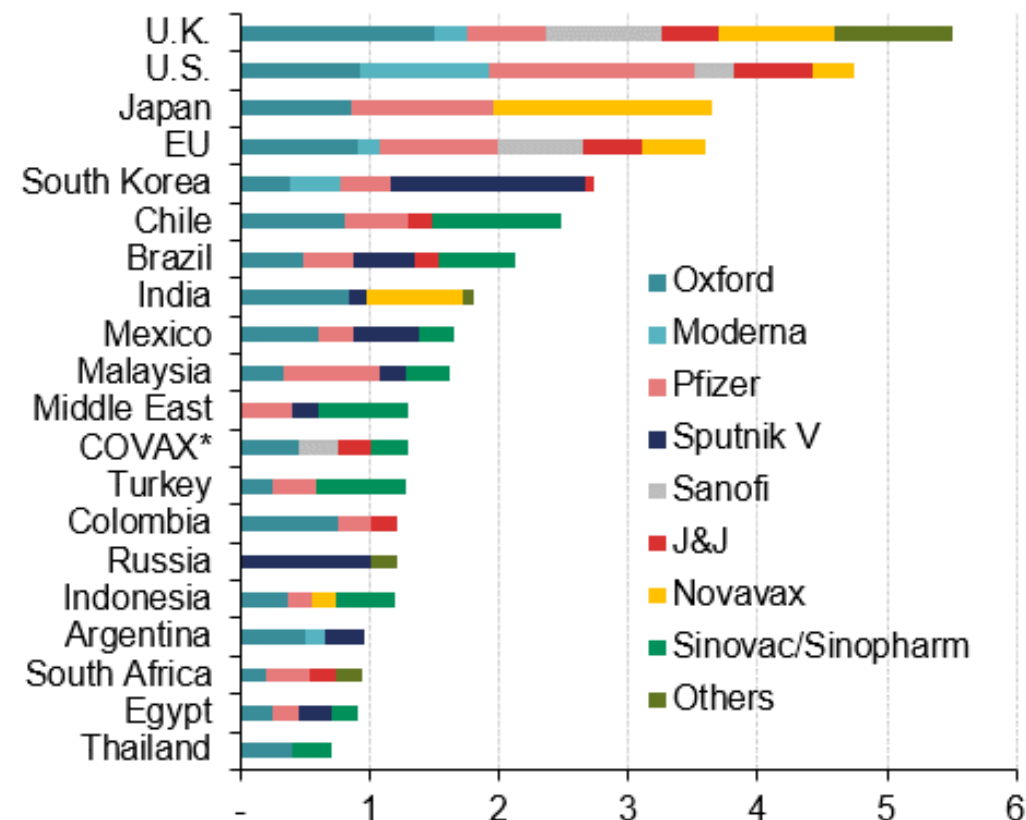
The biggest vaccination campaign in history

Millions of administered doses
(in millions and in % of population*)



Note: * The number of administered doses is less than or equal to the number of people vaccinated. In some countries, some people have already taken the second dose. Therefore, the percentage in relation to the population should be understood as "maximum percentage of the vaccinated population".

Vaccine doses purchased
(per capita)



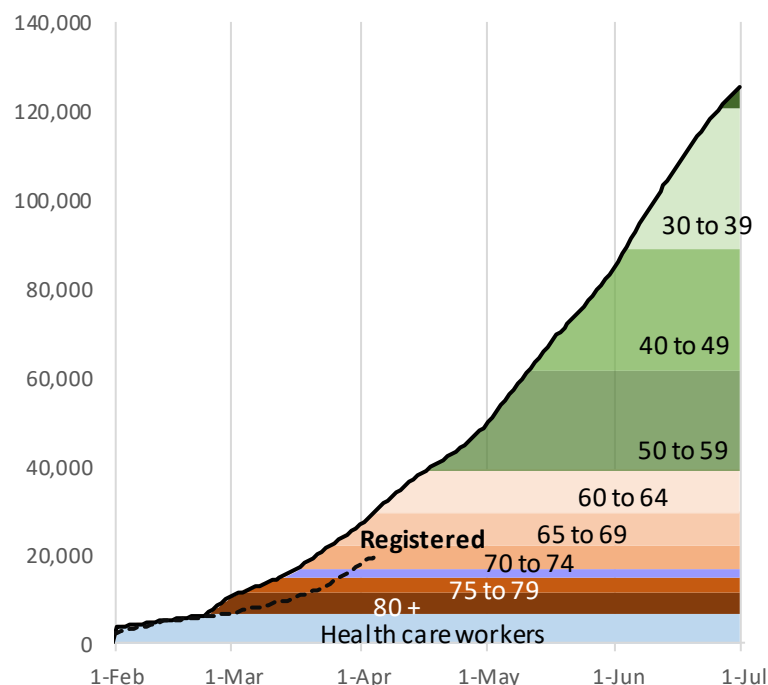
*UN initiative to support vaccination in low- and middle-income countries.

Sources: Airfinity, FT, economic Times. BNP Paribas

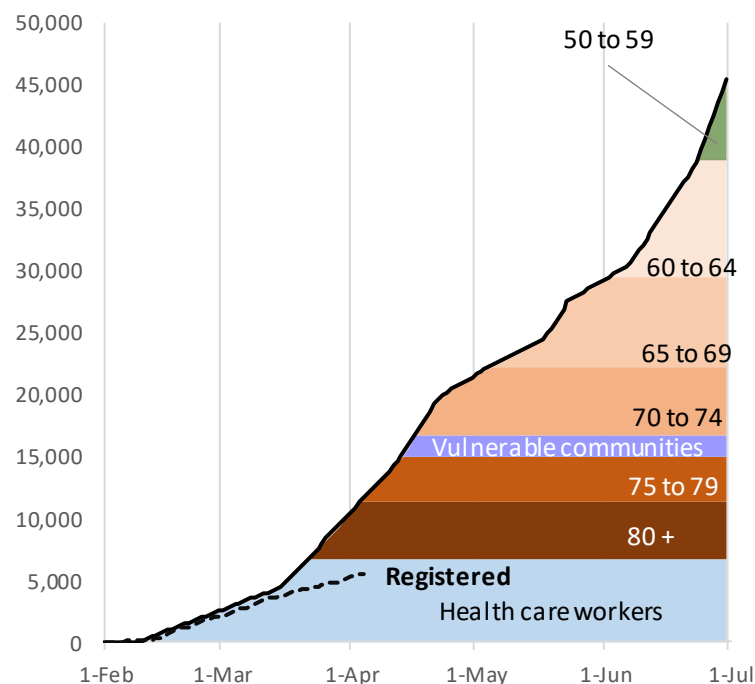
This is a simplified scenario for the purpose of indicating the degree of protection over time afforded by vaccination.

- The scenario assumes 90% efficacy of vaccines regarding to deaths by Covid-19 and a simplified vaccination strategy based on age.

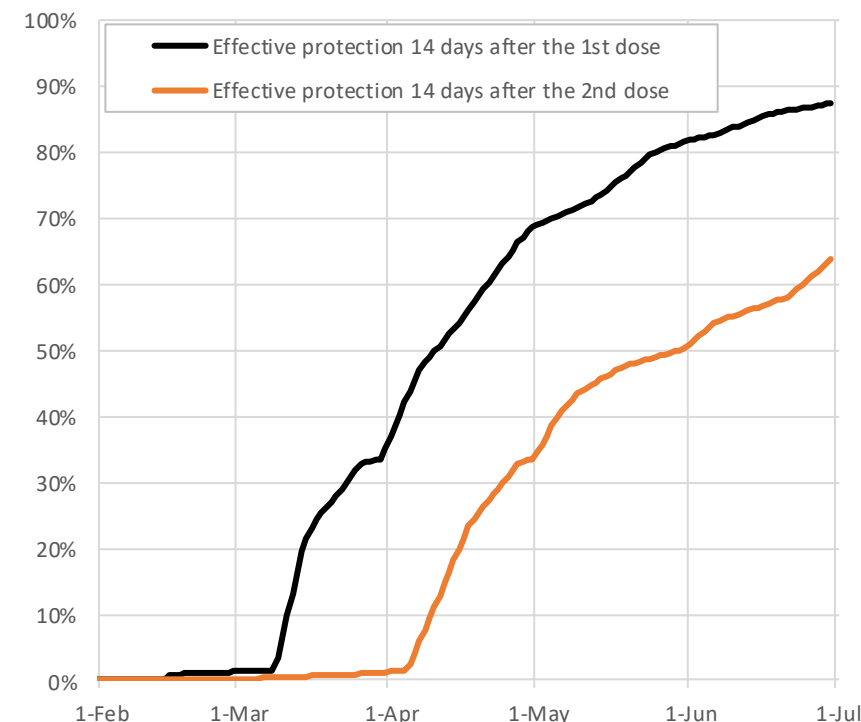
Vaccinated with 1 dose
(AZ + CV + Pfizer)



Vaccinated with 2 doses
(AZ + CV + Pfizer)



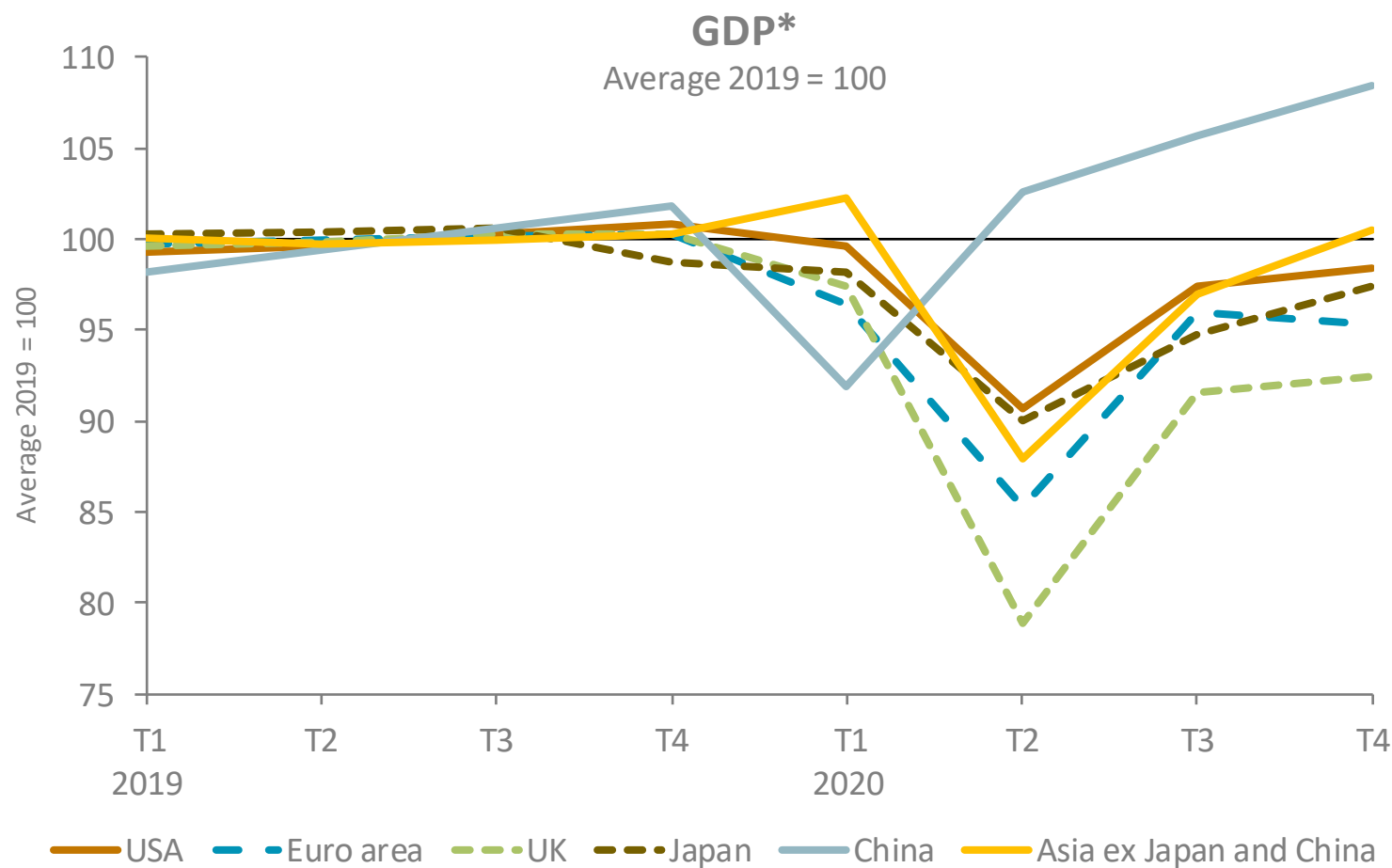
Simulated death reduction compared to a scenario without vaccination



Notes: Availability of doses compiled from a schedule released by the Ministry of Health on March 19, with adjustments that reflect news from the press. Population groups are a simplified version of the schedule on the National Vaccination Plan Against Covid-19 (4th edition). Only vaccines authorized for use by Anvisa and with delivery contracts signed were included (Astrazeneca-Oxford via Fiocruz, Coronavac, Pfizer-BioNTech, Astrazeneca-Oxford via Covax consortium, Janssen). Sputnik V and Covaxin vaccines, not yet authorized for use by Anvisa, were not considered. The Moderna vaccine was not considered, as it is still under negotiation. There is uncertainty about the dose delivery schedule – graphs indicate, in general, a possible scenario for the vaccination campaign. Latest Ministry of Health schedule released does not coincide with the dates foreseen by Instituto Butantan and Fiocruz. Registered number of vaccinated people based on data from <https://coronavirusbra1.github.io/>.

Vaccination order of priority groups follows, in a simplified way, the National Vaccination Plan Against Covid-19 (4th edition). Vaccine supply as indicated on the first two charts. The estimated reduction in deaths is calculated in relation to the scenario without individual protection from vaccines, assuming everything else equal (including average level of exposure to contagion). Main hypotheses adopted for the exercise: 1) vaccines reduce the probability of death by 90%, given the same exposure to the virus; 2) 100% of each target group is vaccinated; 3) effective vaccination follows the supply of doses; 4) reference of mortality by age group follows the 2020 pattern of deaths by SRAG Covid (ref. Epidemiological Bulletins of the Ministry of Health); 5) 2nd doses are attributed to groups in accordance with their priority, while actual 2nd doses for some higher priority individuals may occur later due to longer dose intervals for the AZ vaccine; 6) the full effect of vaccines occurs either 14 days after the 1st or 2nd doses.

Global economic recovery continues to be directly linked to the evolution of the pandemic and containment measures.

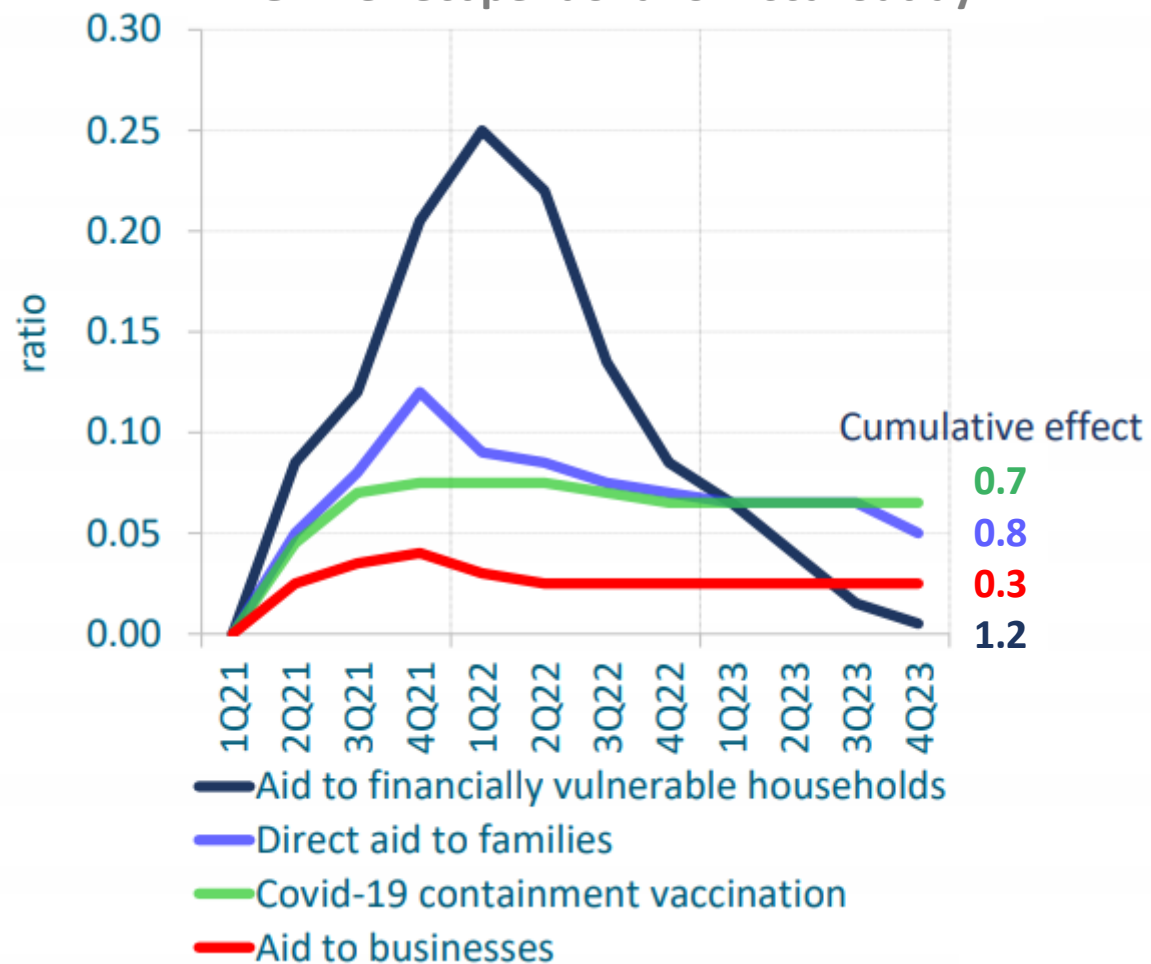


* Series at constant prices, seasonally adjusted. The series 'Asia ex. Japan and China' was calculated as a weighted average of Singapore, South Korea, Hong Kong, India, Indonesia, Philippines, Malaysia, Thailand, Taiwan and Turkey. The series of Singapore, India and Indonesia are not seasonally adjusted.

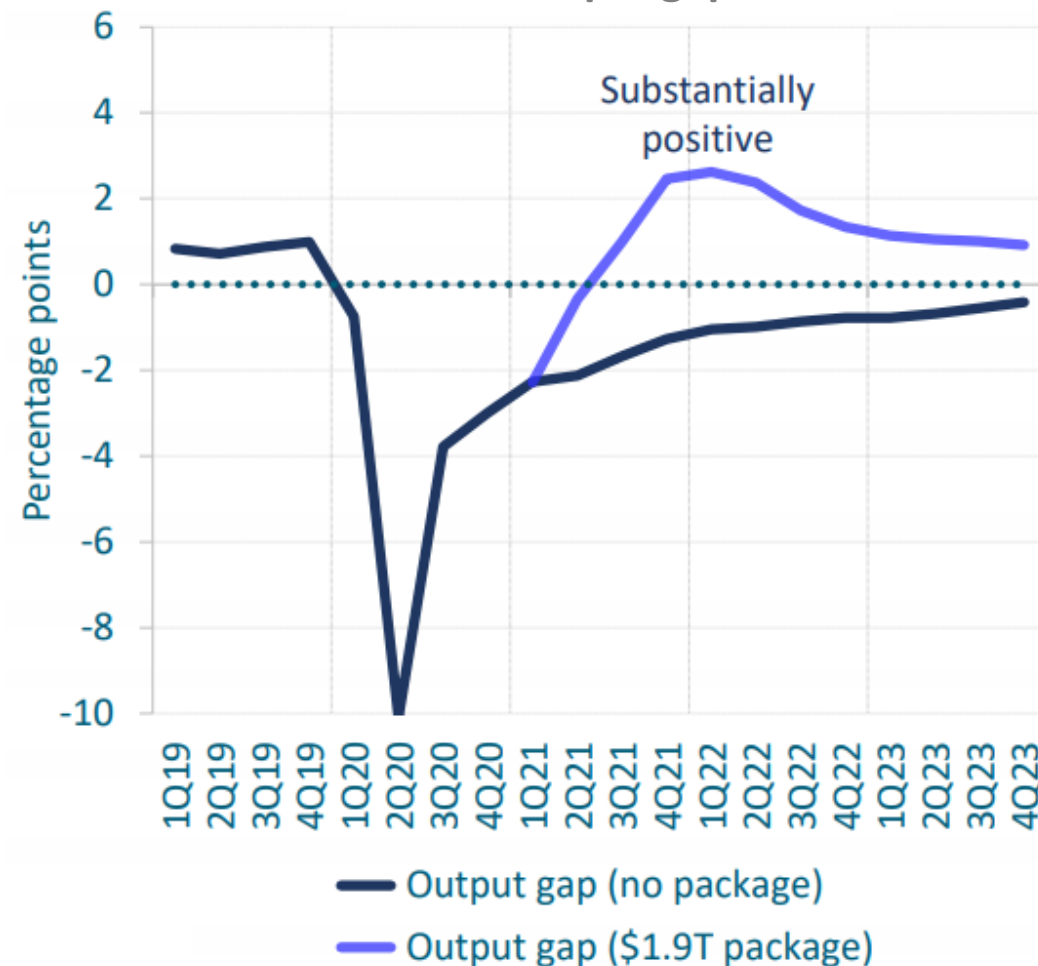
Source: Bloomberg.

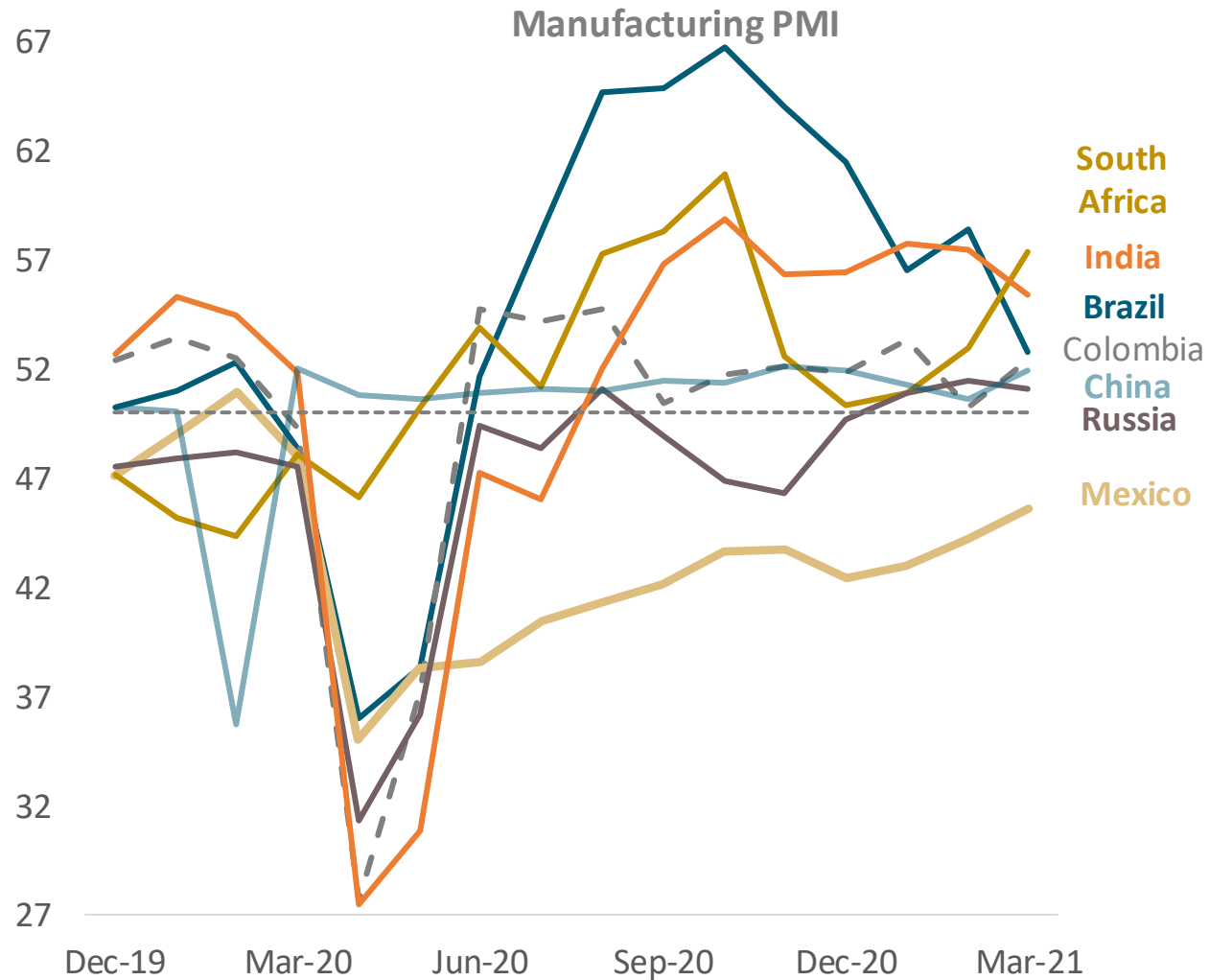
U.S.: effects of US\$ 1,9 tri package

GDP effect per dollar of fiscal outlay

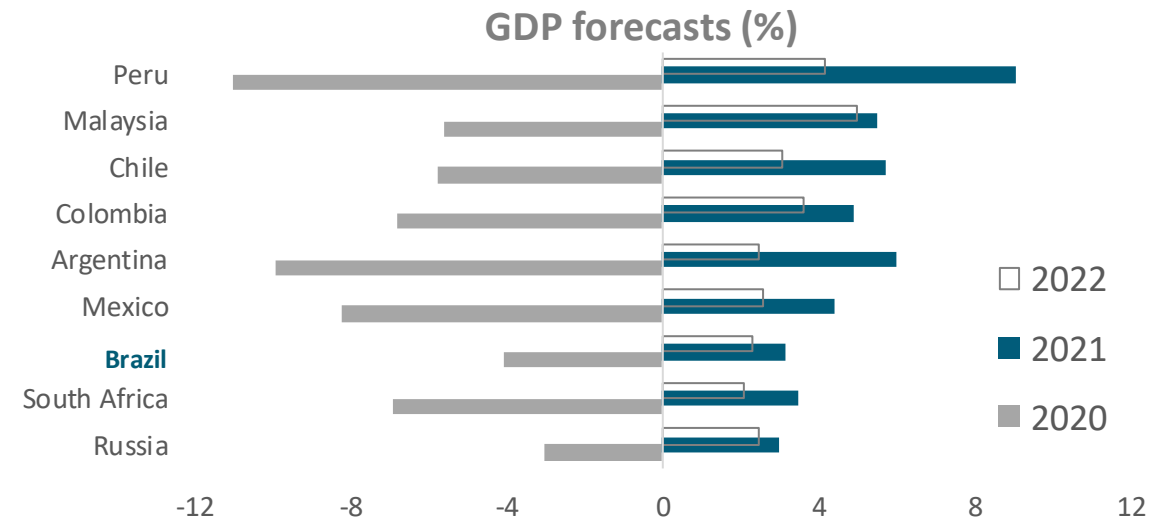
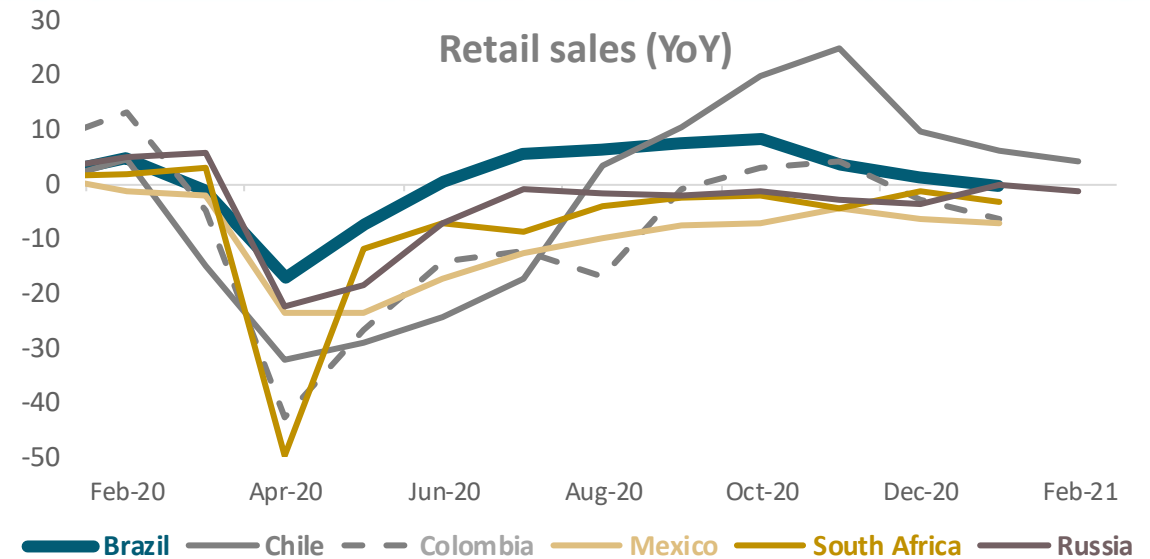


Output gap



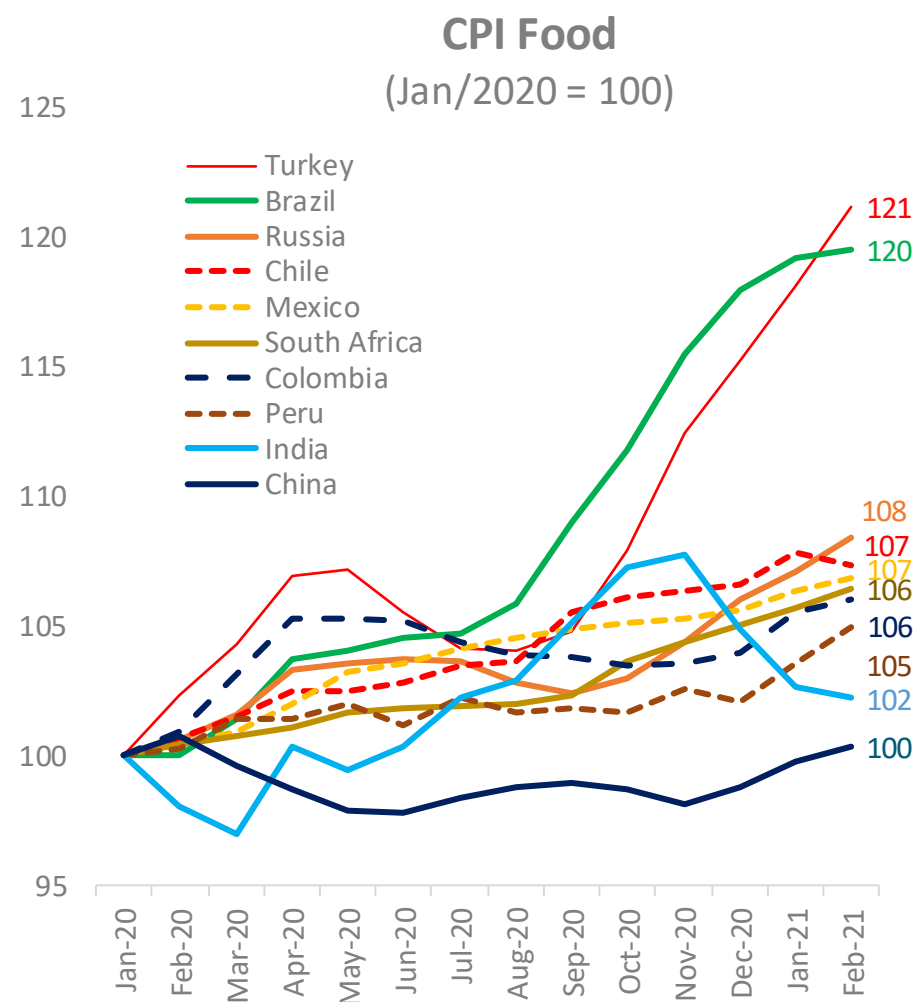
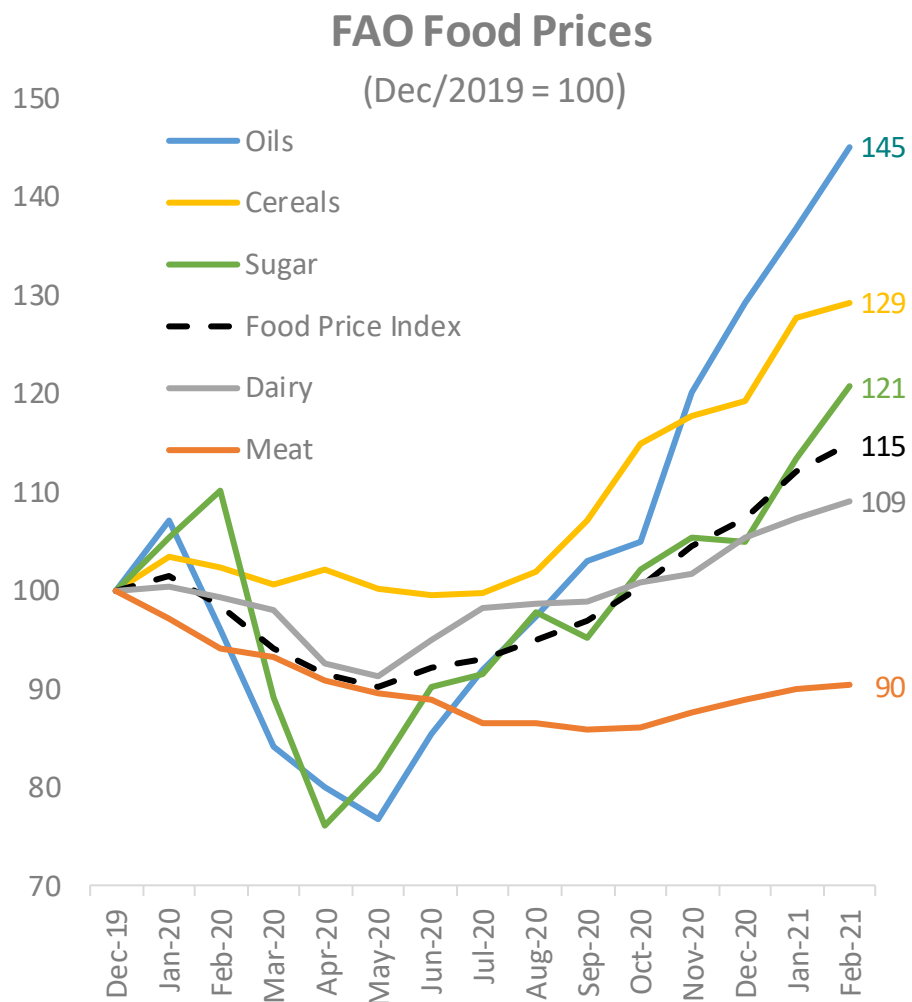


Sources: Markit; ABSA (South Africa); NBS (China).

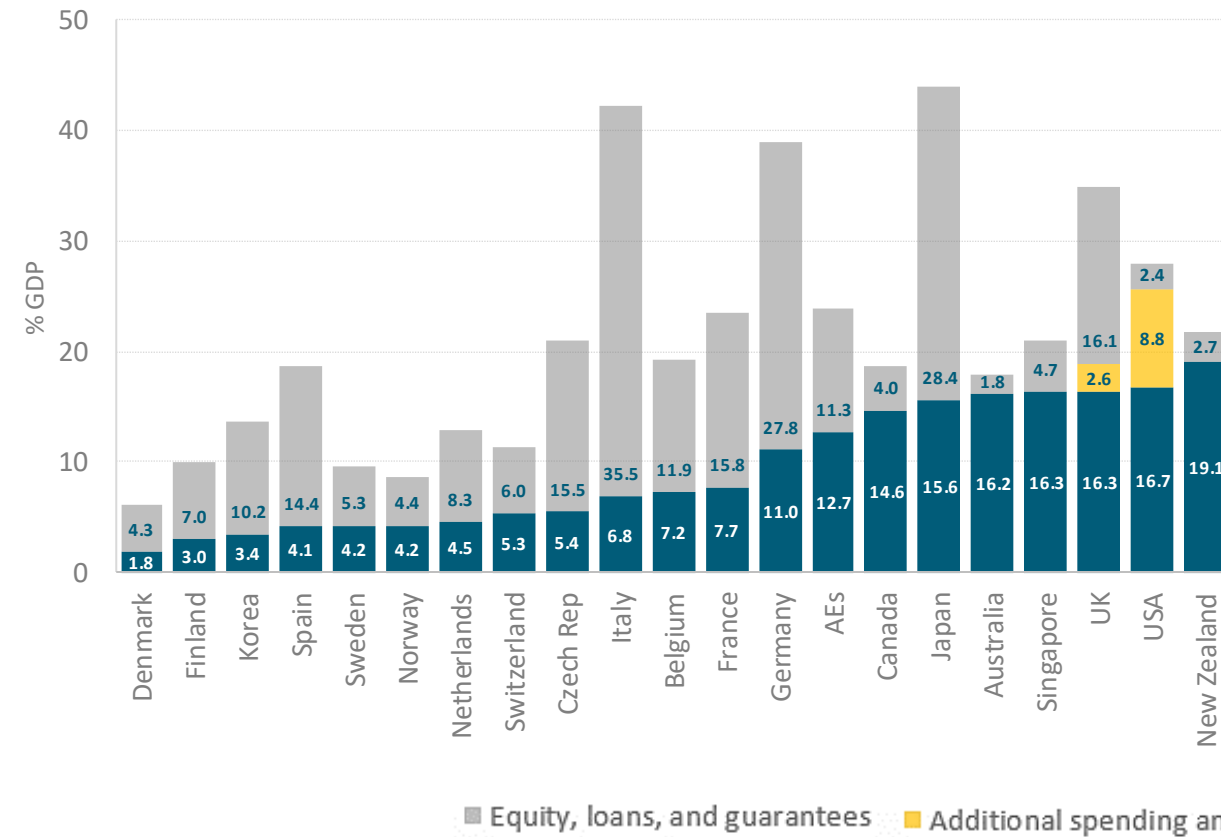


Sources: Bloomberg and Focus Report April 01, 2021.

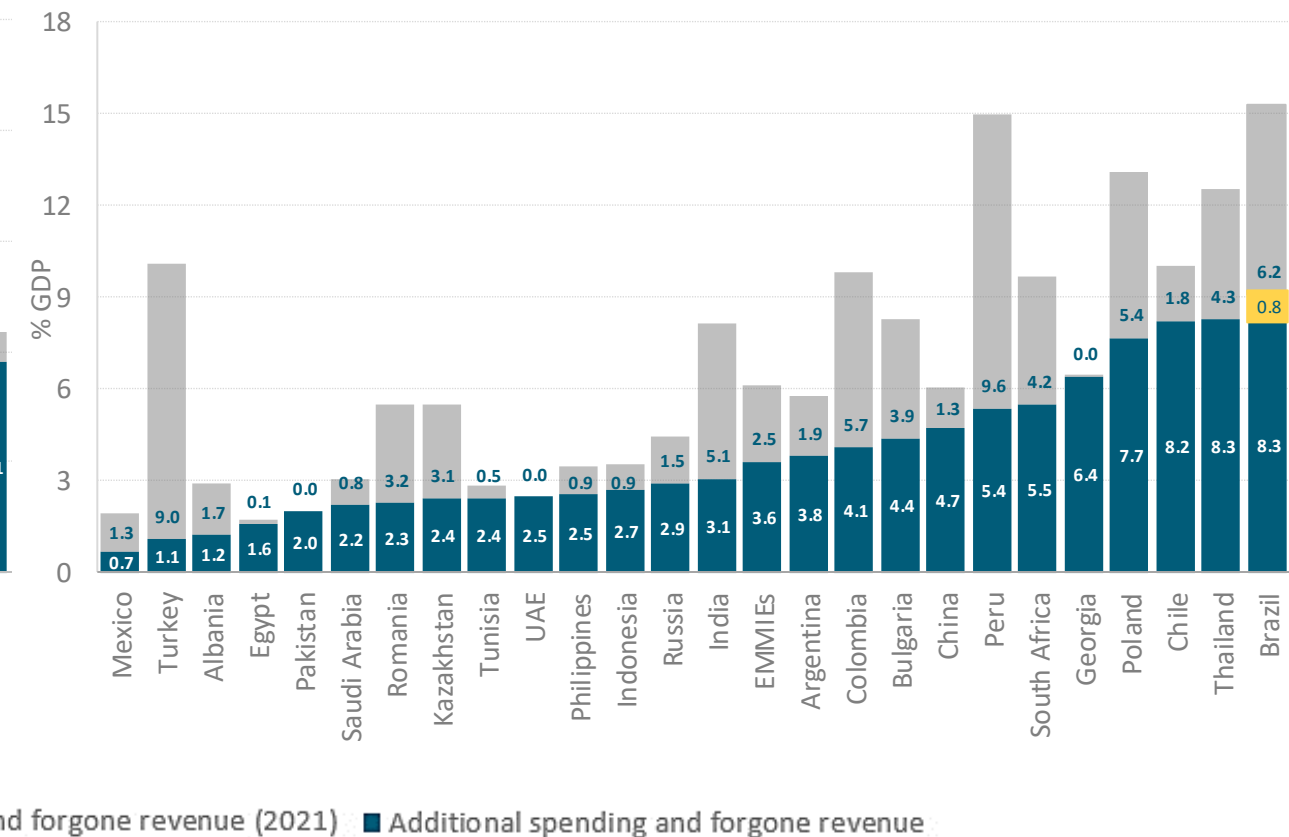
Increasing trend of food prices in international markets create upward pressure on inflation.



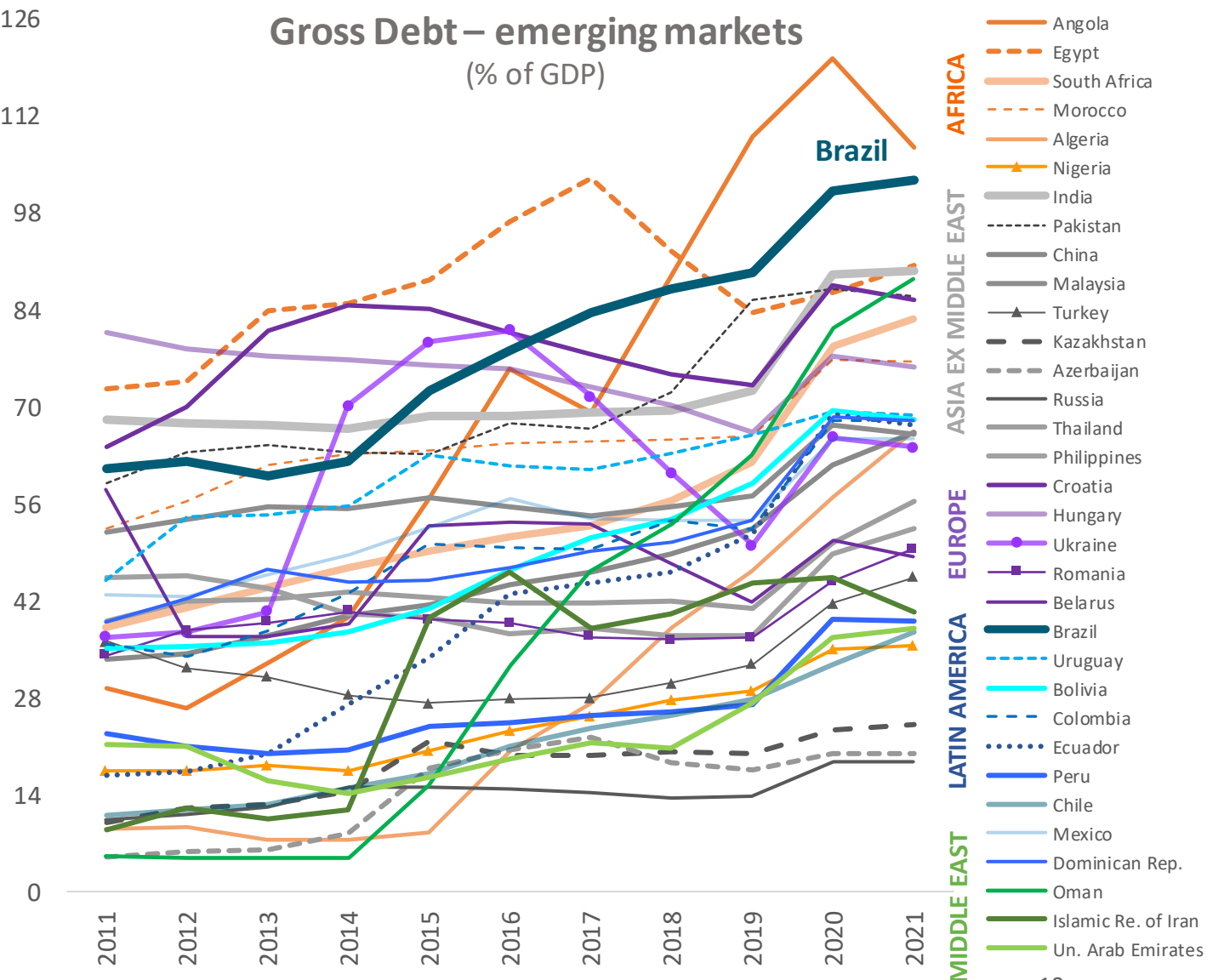
Advanced Countries



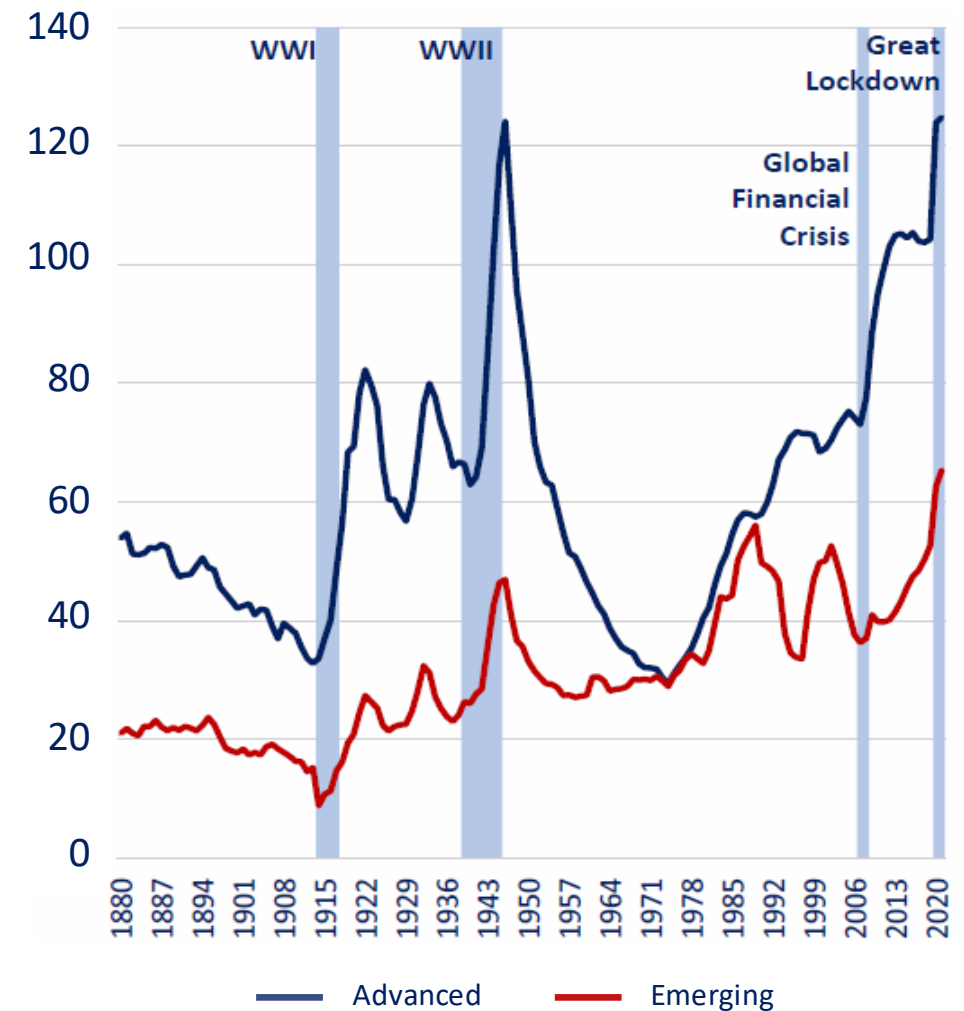
Emerging and Middle-Income Countries



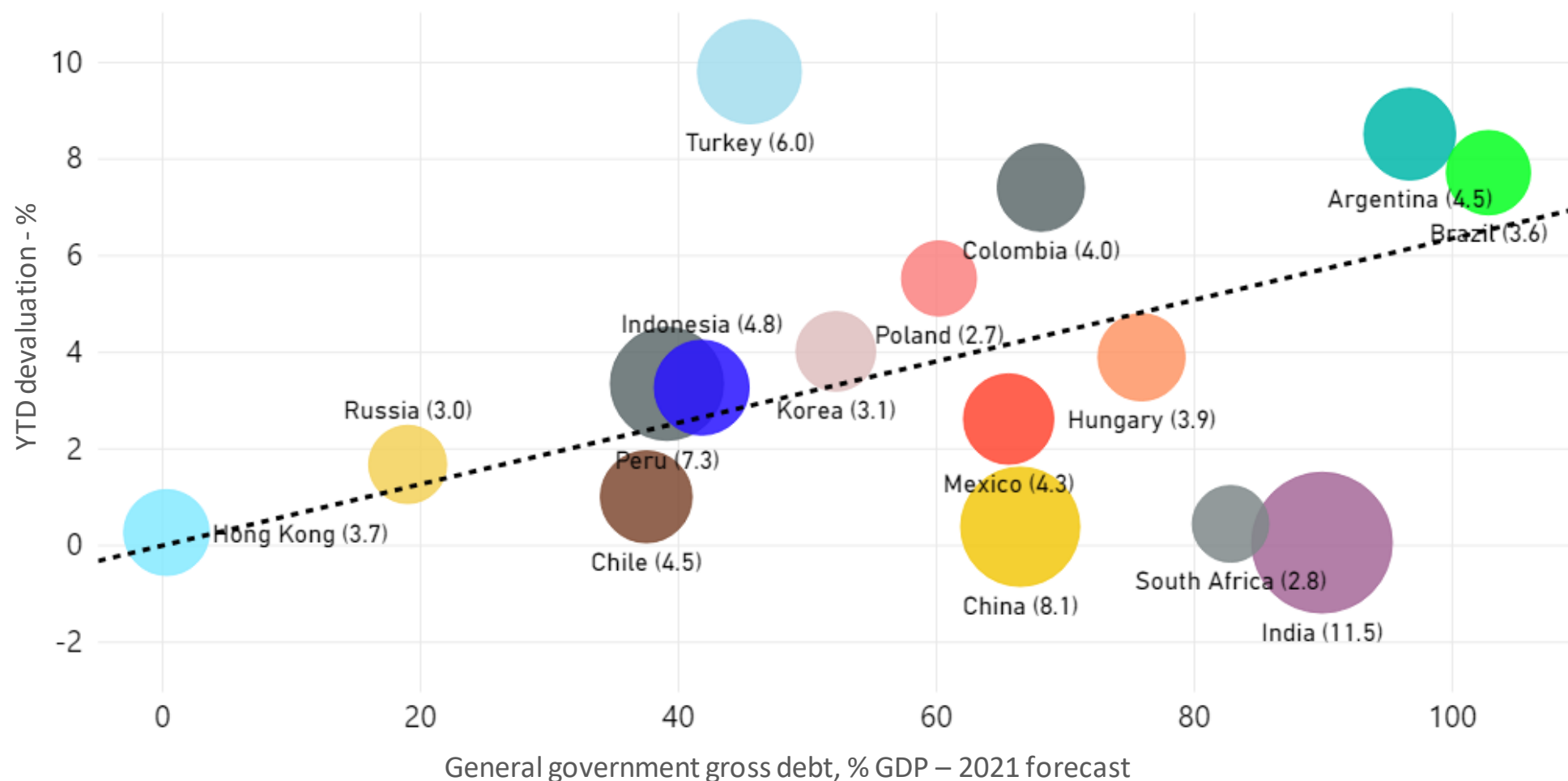
Gross Debt – emerging markets (% of GDP)



Historical pattern of general government debt (% of GDP)

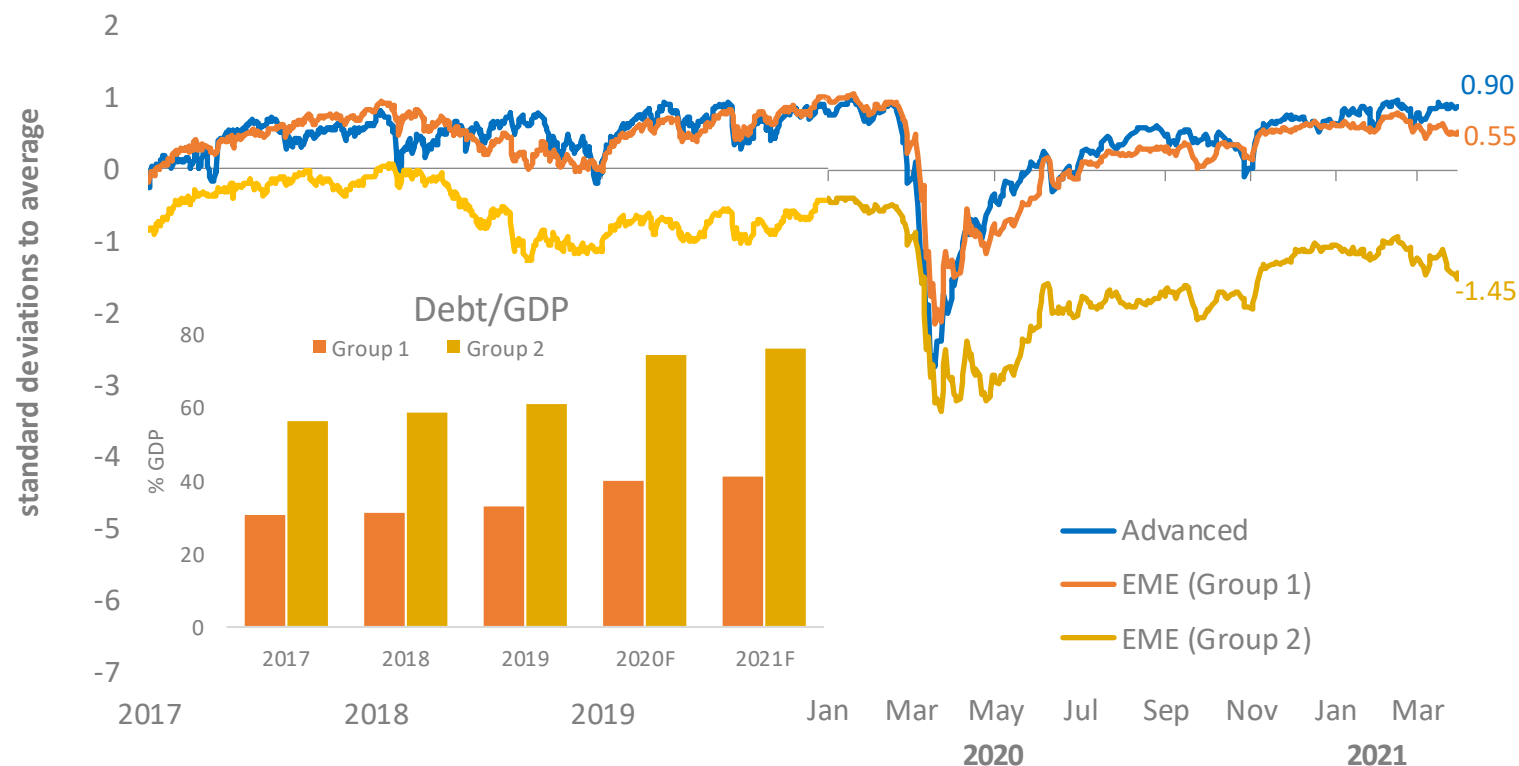


Fiscal Aspects in Emerging Markets



Differentiation in risk appetite for emerging economies with unfavorable economic fundamentals remains.

Risk Appetite



EME Group 1:

Chile, Indonesia, Malaysia and Russia.

Gross Debt/GDP (average 2017-21) = 34.9%

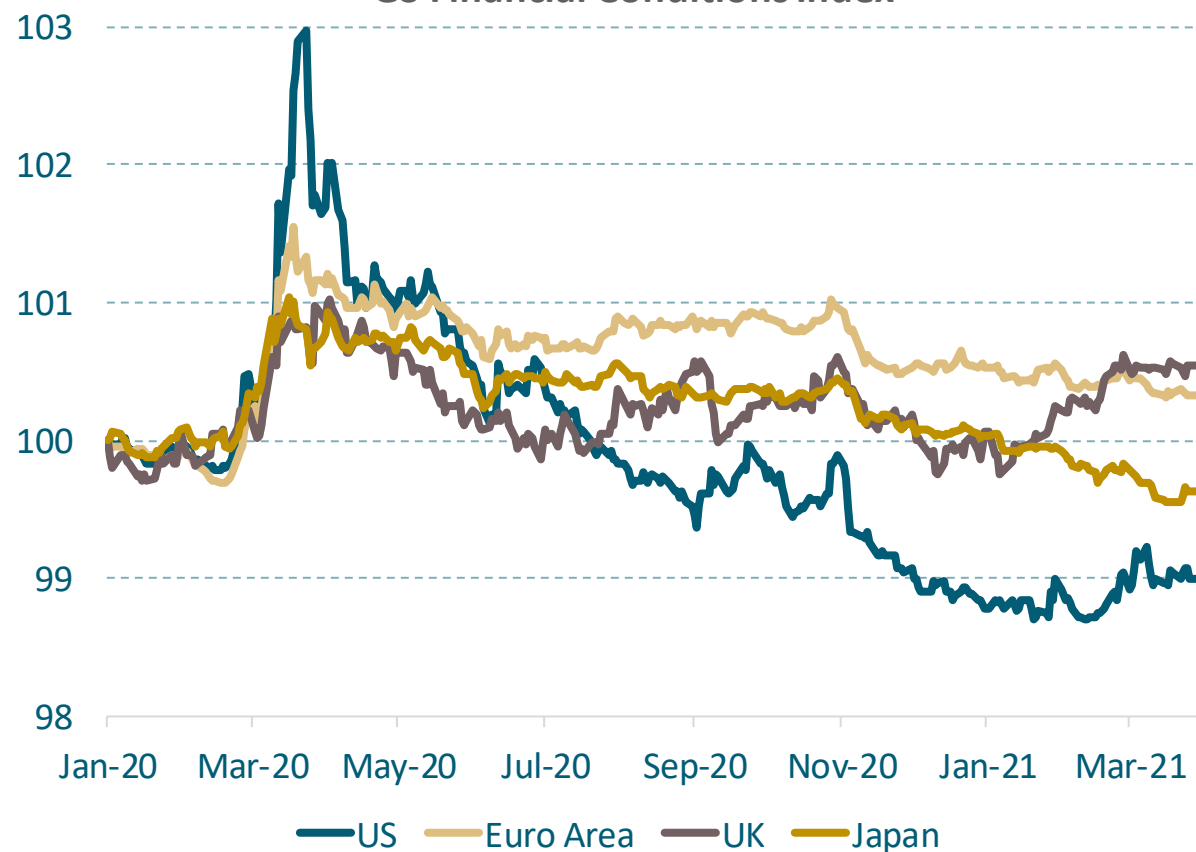
EME Group 2:

Brazil, Colombia, India, Mexico, South Africa and Turkey.

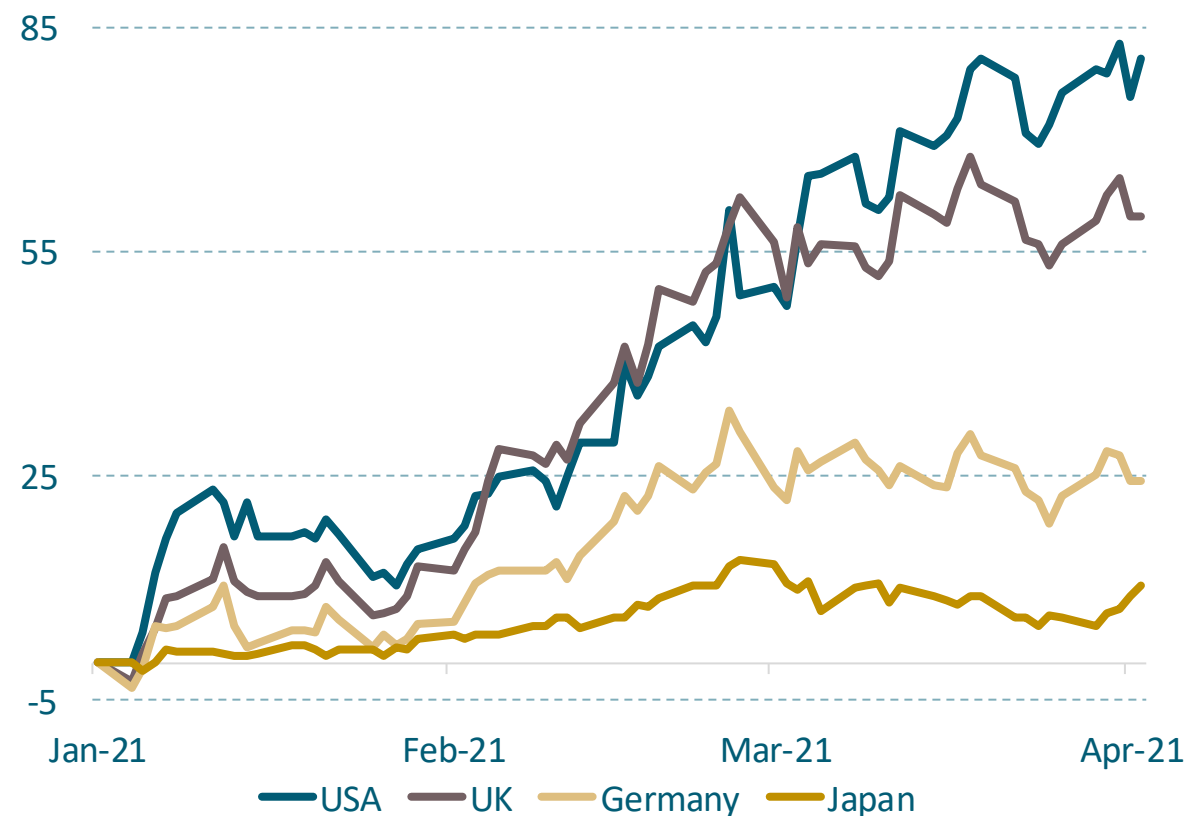
Gross Debt/GDP (average 2017-21) = 65%

Financial conditions more stimulative in the US. Increase in long term yields, especially in the US and the UK.

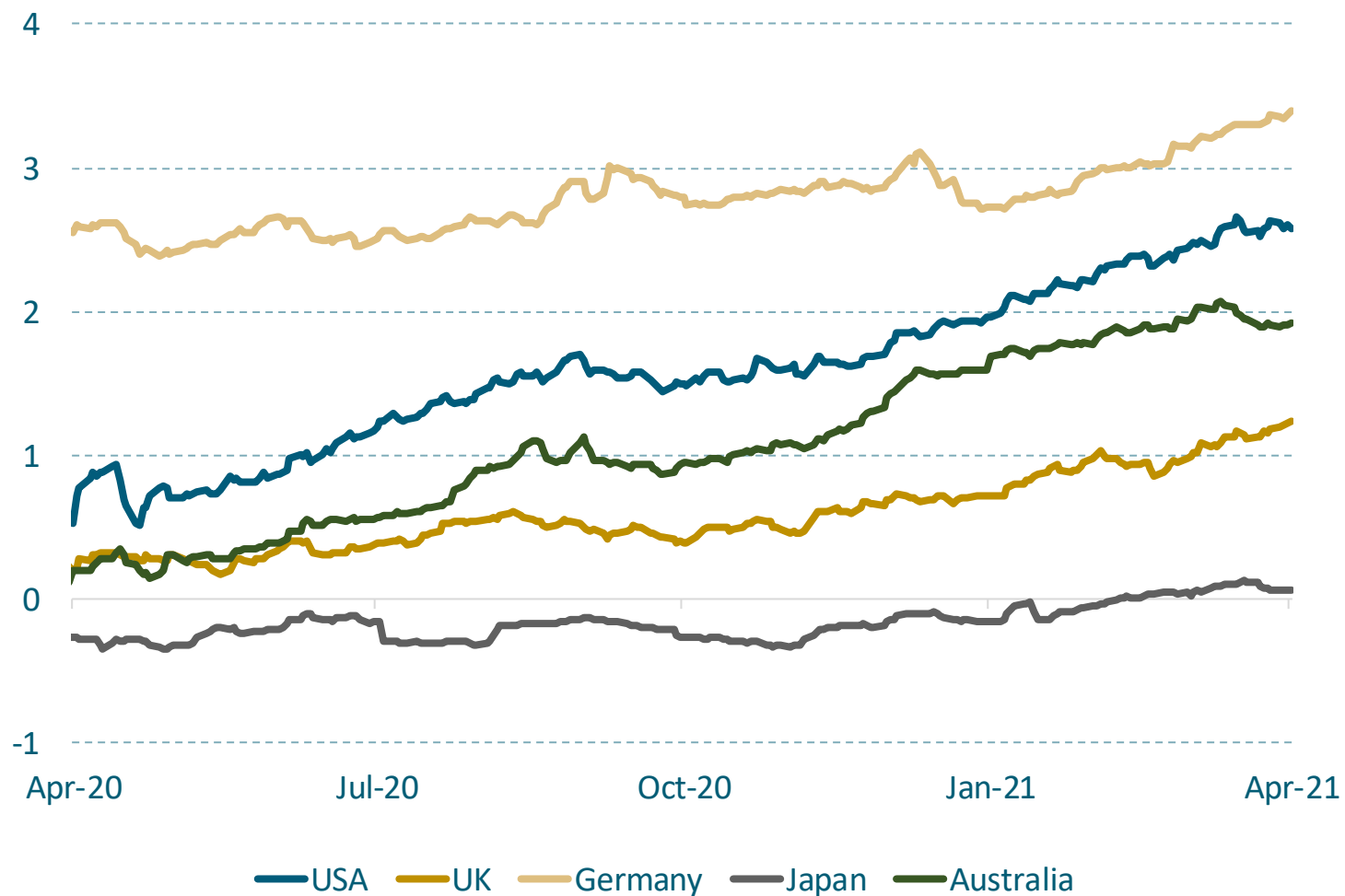
GS Financial Conditions Index



Change in 10-year yield* (YTD b.p.)

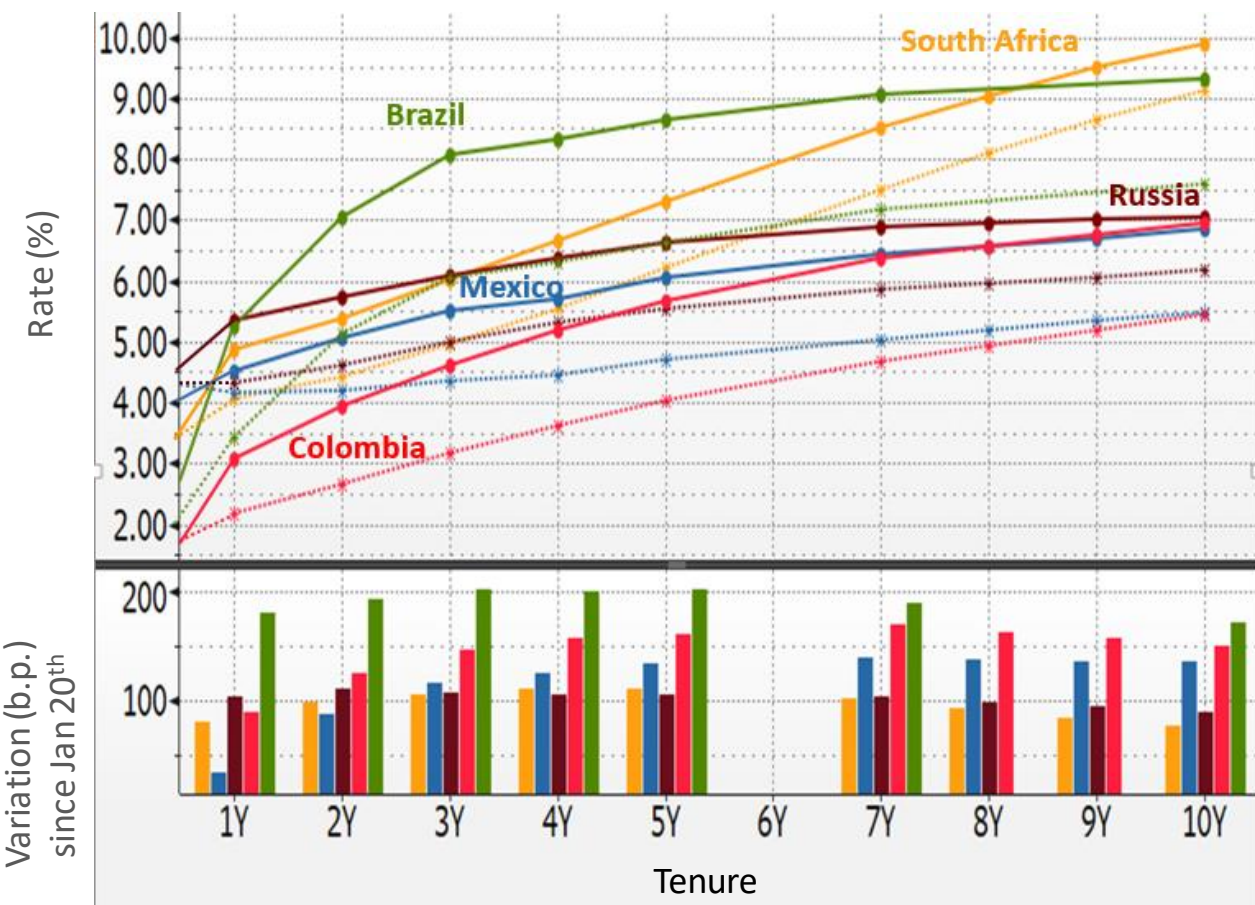


Implicit inflation (5-years break-even)

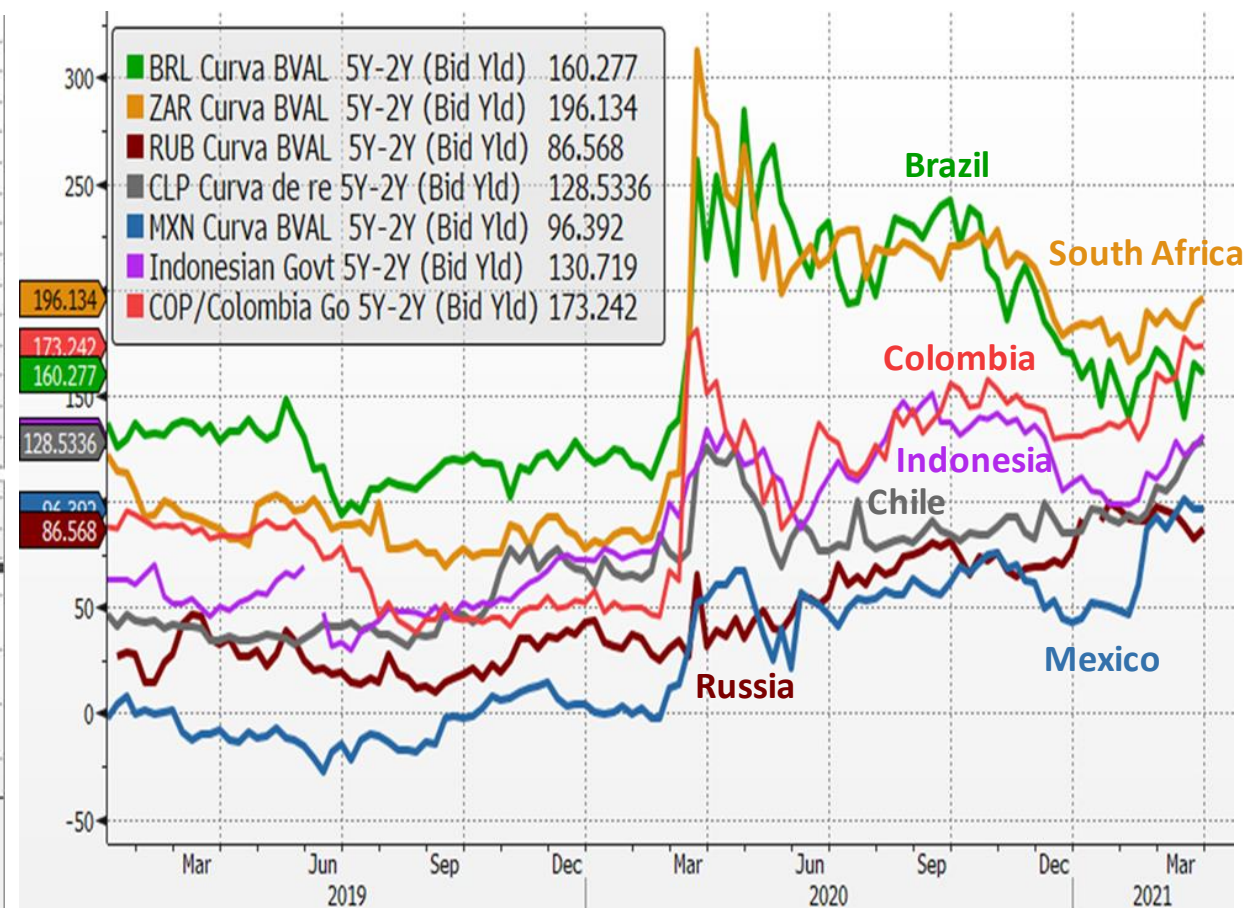


Source: Bloomberg

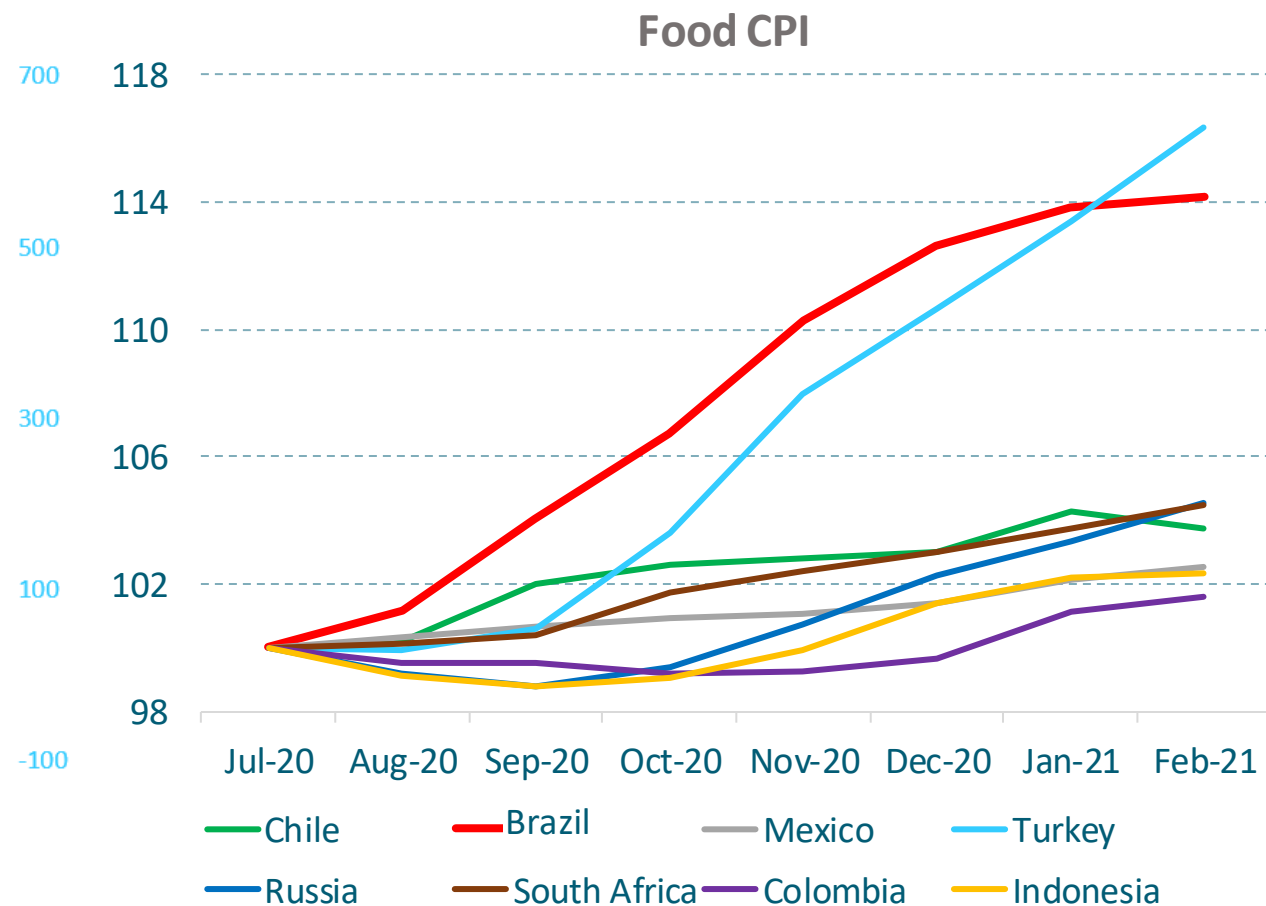
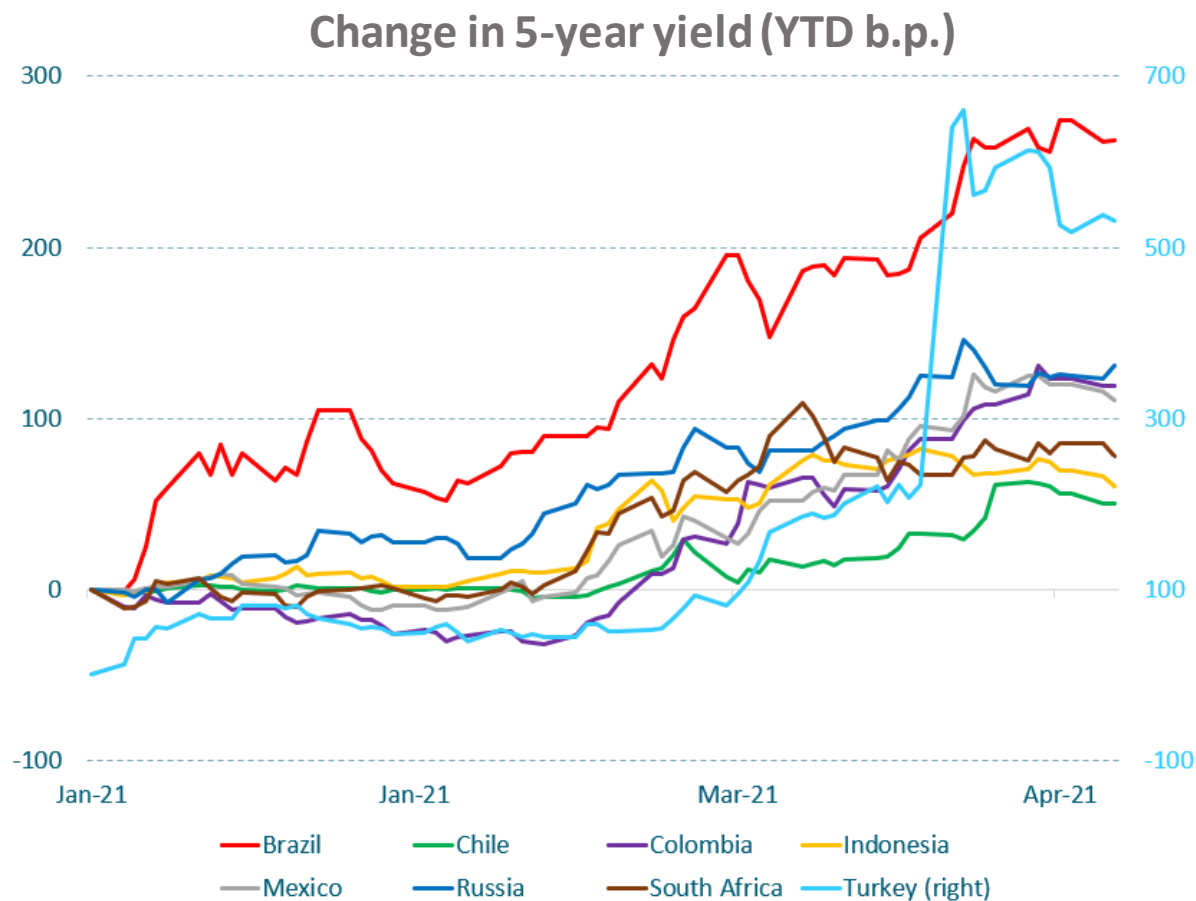
Yield curves



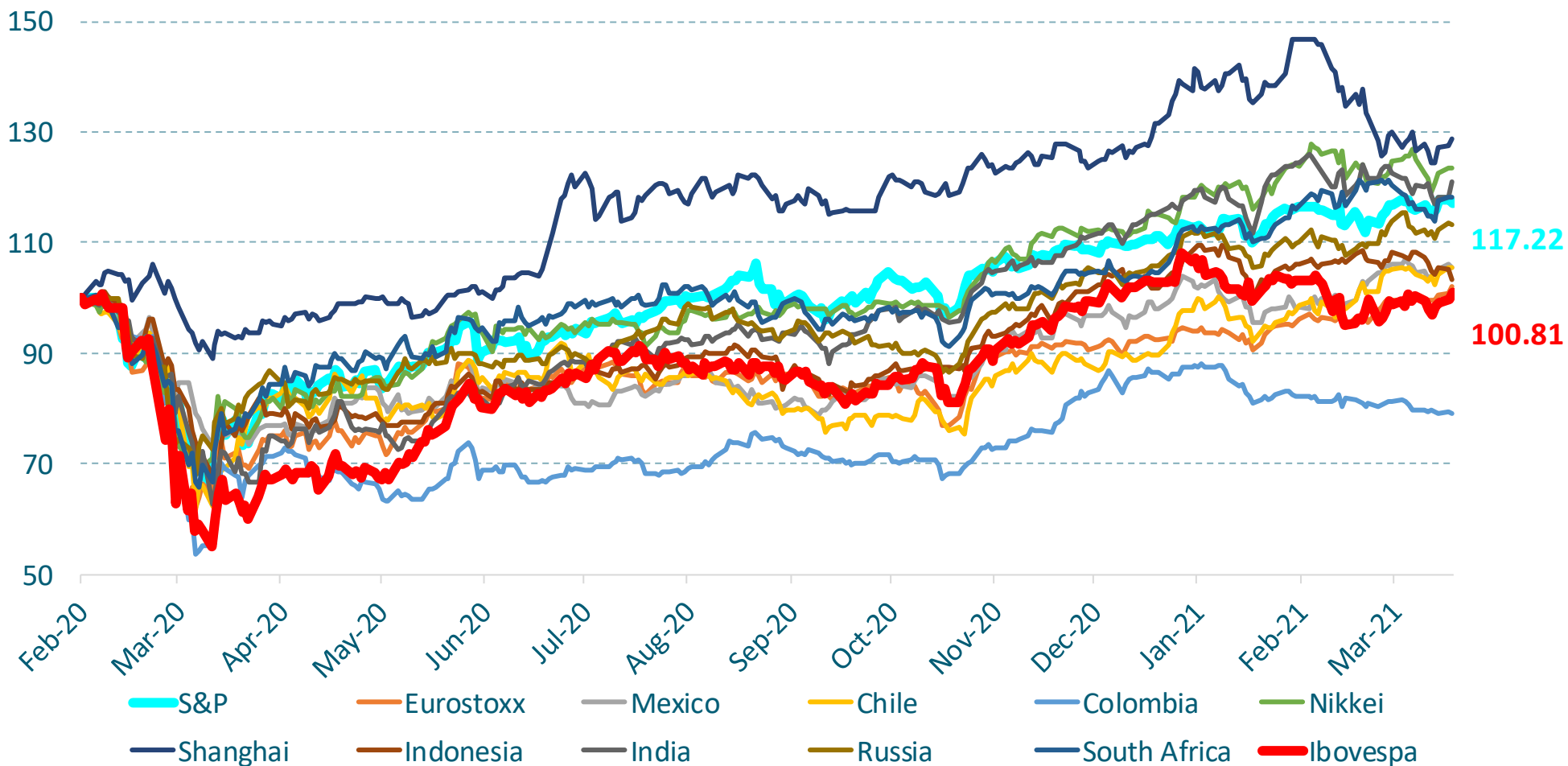
Slope for 2 x 5 years (b.p.)



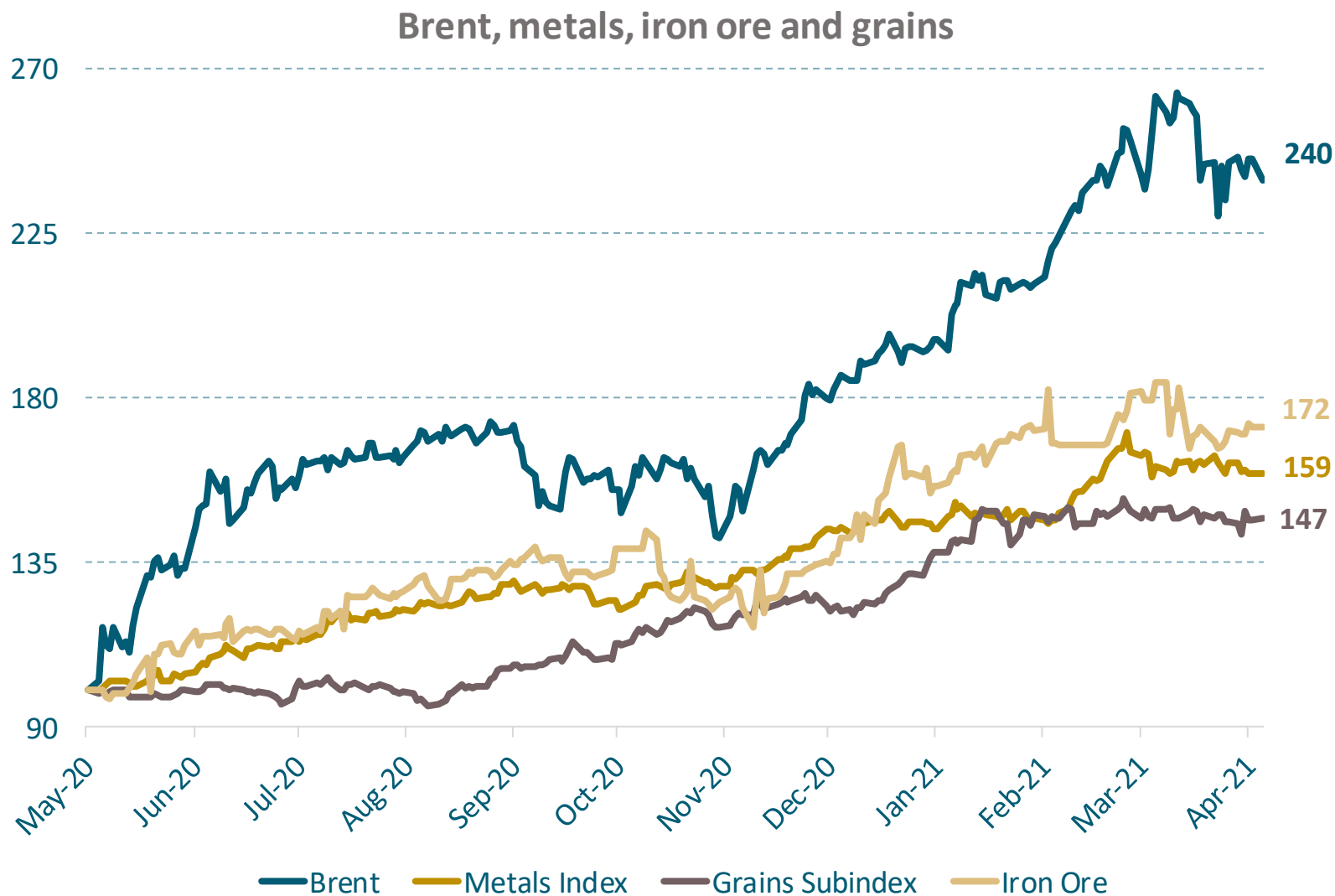
Yields and food CPI – Selected countries



Stock markets performance



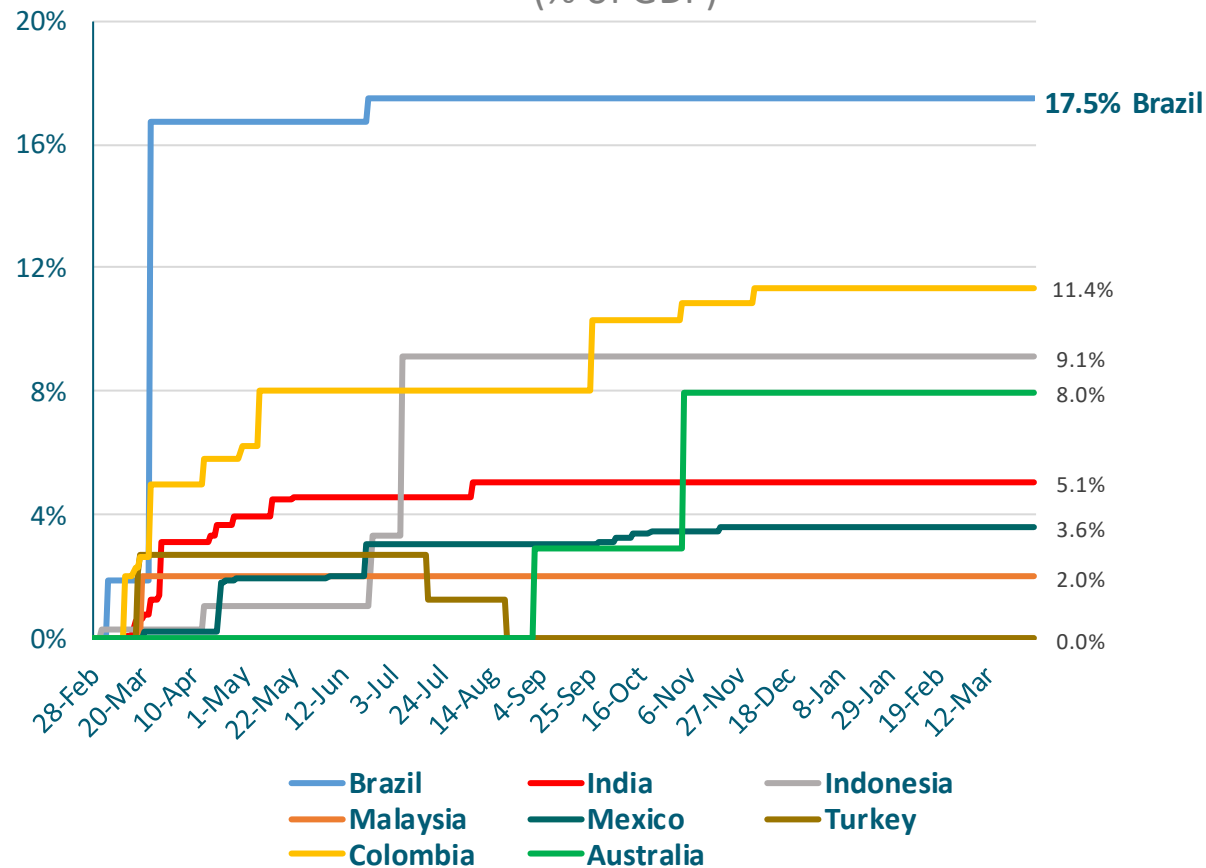
Source: Bloomberg



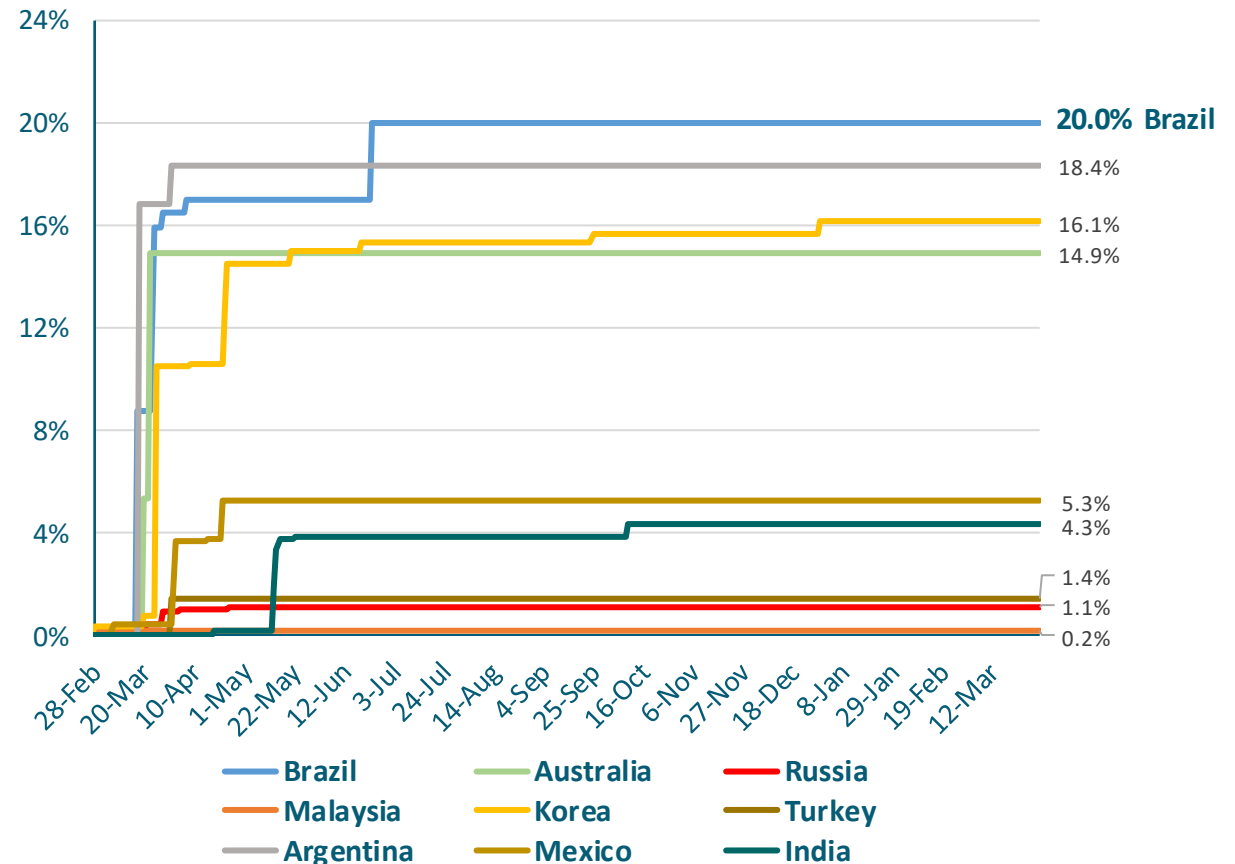
Source: Bloomberg

EMEs – Comparative overview of announced measures

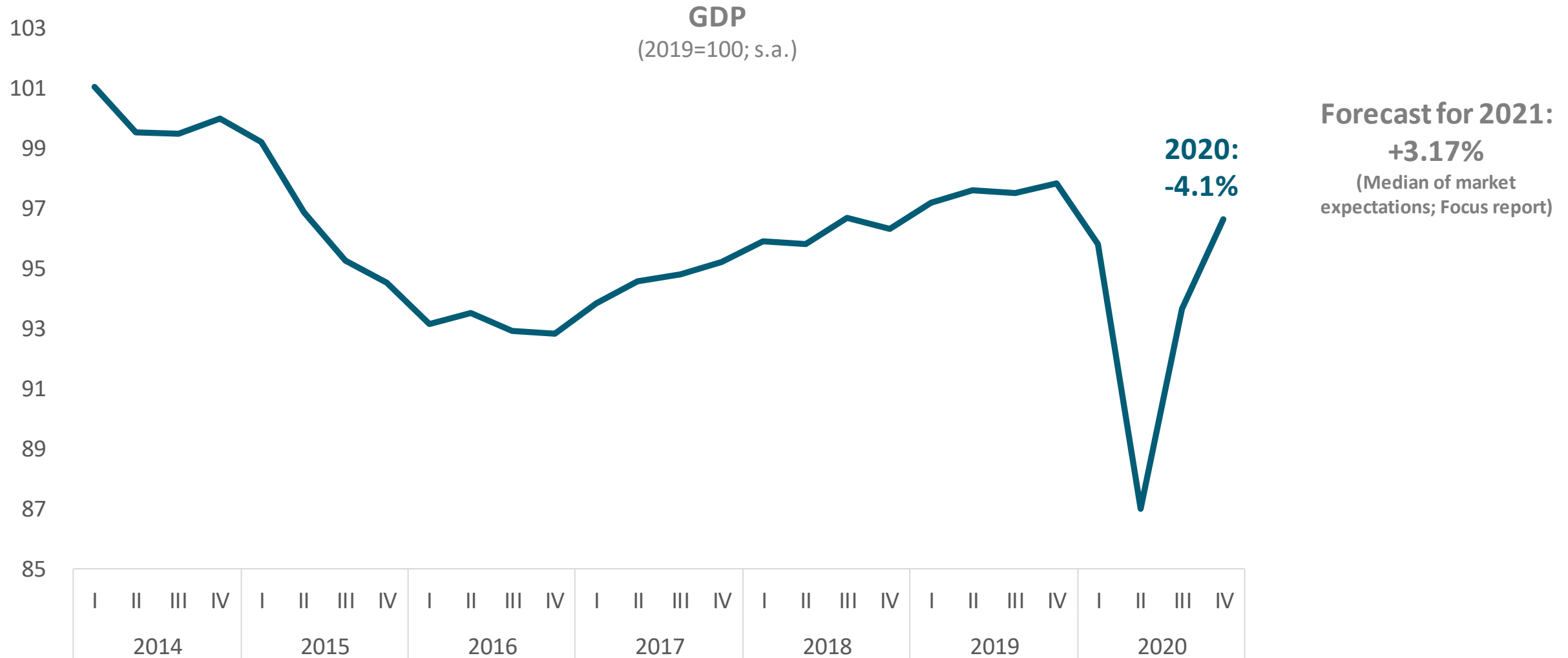
Liquidity Support (% of GDP)



Credit Support (% of GDP)



Source: FSB/BCB – updated until 03/30/2021



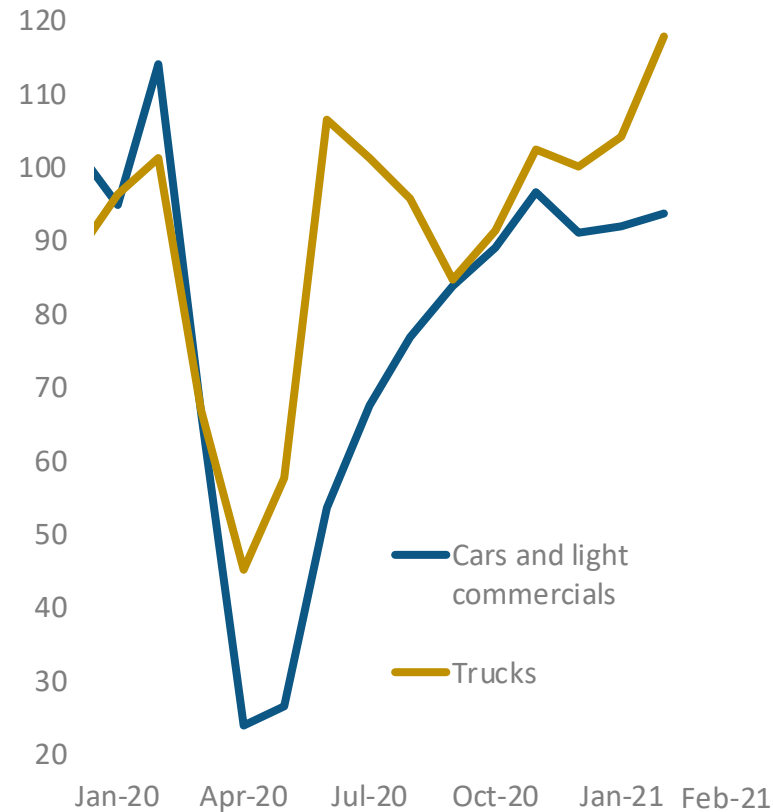
Sources: IBGE and Focus Report (Apr 1st, 2021)

Electricity demand
(mm7d; 2019=100)

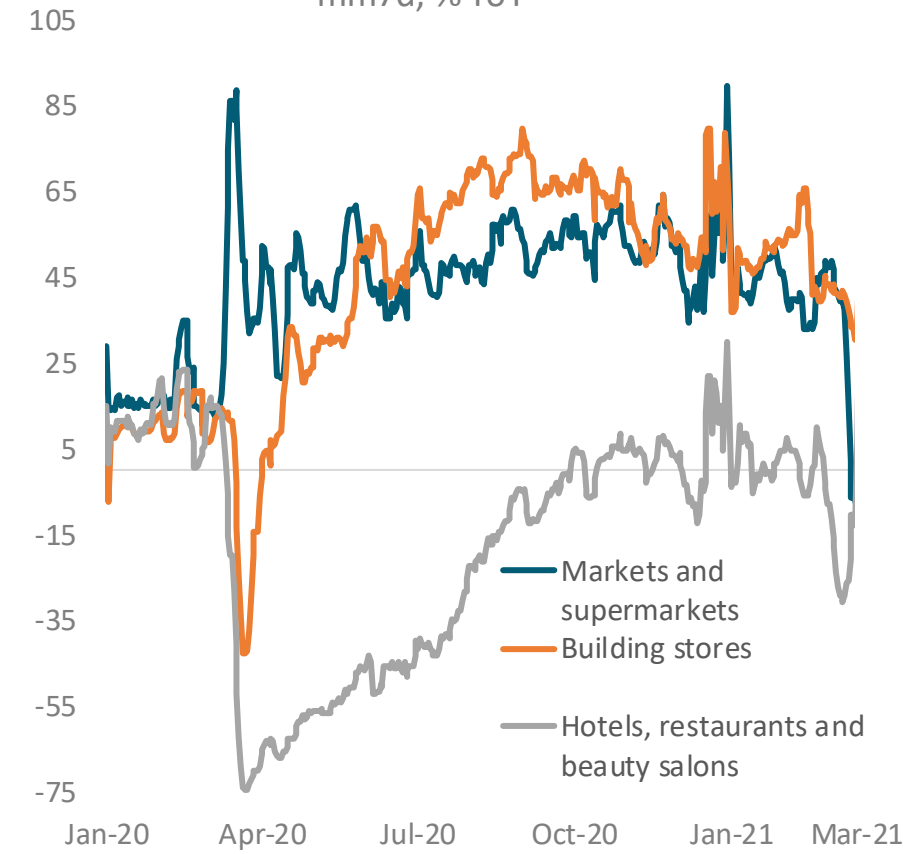


Sources: ONS, seasonally adjusted by BCB; Fenabreve.

Vehicle sales
(2019=100; s.a.)

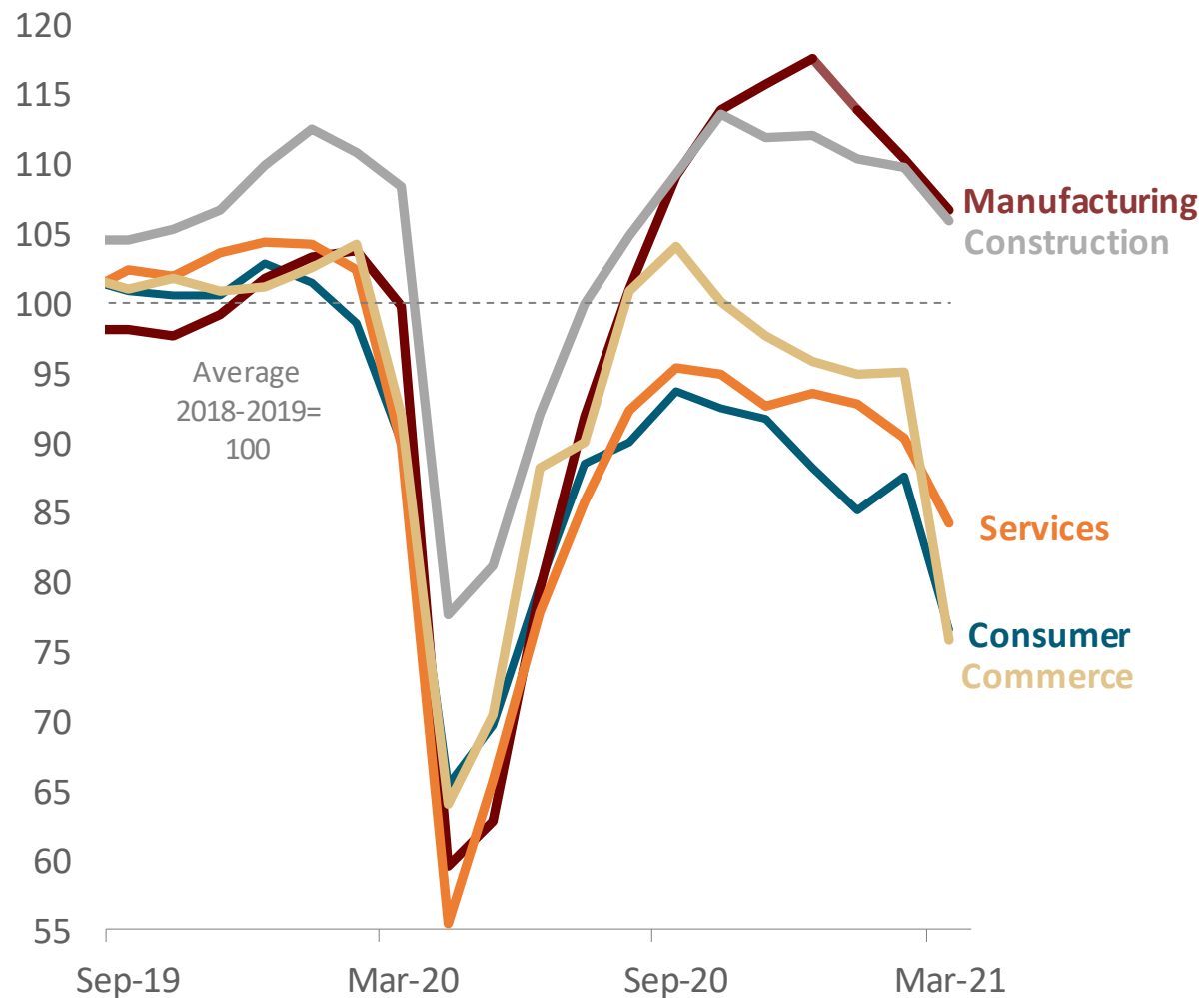


Debit card sales
Selected sectors, Nominal values
mm7d; % YoY

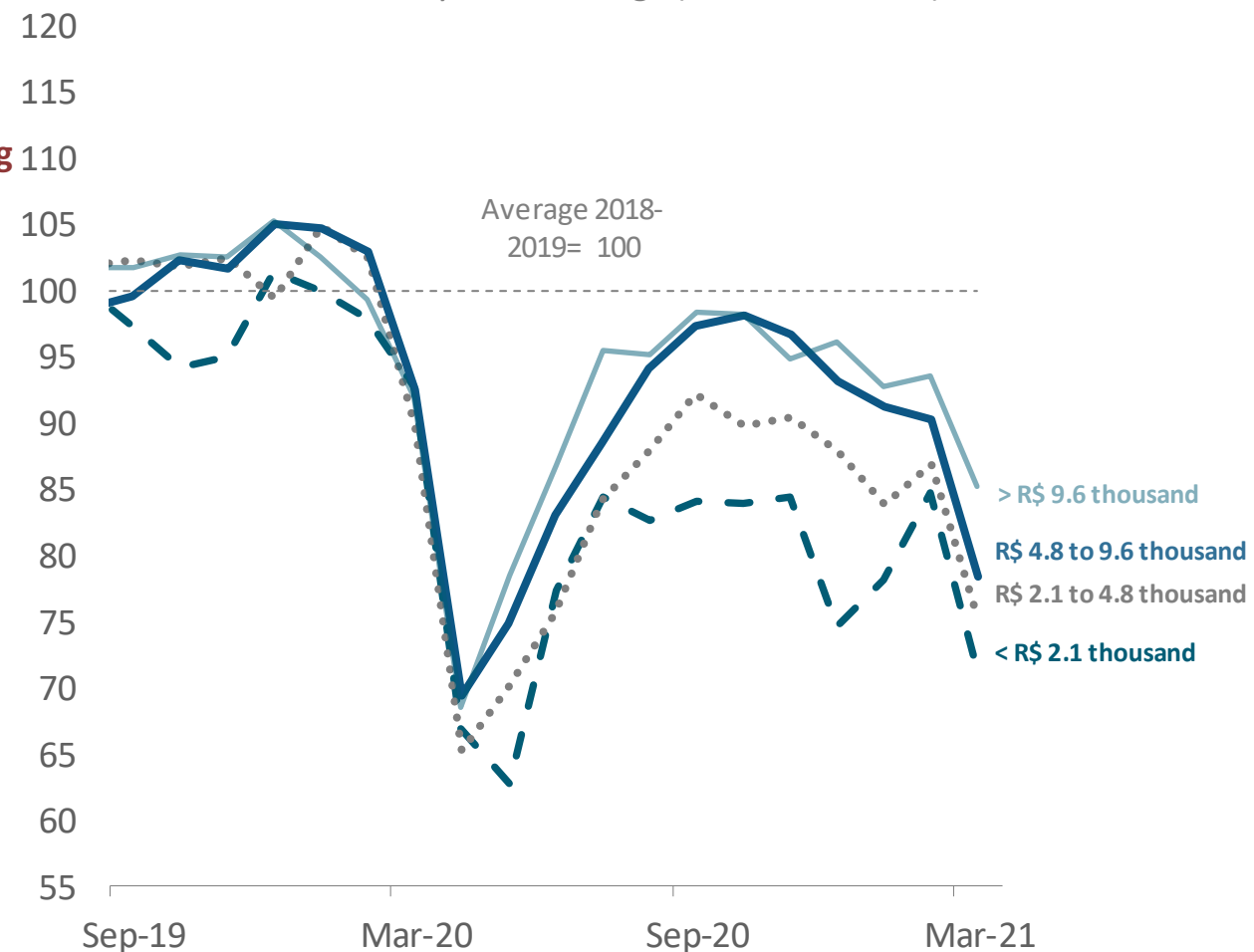


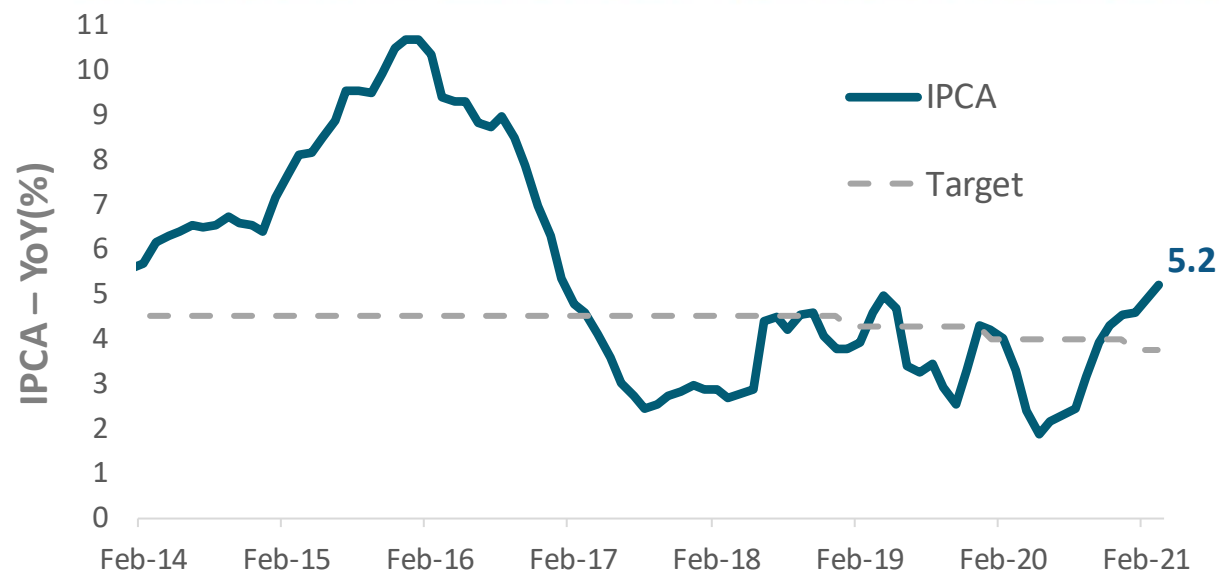
Source: Câmara Interbancária de Pagamentos (CIP)

Business confidence X consumer confidence



Sources: FGV. Seasonally adjusted data.

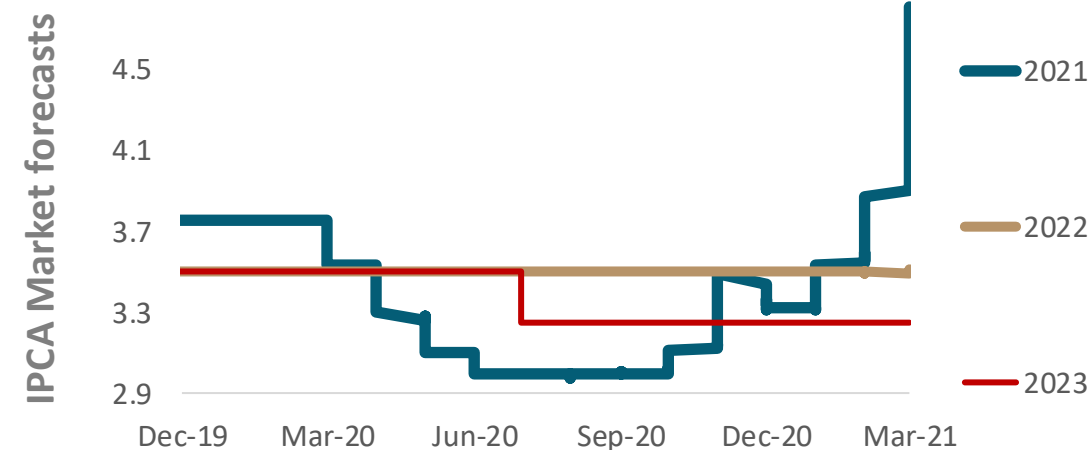
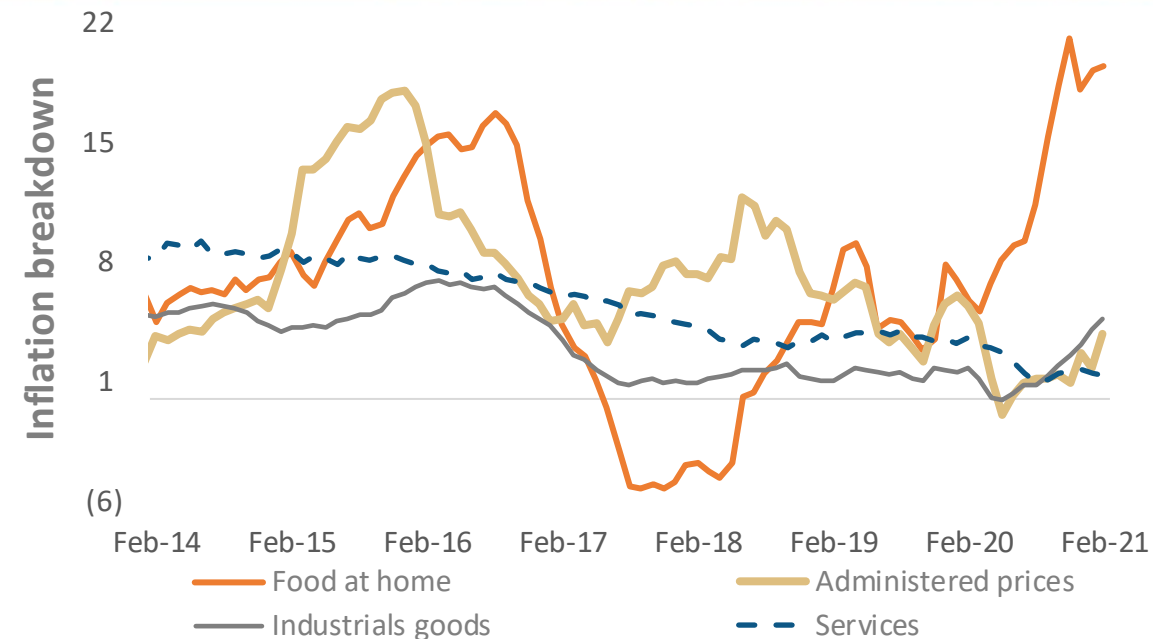
Consumer confidence
By income range (in BRL thousand)



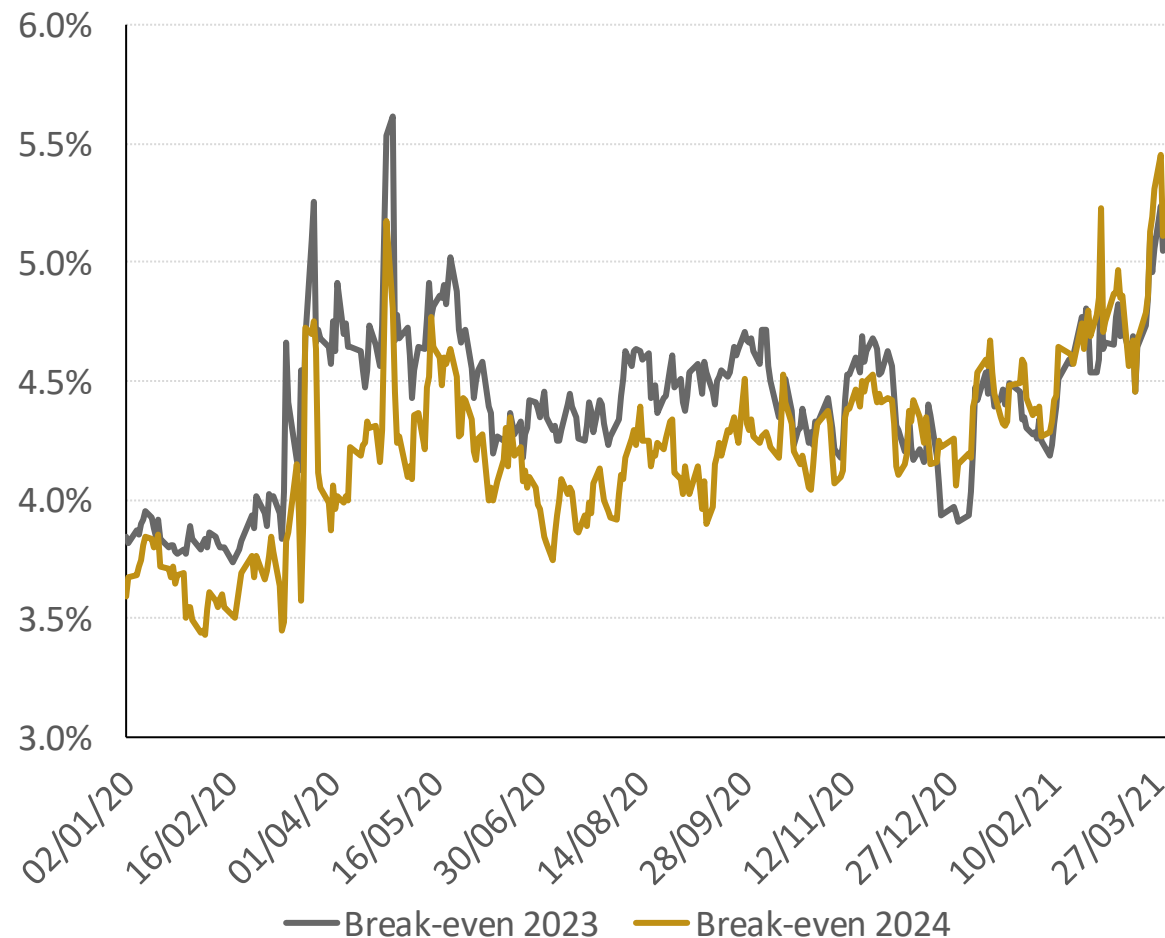
12-month change

| | January COPOM [1] | March COPOM [2] | Difference [2-1] | Contribution to the difference |
|-------------------|----------------------|--------------------|---------------------|--------------------------------------|
| | Dec 2020 | Feb 2021 | Feb - Dec | (p.p) |
| IPCA | 4.52 | 5.20 | 0.68 | 0.68 |
| Administered | 2.61 | 3.80 | 1.19 | 0.31 |
| Free prices | 5.18 | 5.68 | 0.50 | 0.38 |
| Food | 18.16 | 19.44 | 1.28 | 0.17 |
| Industrials goods | 3.17 | 4.62 | 1.45 | 0.33 |
| Services | 1.73 | 1.39 | -0.34 | -0.13 |

Sources: IBGE, BCB, Focus Report.

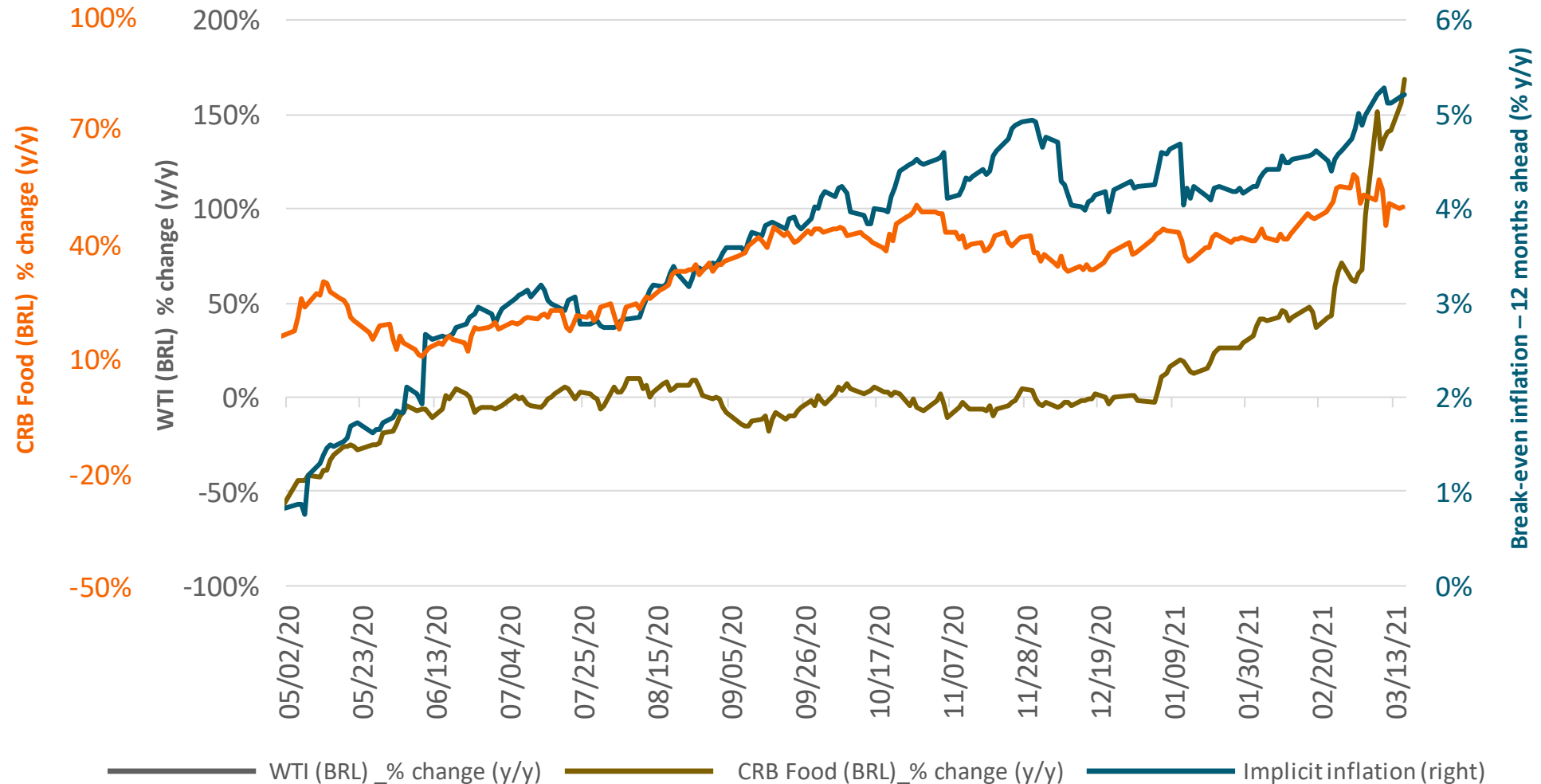


Inflation expectations – Brazil



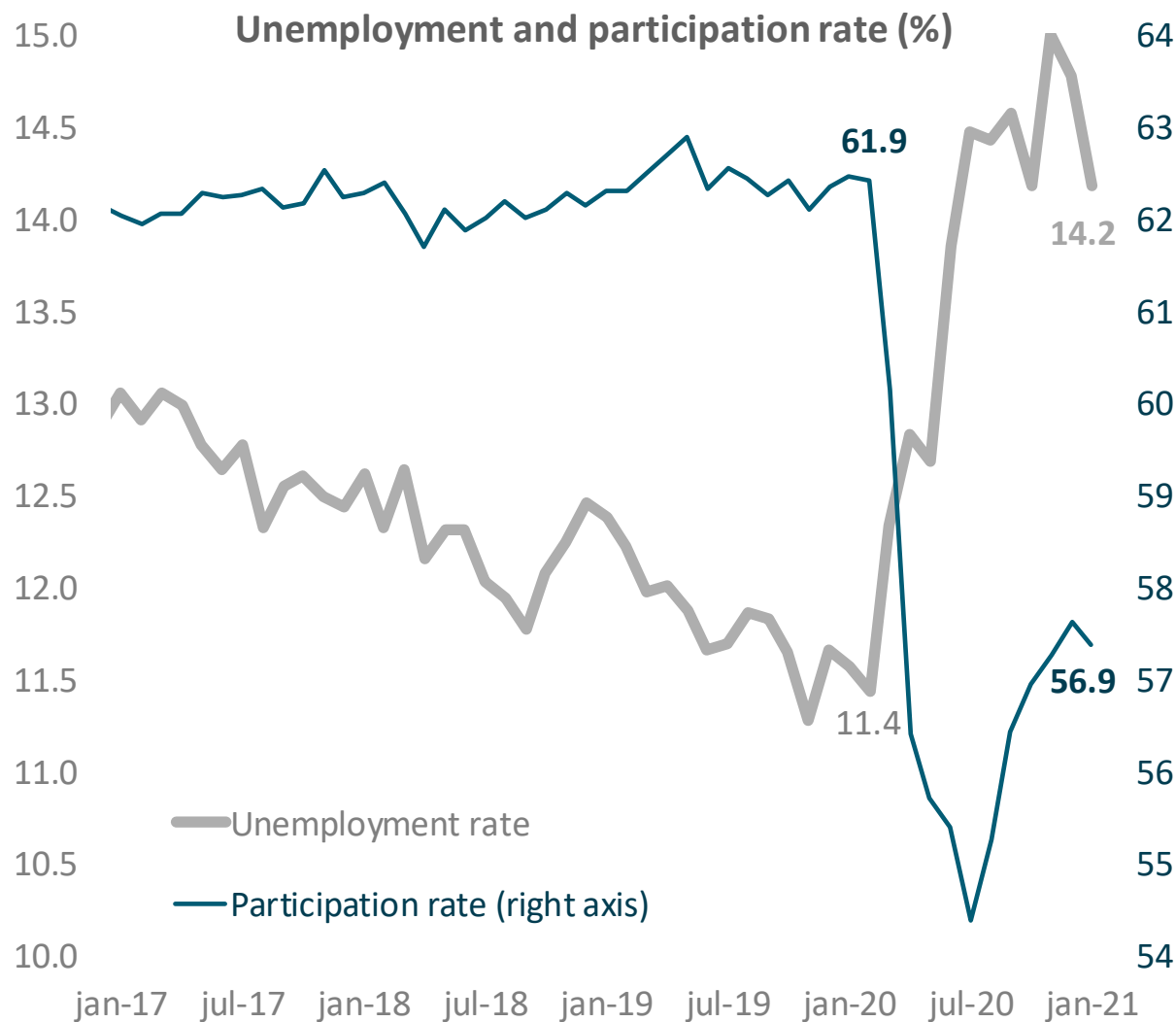
Sources: BCB. Rates estimated from DAP.

CRB Food and WTI vs. implicit inflation 12 months ahead

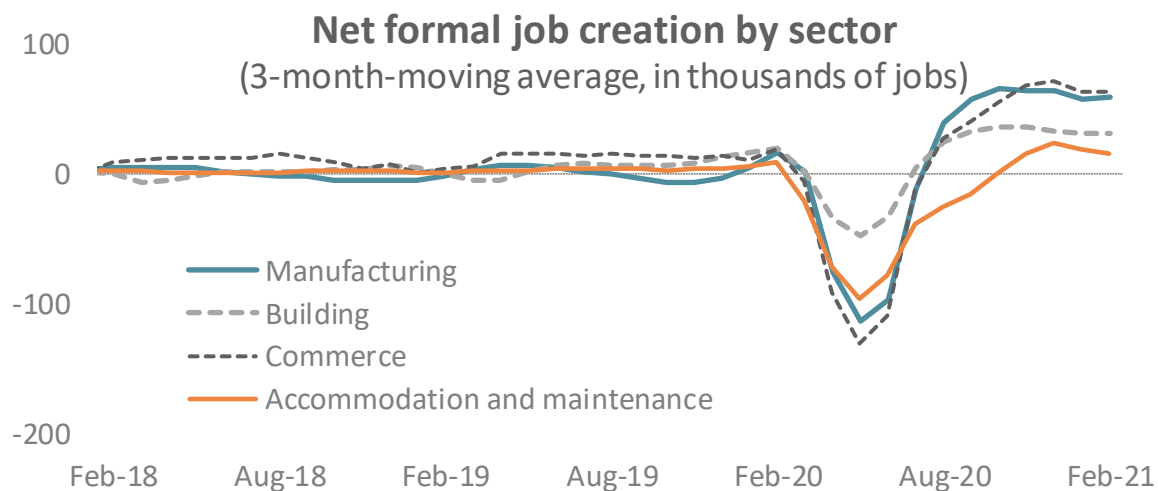
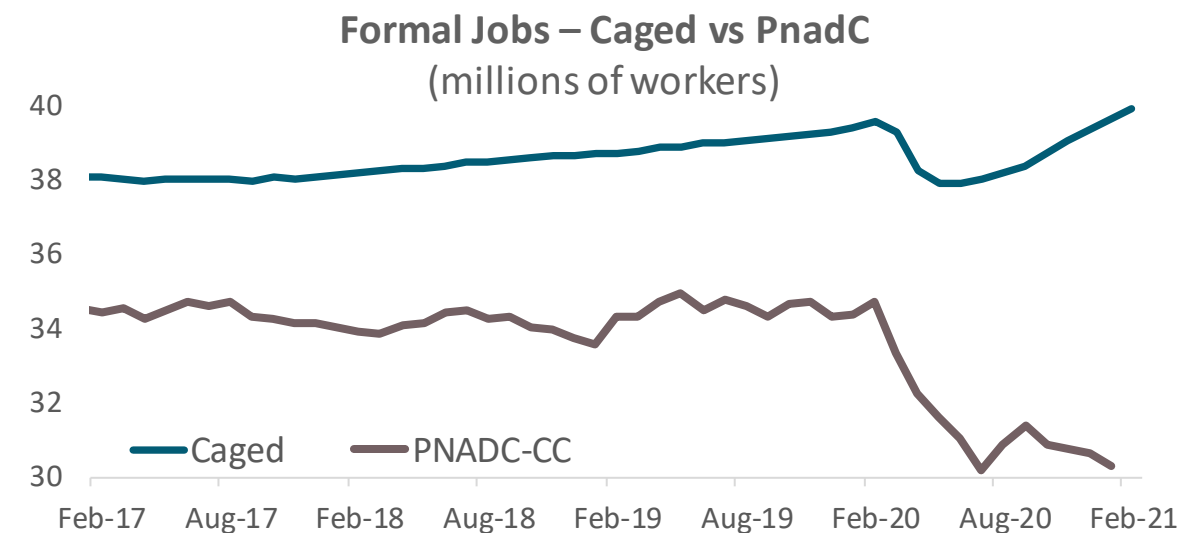


Source: Bloomberg.

Labor market: formal vs informal



Source: IBGE (PNAC-C mensalizada). Data is seasonally adjusted by BCB.

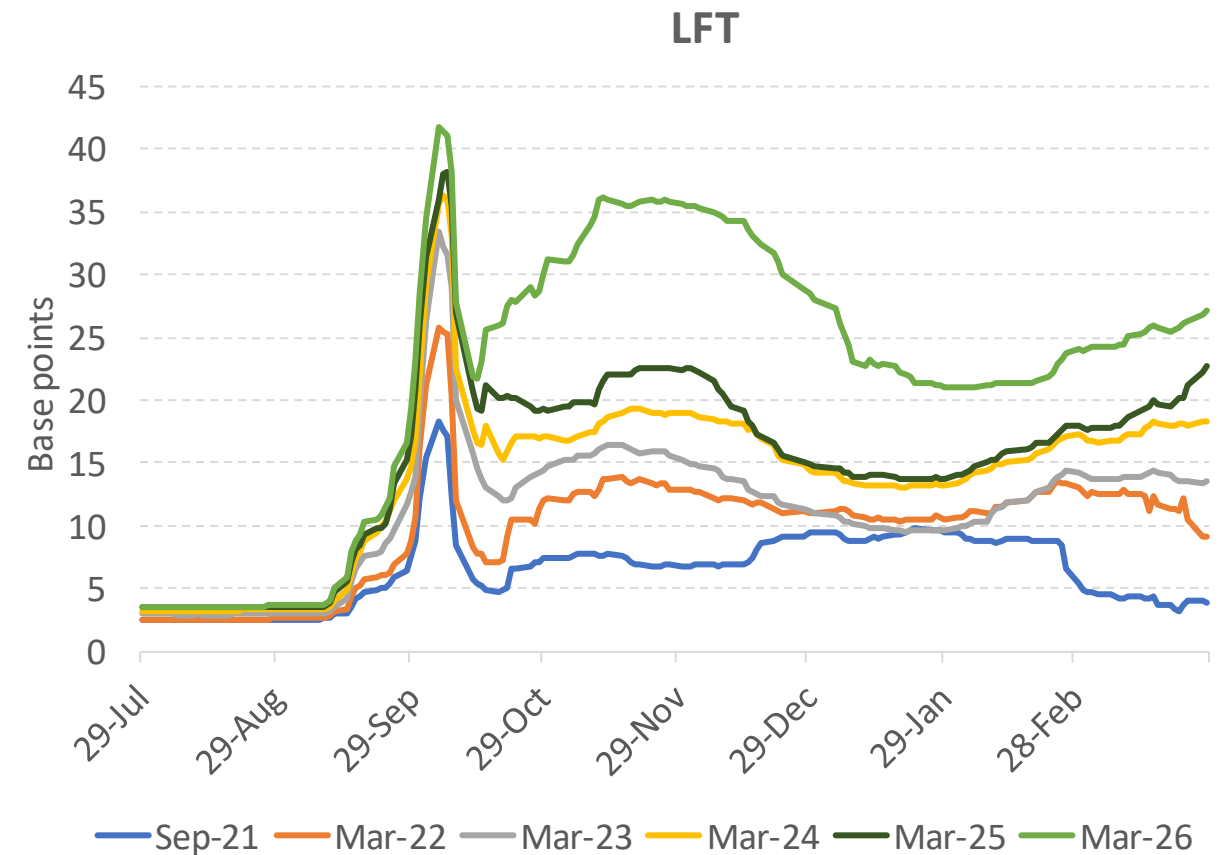
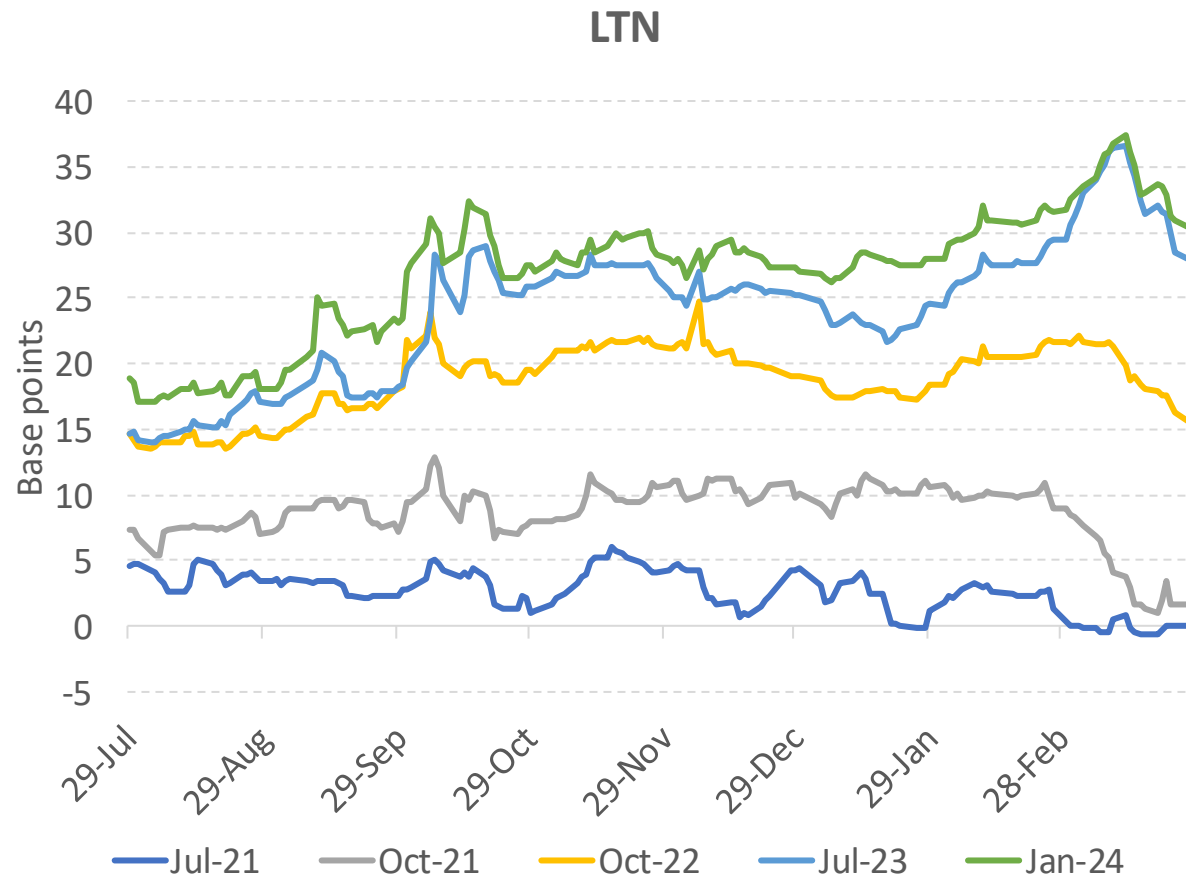


Source: Ministry of Economy (CAGED). Data is seasonally adjusted by BCB.

237th Copom meeting – March 2021

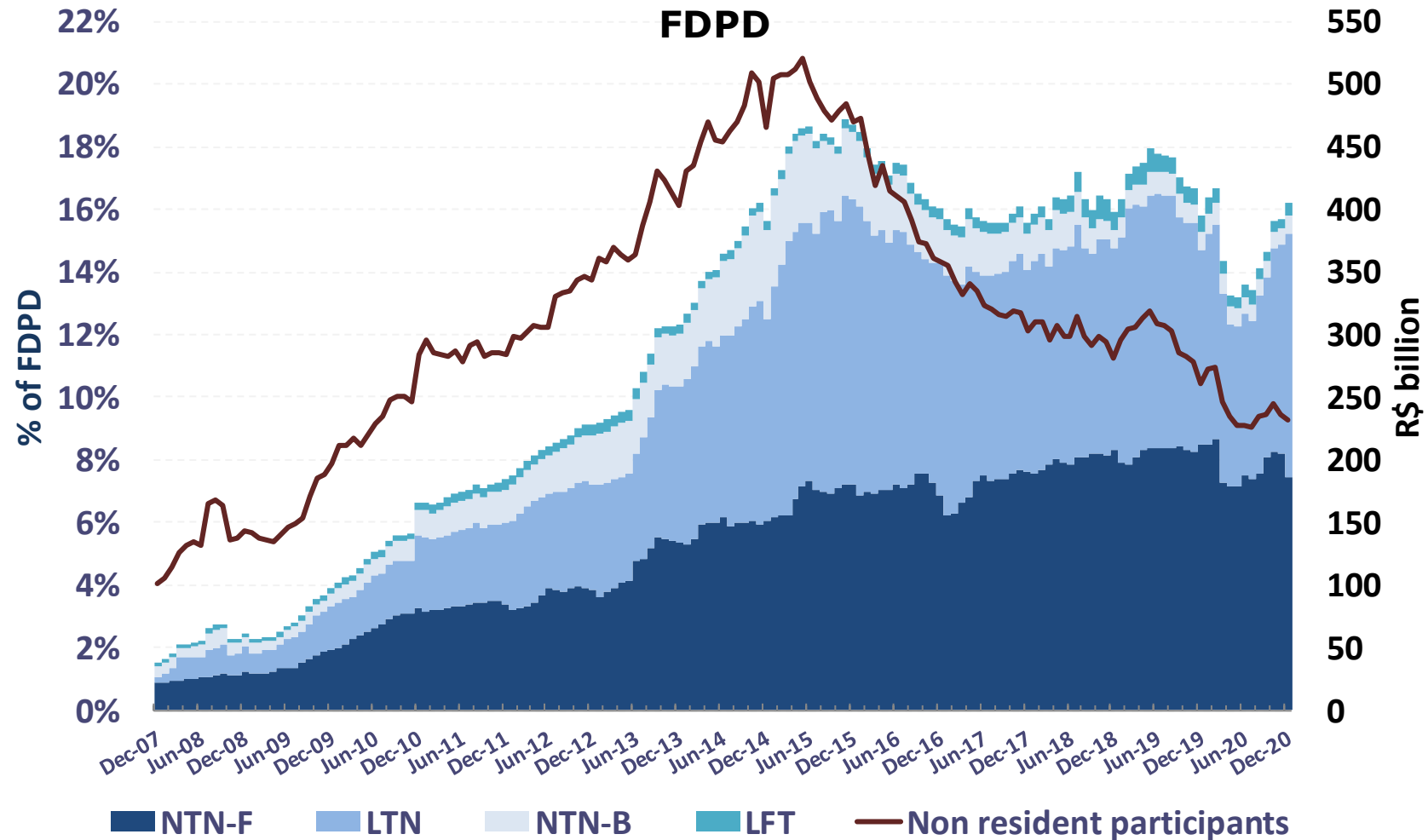
- In its 237th meeting, the Copom unanimously decided to increase the Selic rate to 2.75% p.a.
- The Committee judges that this decision reflects its baseline scenario for prospective inflation, a higher-than-usual variance in the balance of risks, and it is consistent with convergence of inflation to its target over the relevant horizon for monetary policy, which includes 2021 and, mainly, 2022.
- The Copom members consider that the current conditions ceased to prescribe an extraordinary stimulus.
- Therefore, the Copom decided to start a process of partial normalization by reducing the extraordinary degree of monetary stimulus. For all the aforementioned reasons, the Committee considered appropriate an adjustment of 0.75 p.p. in the Selic rate. In the Committee's evaluation, a swifter adjustment has the benefit of reducing the probability of not meeting the inflation target in 2021, as well as of keeping longer horizon expectations well anchored. Additionally, the broad set of information available to the Committee suggests that this strategy is consistent with meeting the 2022 inflation target, even if social distancing increases temporarily.
- For the next meeting, unless there is a significant change in inflation projections or in the balance of risks, the Committee foresees the continuation of the partial normalization process with another adjustment, of the same magnitude, in the degree of monetary stimulus.

Risk premia in government bonds



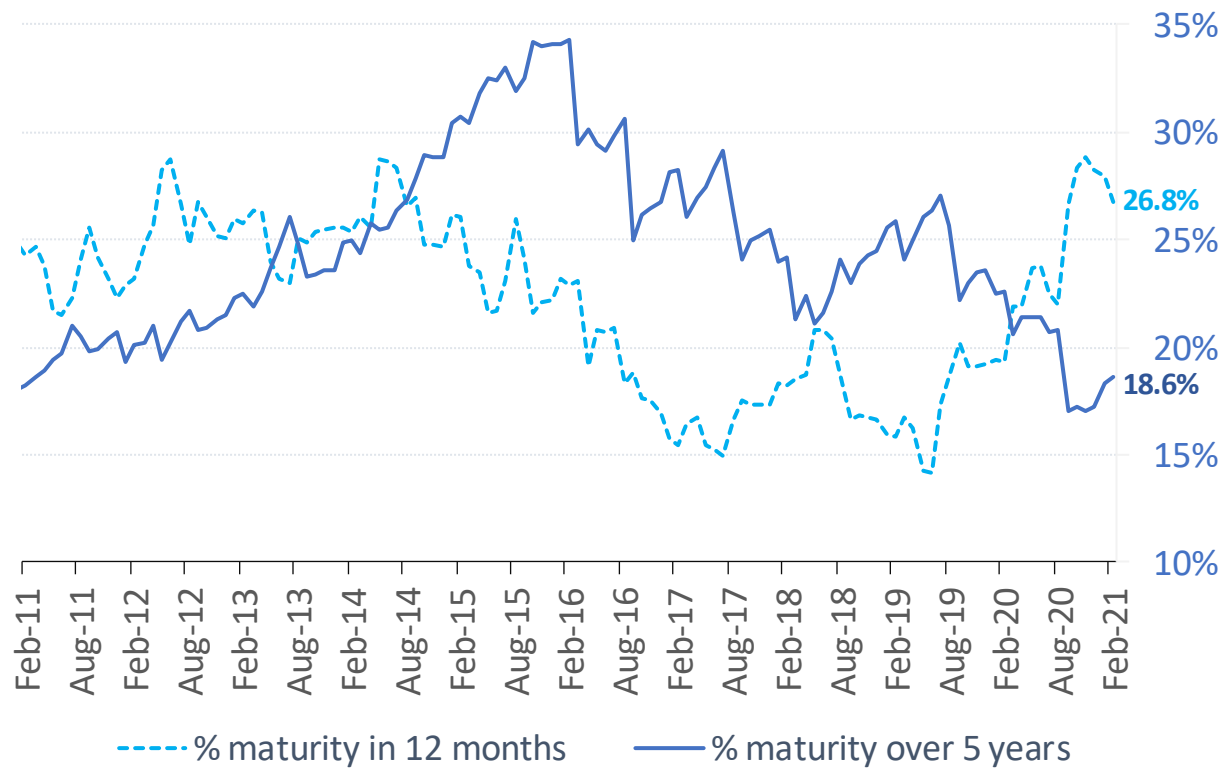
Sources: B3, Anbima, Demab.

Federal Domestic Public Debt

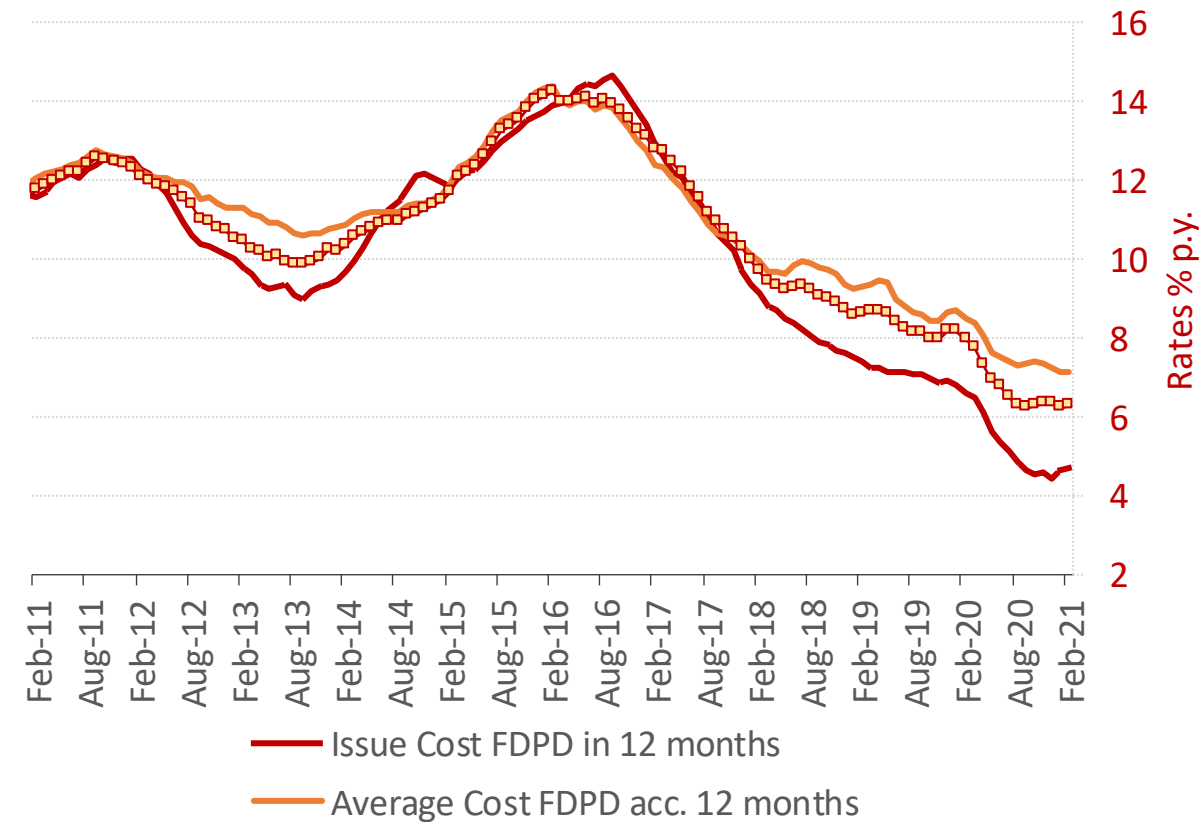


Sources: B3, BCB.

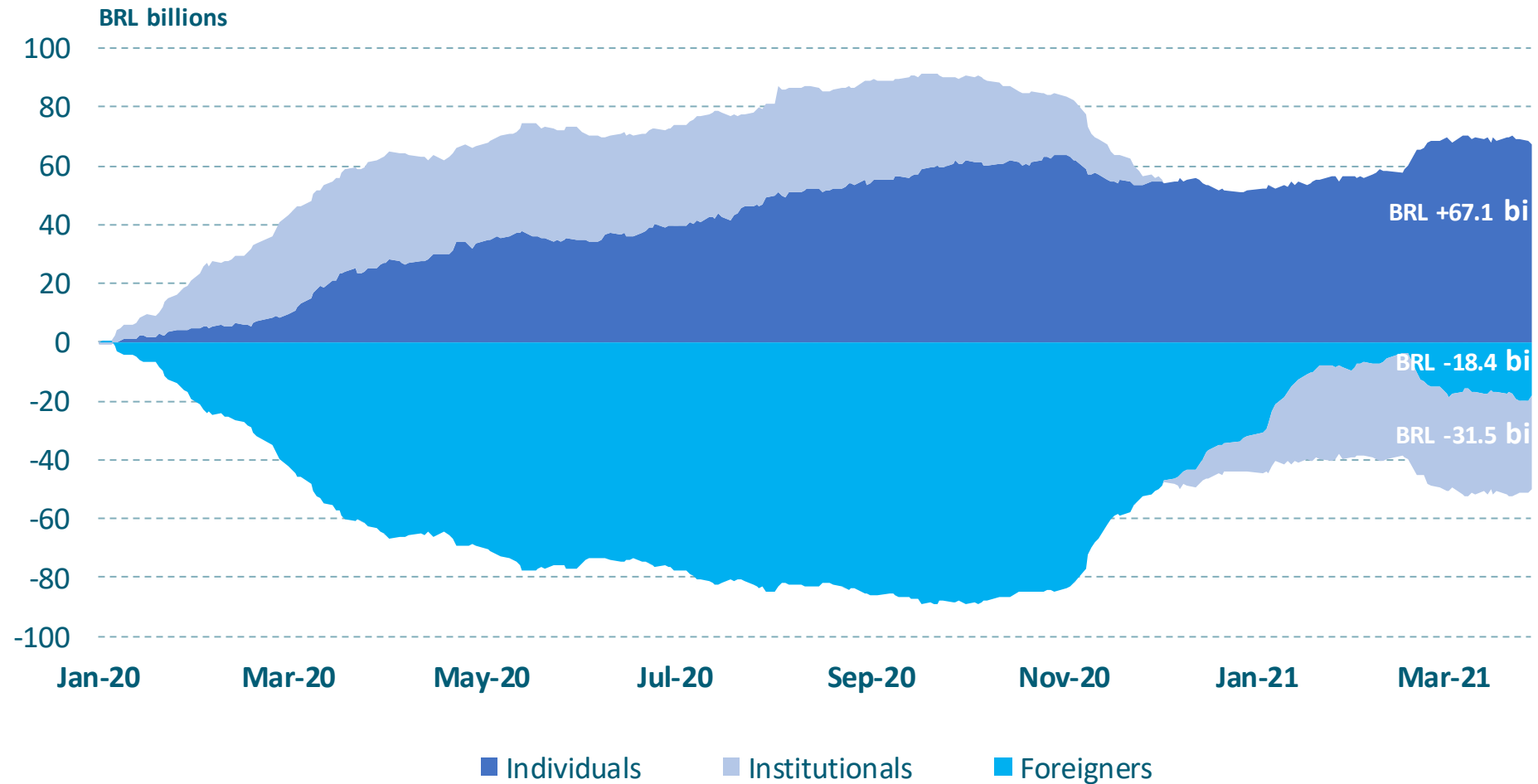
Maturity structure



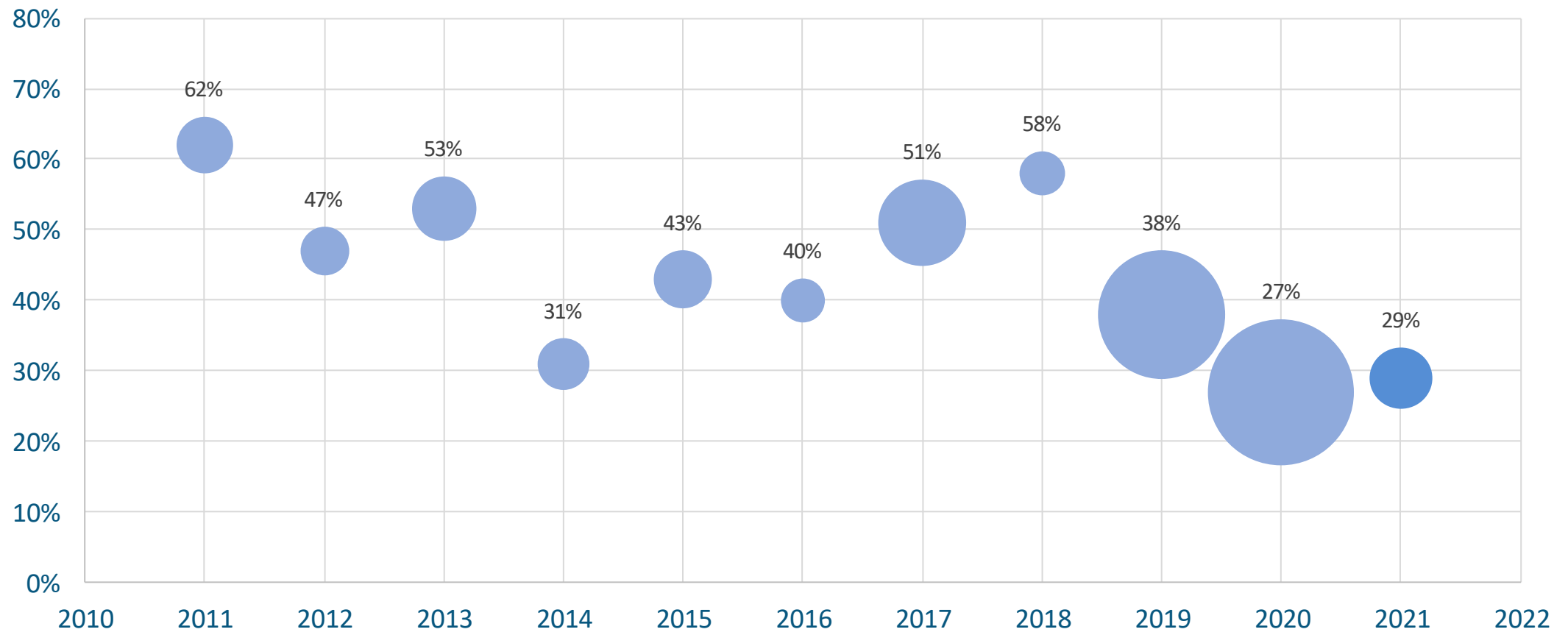
Issuance cost - FDPD



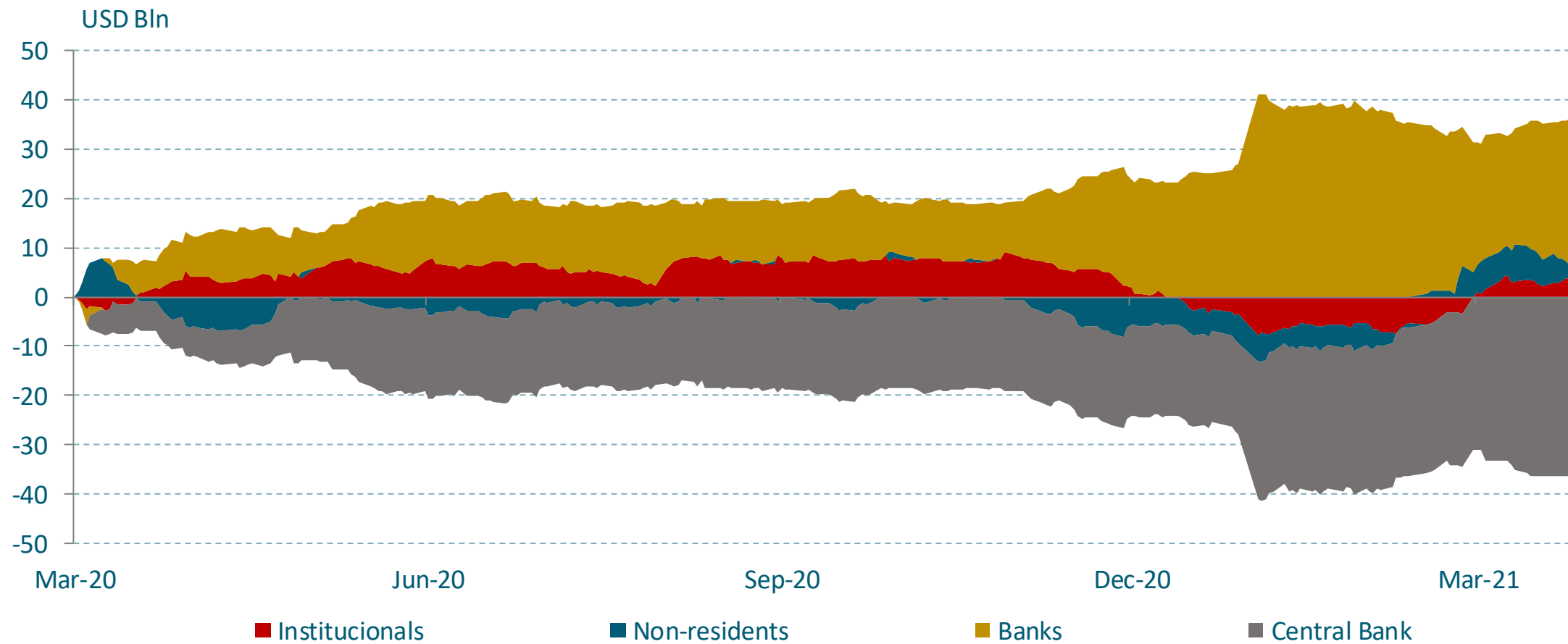
Accumulated flows into the stock market



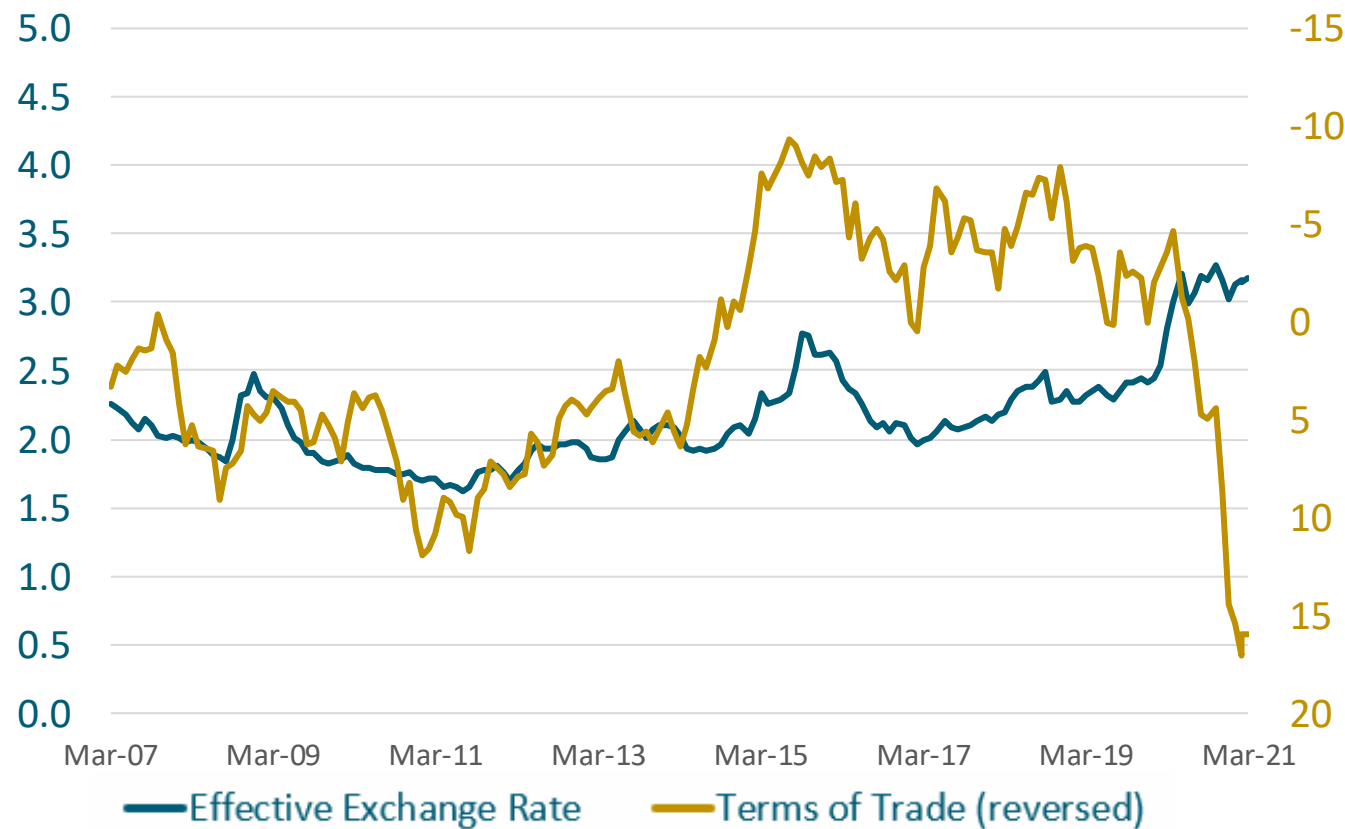
IPO/Follow-on - Foreign Investors' share



Investors' position change in foreign exchange derivatives at B3

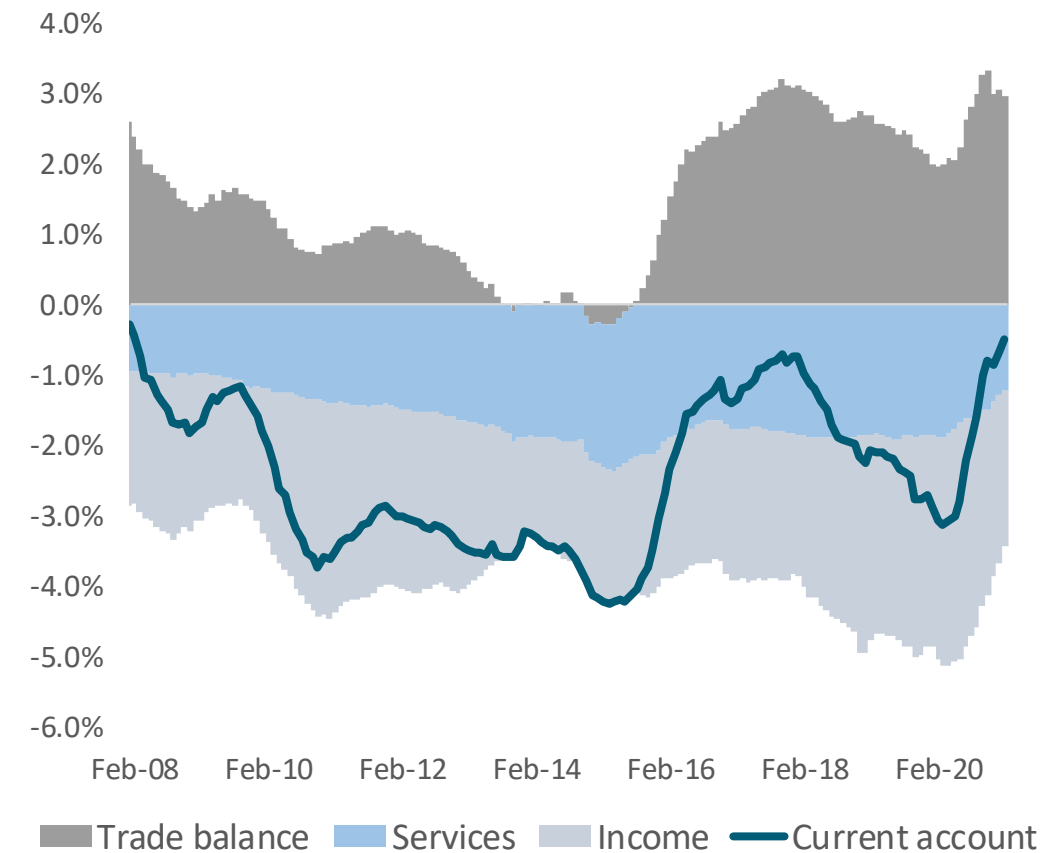


Effective foreign exchange rate and terms of trade

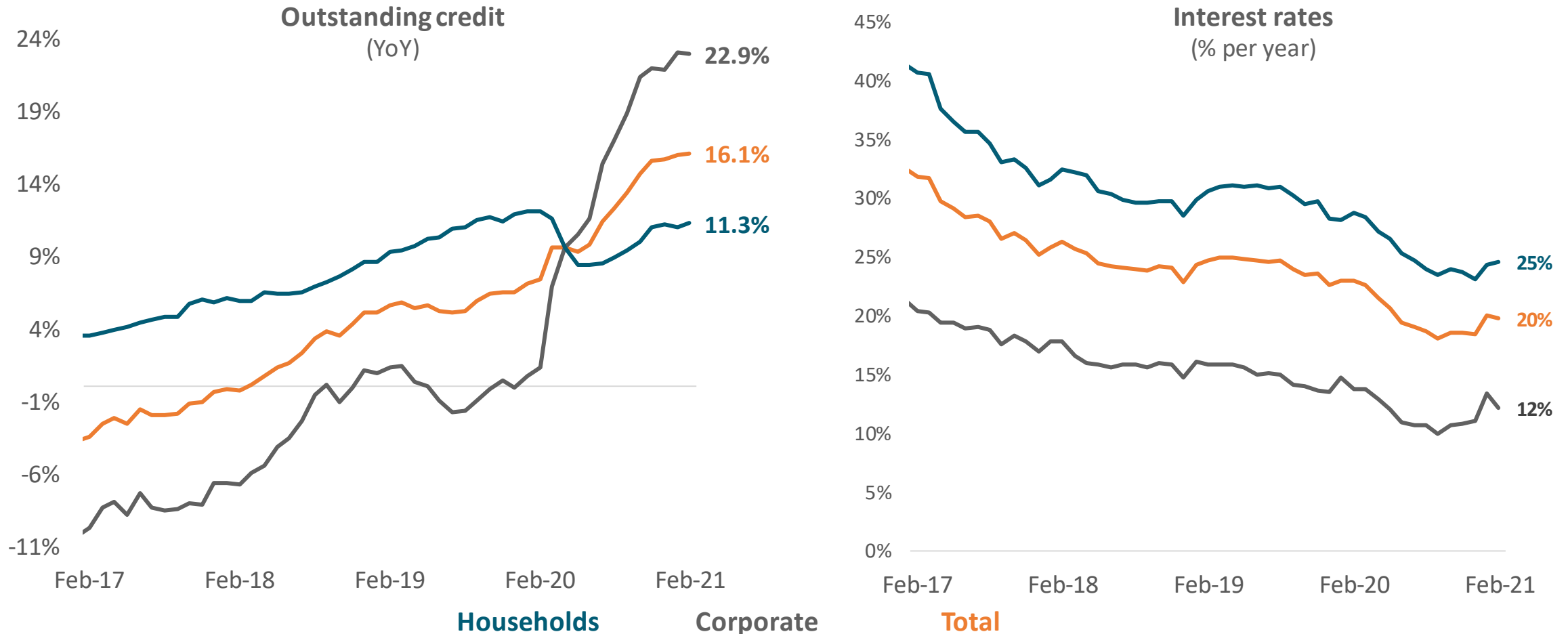


Current account

12 month accumulated, % of GDP



Credit increase amid the crisis. Interest rates at historically low levels.



Source: BCB



Technology Agenda



INCLUSION

Cooperative credit
Microcredit
Currency convertibility
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



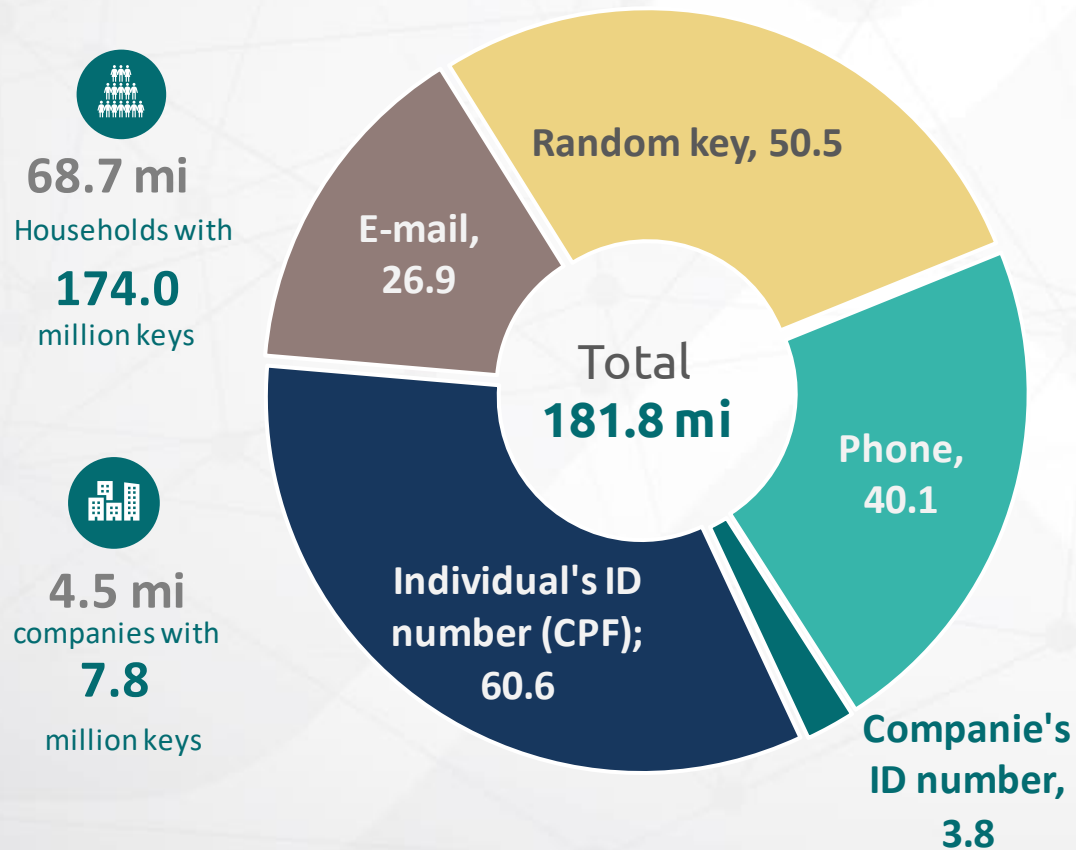
SUSTAINABILITY

BCB's S&E responsibility
Regulation
Supervision
Partnerships

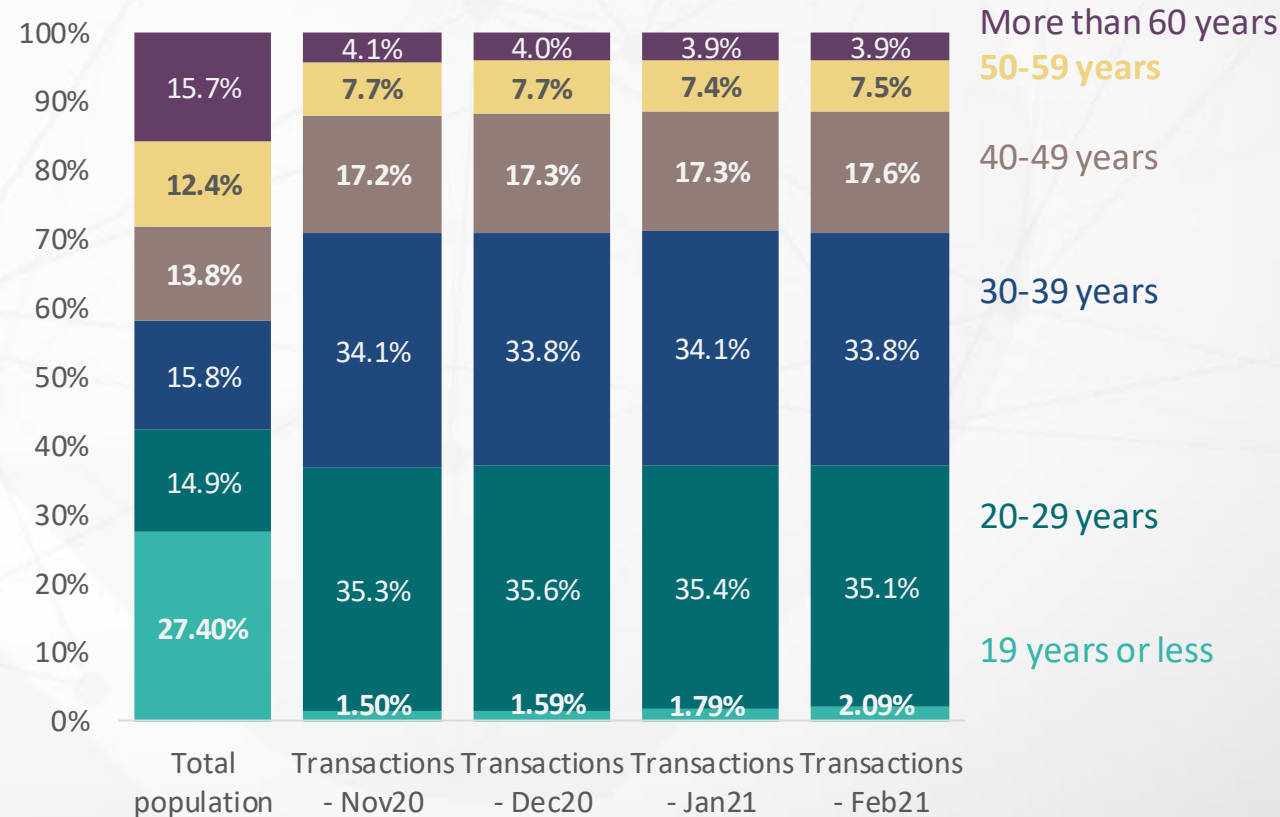


PIX registration and transactions by age

Types of keys
(in millions)



Distribution by age
(transactions X population)

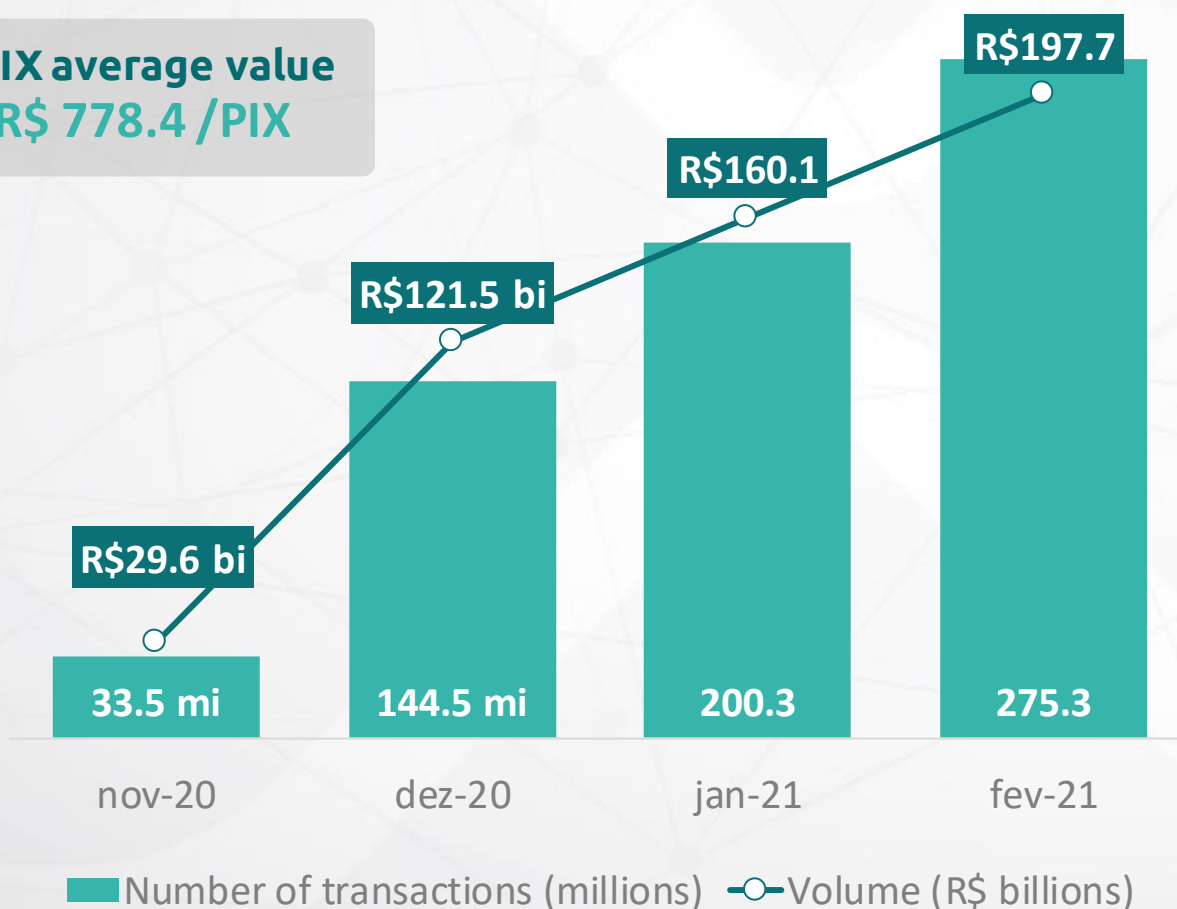


Pix transactions

Number of transactions and volume

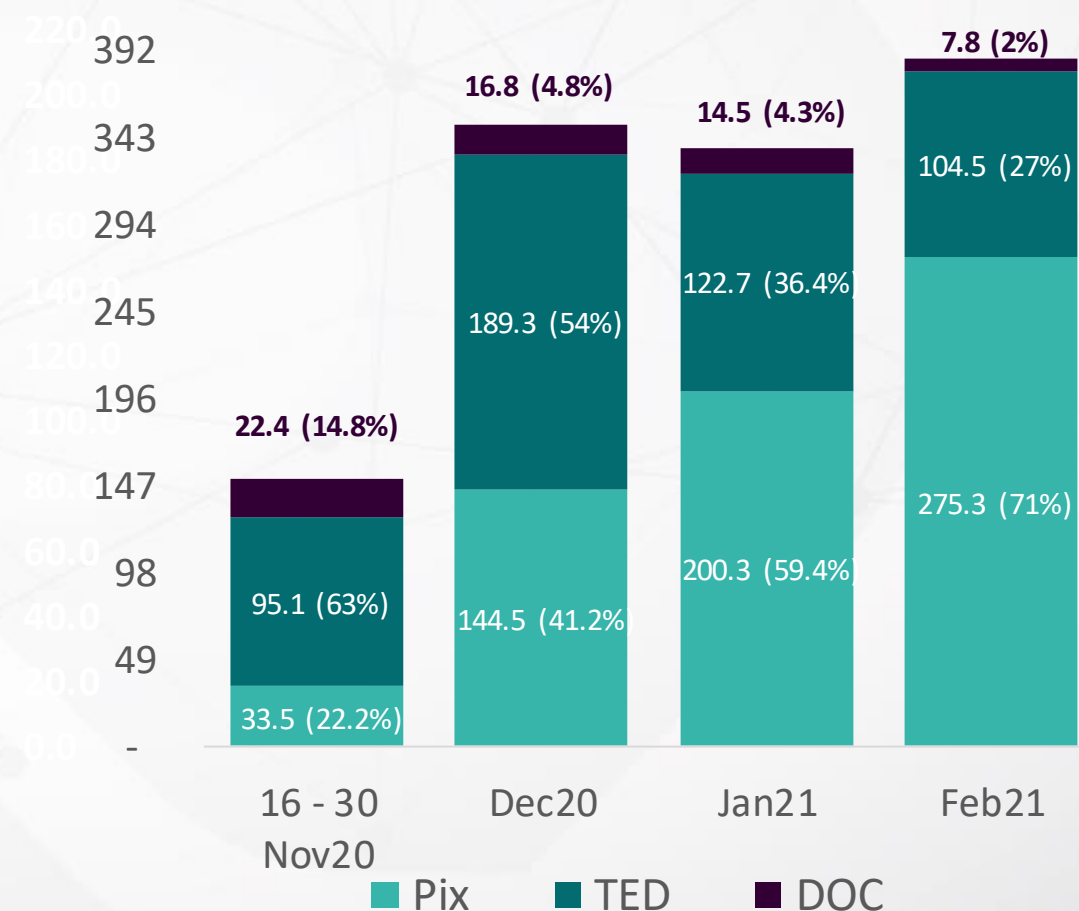
(in million of transactions and BRL billions)

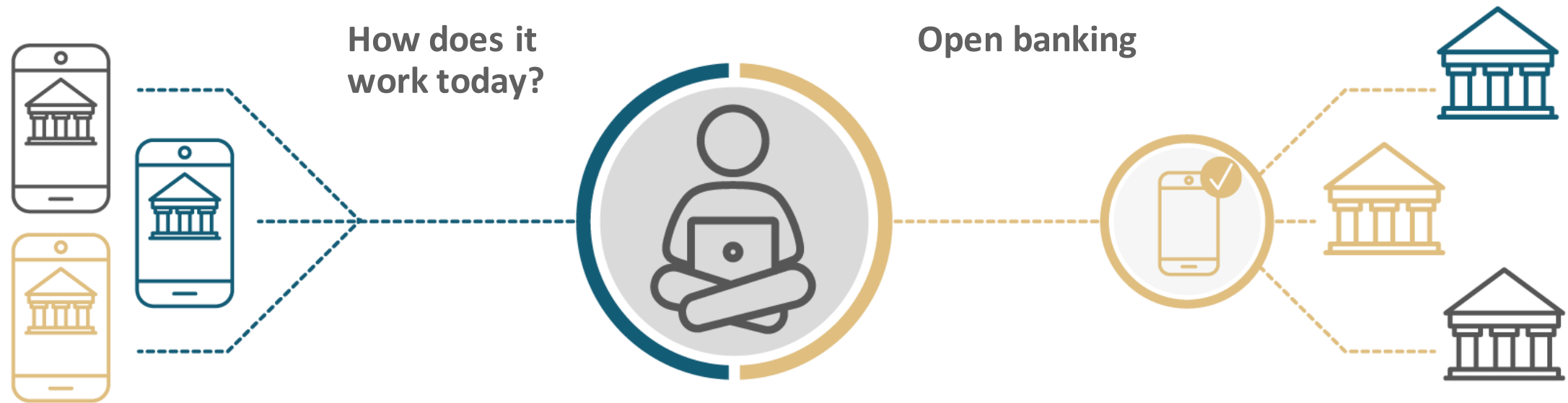
PIX average value
R\$ 778.4 /PIX



Pix versus other instruments

(in million of transactions and % of total)





- Implementation will be scheduled throughout 2021.
- **Solutions that can be developed from Open Banking:**



Devices to Compare
Services and Fees



Financial Advice and
Family Planning Apps



Payments Initiation in
Social Medias



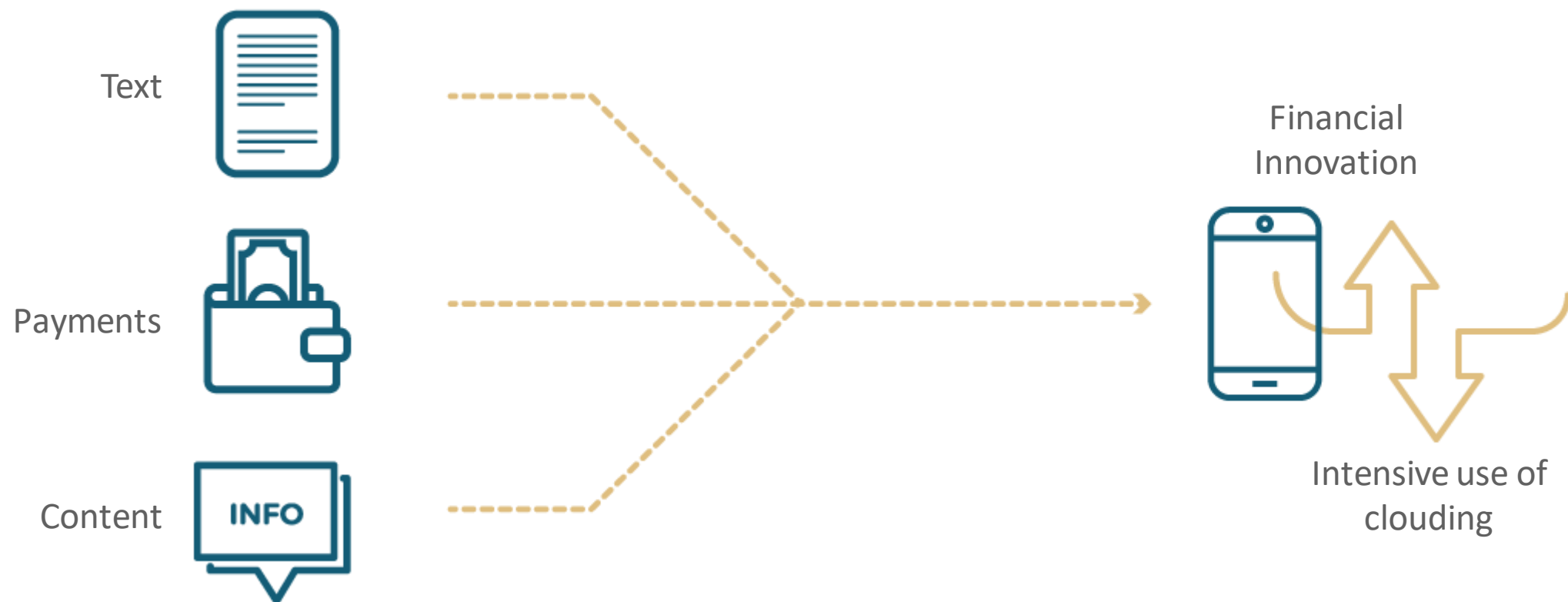
Credit Marketplace

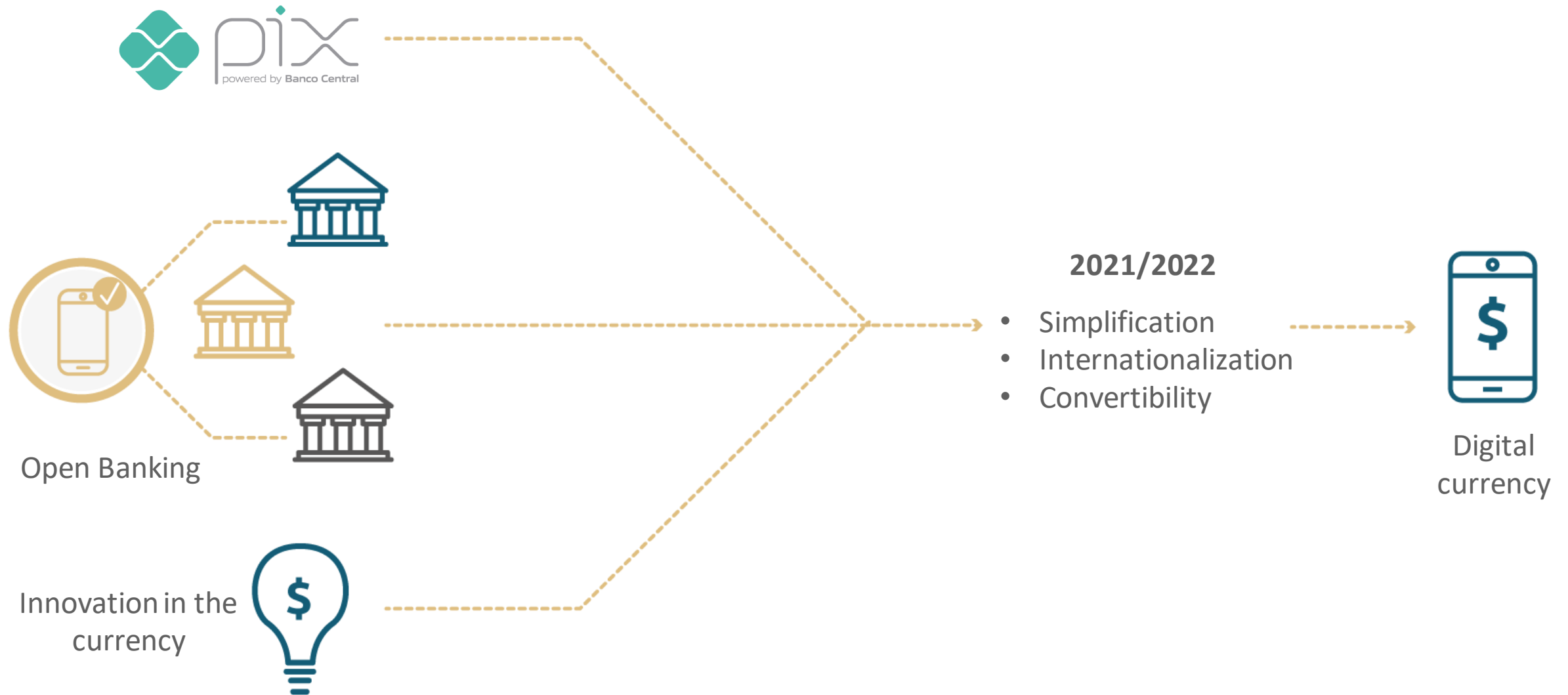
BCB's Regulatory Sandbox starts in 2021 with the Cycle 1.

TO UNDERSTAND THE REGULATORY SANDBOX



- 1 During the sandbox licensing process, BCB will assess whether the submitted projects comply with the definition of innovative project and whether their development is under the regulatory scope of BCB and CMN, among other criteria.
- 2 Legal persons, notary and registration service providers, public companies, and semi-public companies can participate, even when not yet fully licensed by BCB.
- 3 Simplified monitoring procedures will be adopted, considering the complexity and risks associated to each innovative project and, should BCB deems appropriate, additional limits and criteria may be applied.
- 4 By the end of cycle 1, participants may obtain a permanent license from BCB to operate. The projects may be a stepping stone for the improvement of the regulation issued by BCB and CMN.







Sustainability

Measures:

- BCB's S&E Responsibility
- Partnerships
- Policies
- Supervision
- Regulation



Vision for the future

More technology

The epidemic has accelerated technological change in medicine, education, finance, communication

Common factors in recovery

More sustainable and more inclusive growth

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

Impact of possible reflation global conditions on EMEs

Thank you!

Roberto Campos Neto
Governor of Banco Central do Brasil
April 06, 2021



**BANCO CENTRAL
DO BRASIL**

