

Morgan Stanley

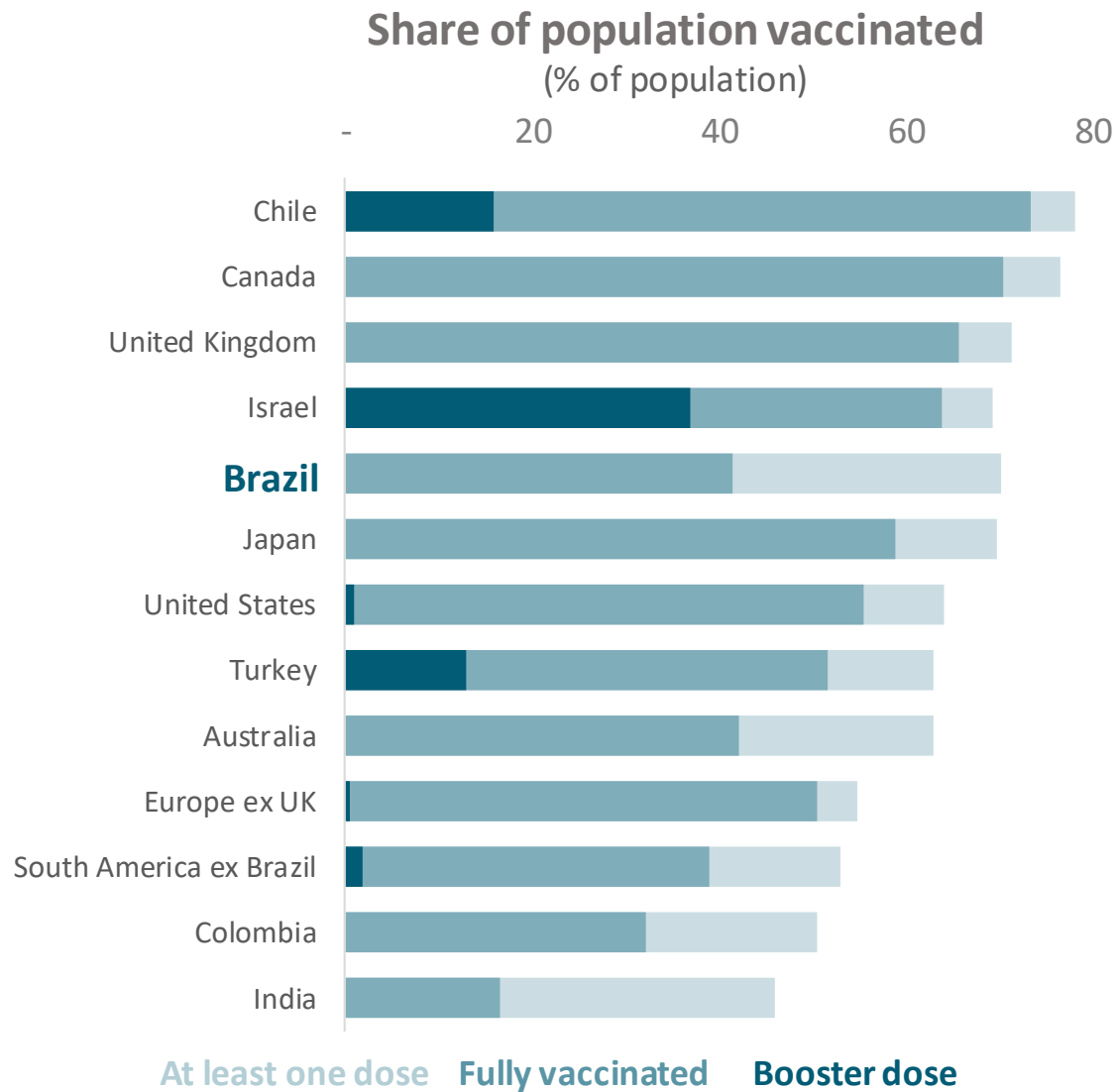
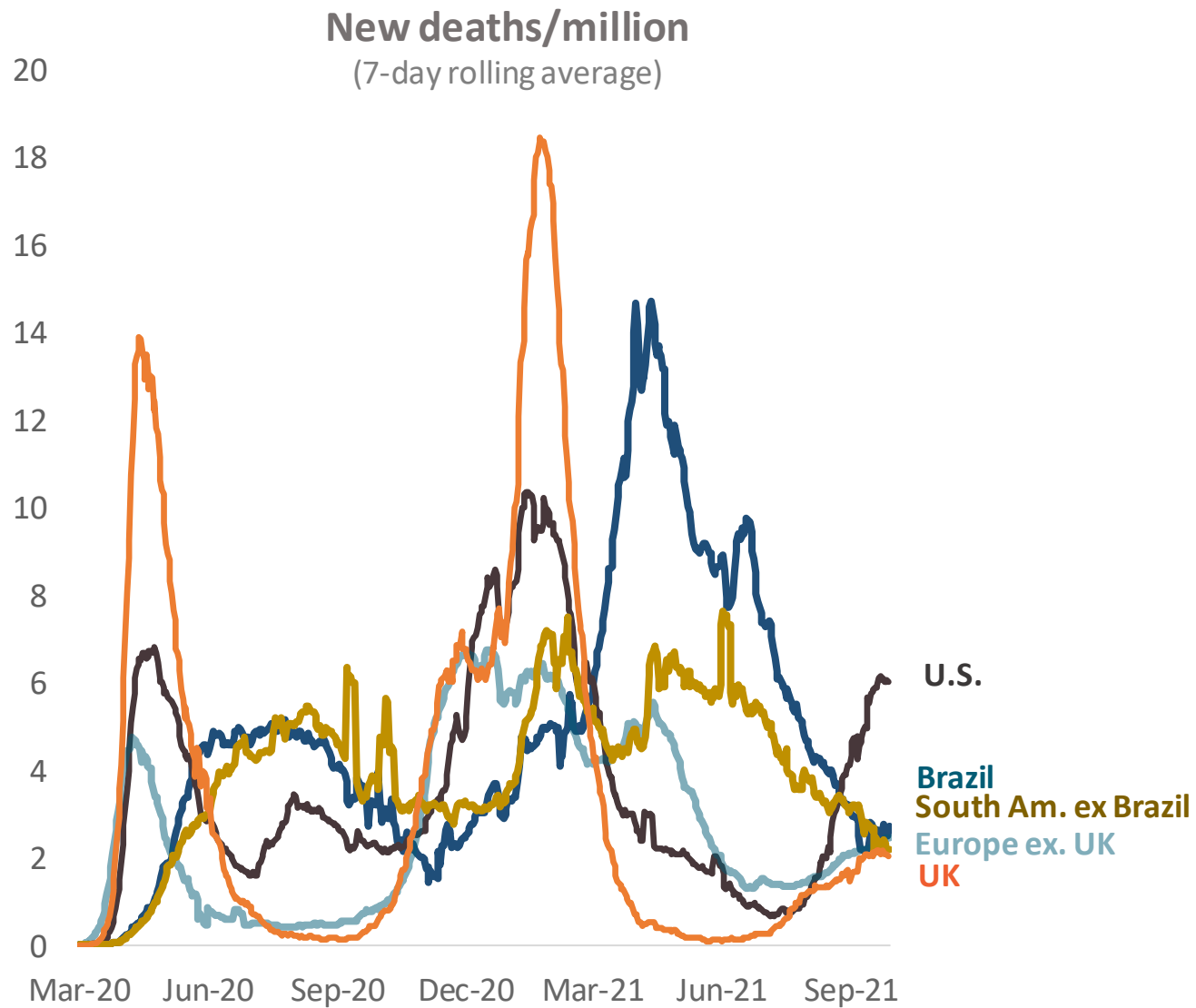
# *Brazil's Economic Outlook and Agenda BC#*

**Roberto Campos Neto**  
Governor of Banco Central do Brasil

October 1st, 2021

# Covid-19: New deaths and vaccination

New deaths fall as vaccination advances



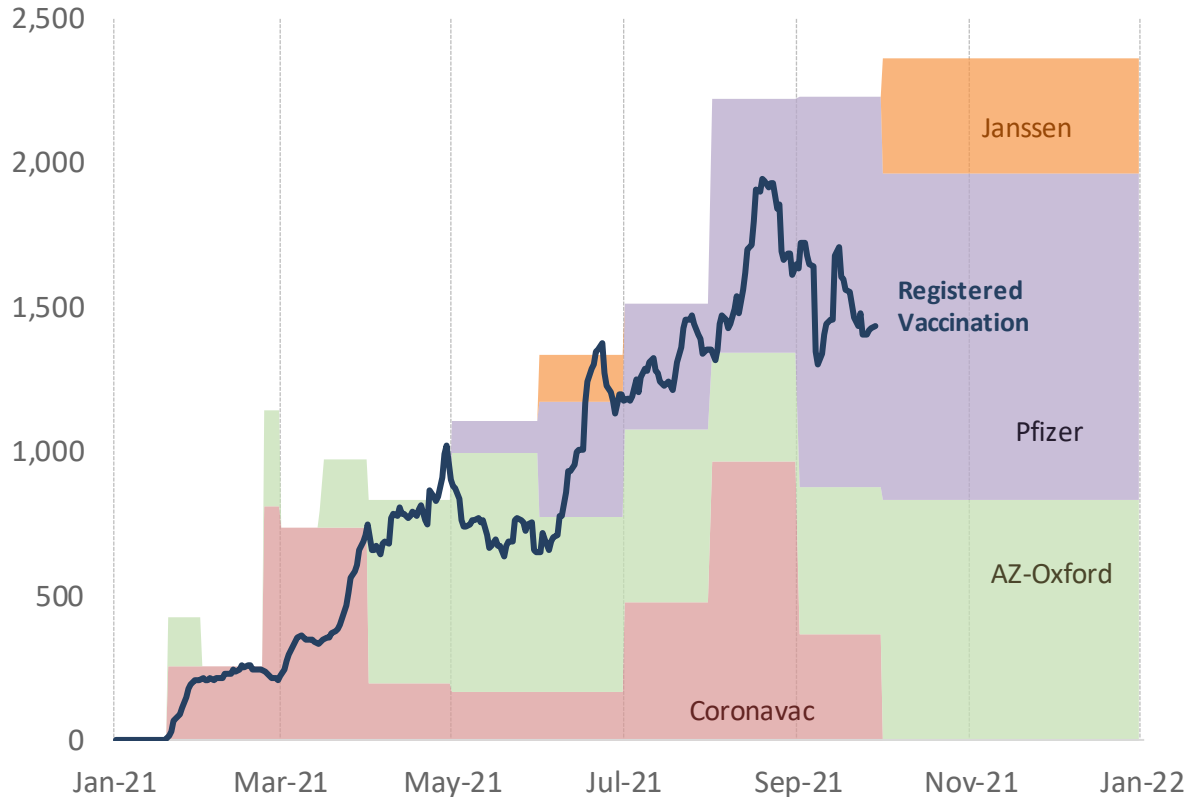
Source: Our World in Data. Last data: 28 Sep. 2021.

# Brazil: Covid-19 vaccination

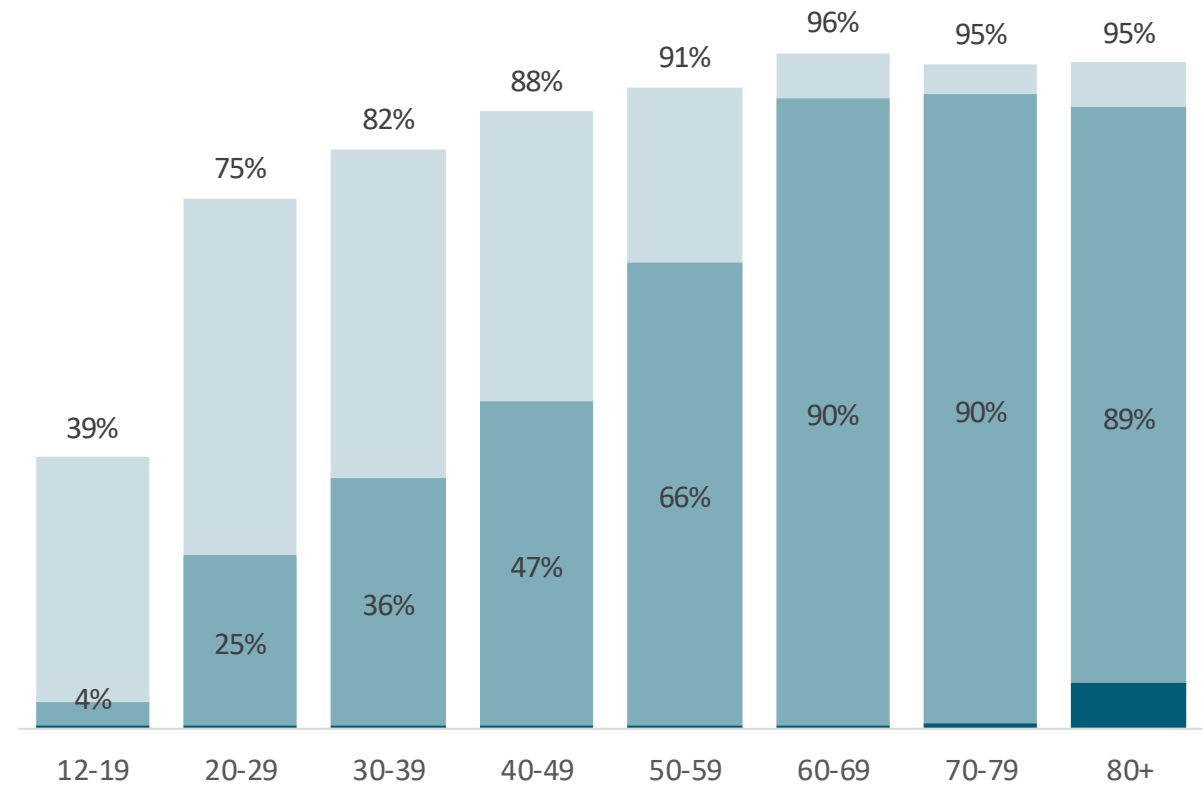
Brazilian vaccination campaign is advancing.

## Brazil: daily doses

Estimated offer x registered (thousands/day)



## Brazil: vaccination by age group

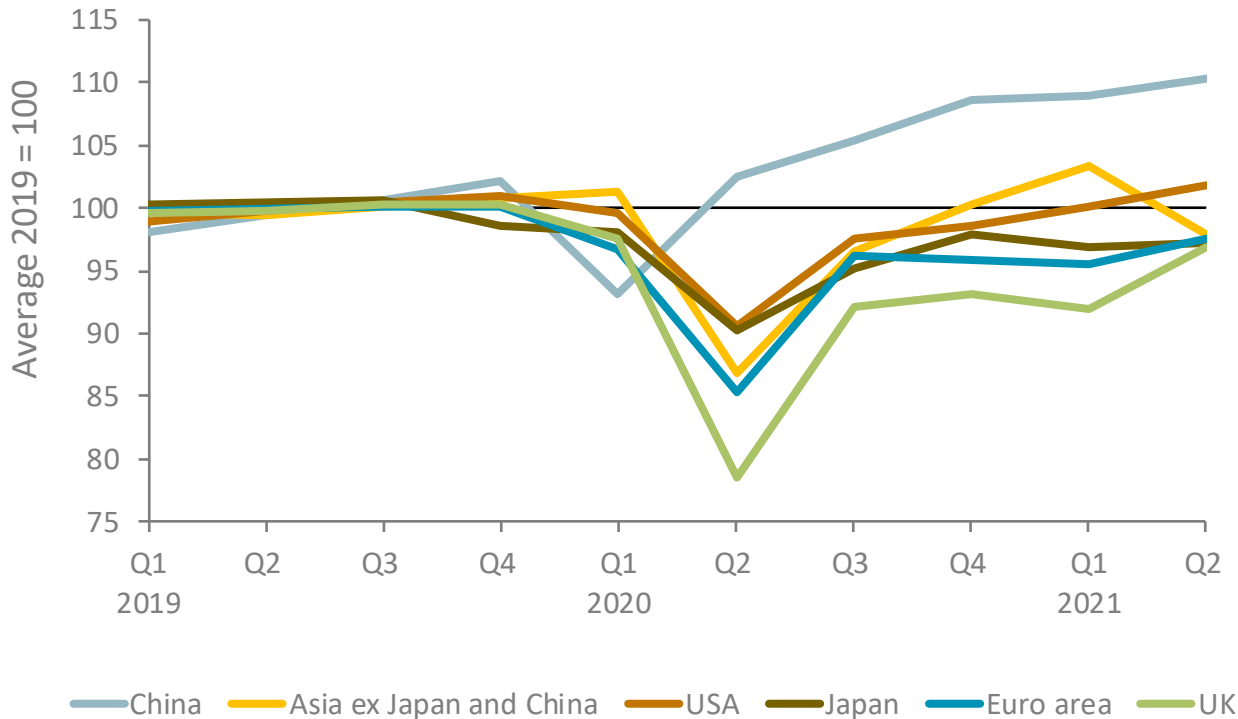


Availability of doses based on a schedule published by the Ministry of Health on September 29<sup>th</sup>, with adjustments that reflect news published by the press. Scenario considers AstraZeneca-Oxford, Coronavac, Pfizer-BioNTech and Janssen vaccines. Dose delivery schedule subject to changes.

# Advanced economies: economic activity

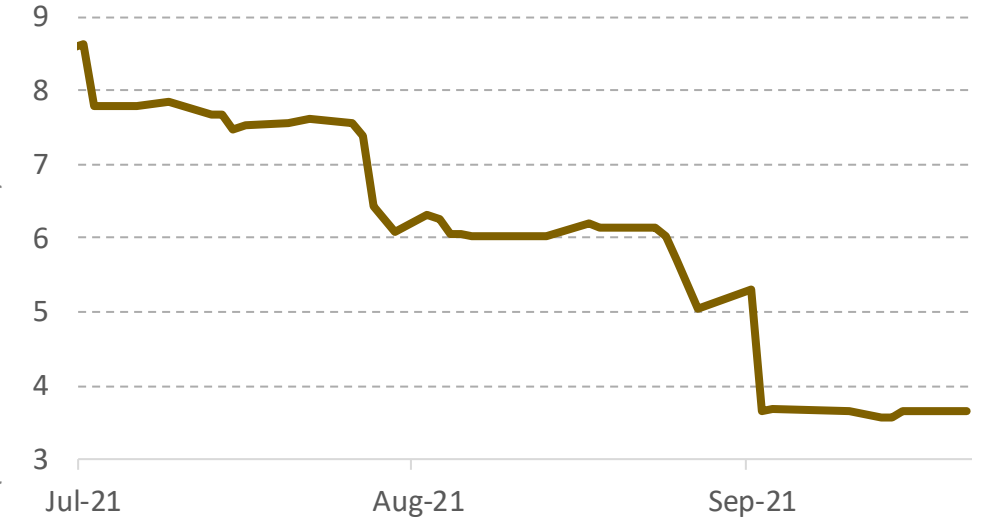
Global economic recovery continues to be directly linked to the evolution of the pandemic and the pace of vaccination.

**GDP\***  
(Average 2019 = 100)

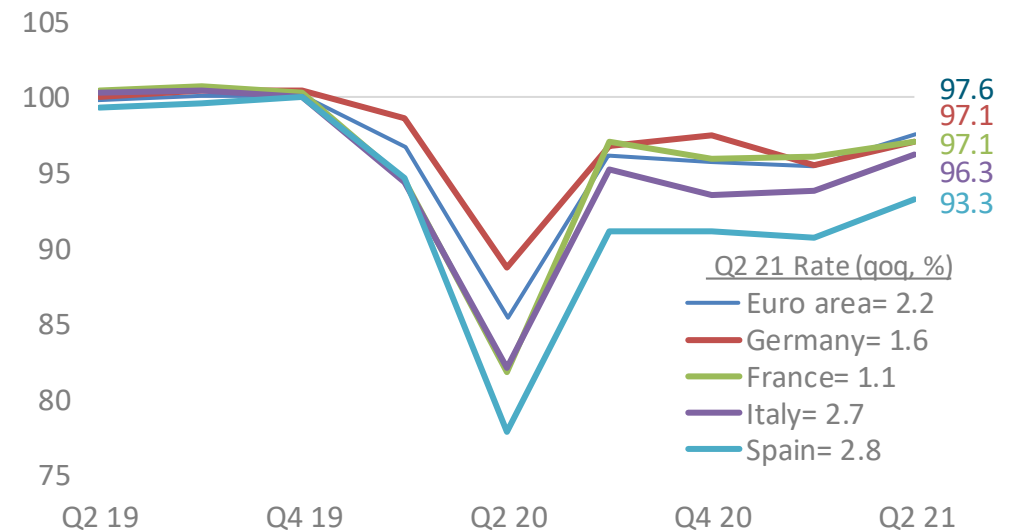


\* Series at constant prices, seasonally adjusted. The series 'Asia ex. Japan and China' was calculated as a weighted average of Singapore, South Korea, Hong Kong, India, Indonesia, Philippines, Malaysia, Thailand, Taiwan and Turkey. The series of Singapore, India and Indonesia are not seasonally adjusted.

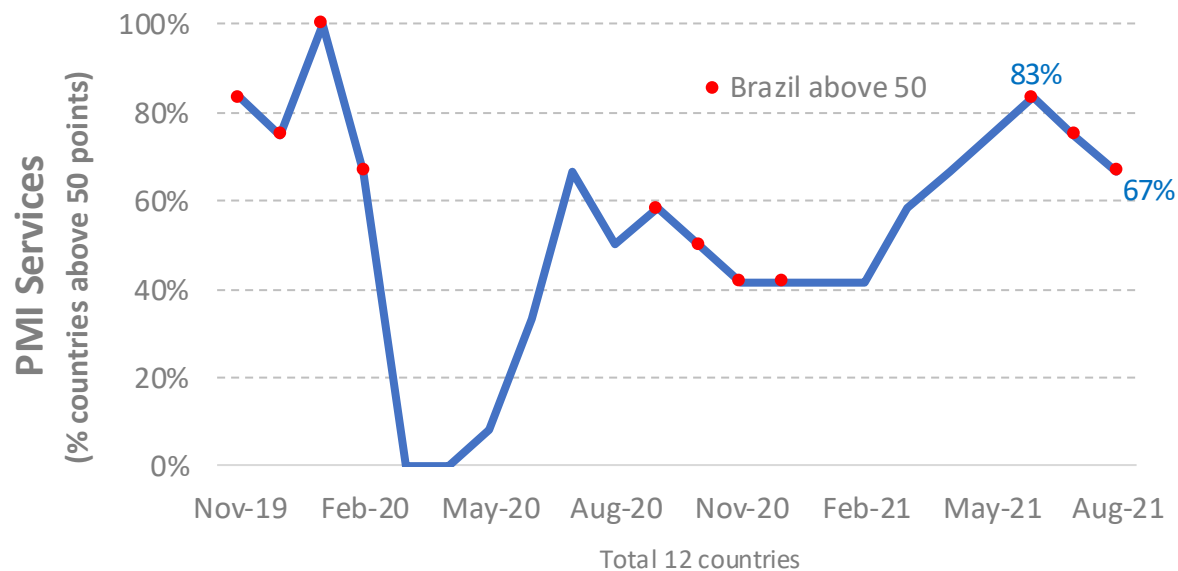
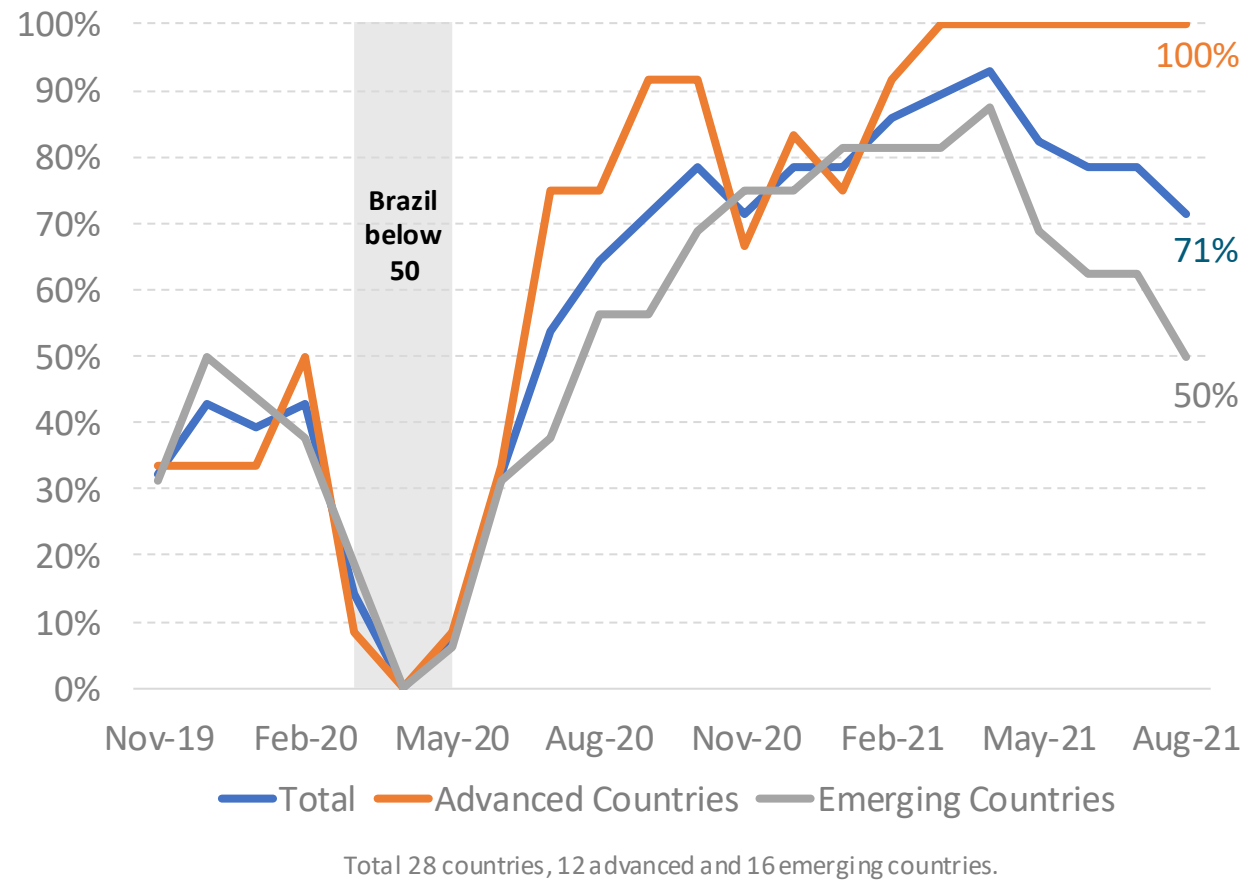
**U.S. GDP Forecast for Q3 21**  
(Fed Atlanta - GDPNow) - S.A.A.R. %



**Euro area GDP**  
Q4 2019 = 100



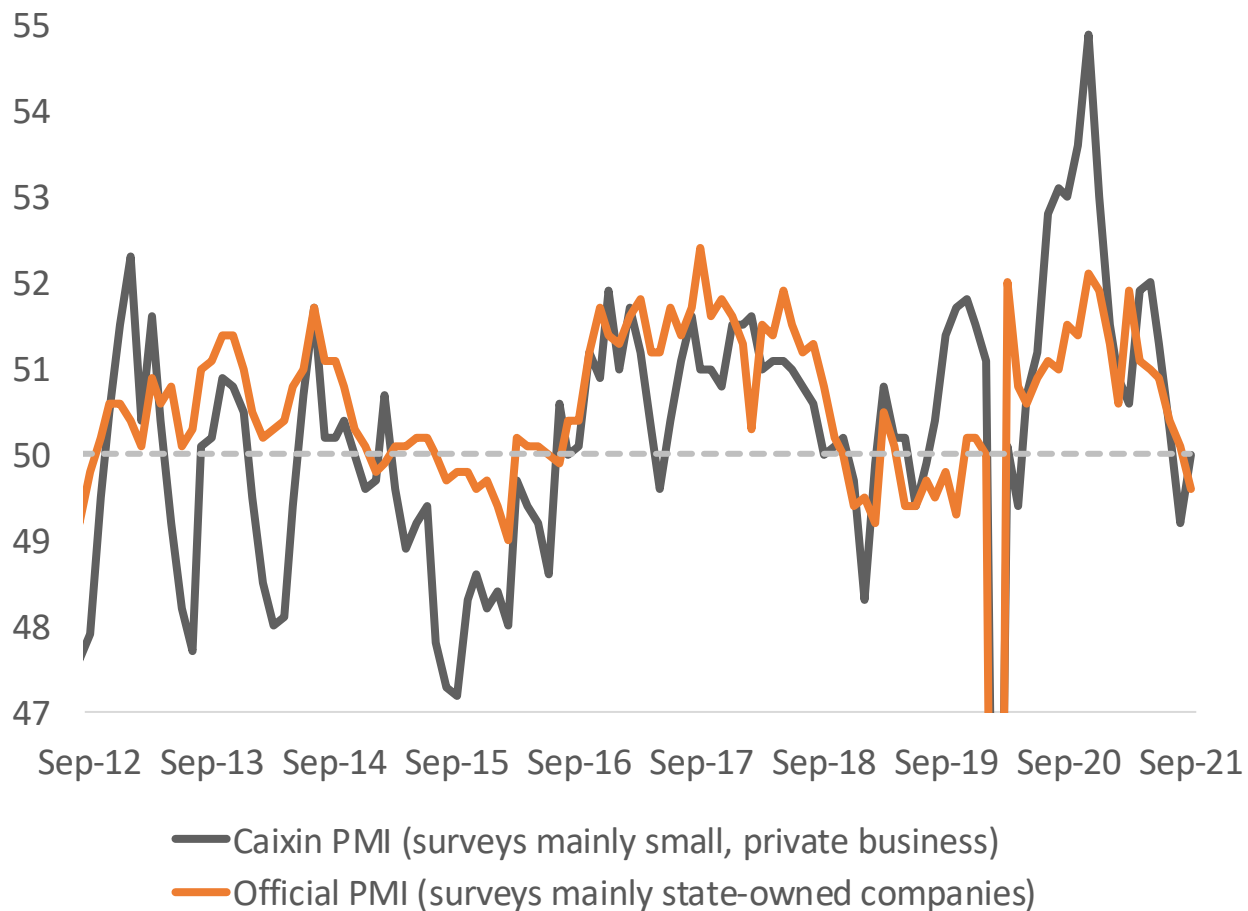
### PMI Manufacturing: % countries above 50 points



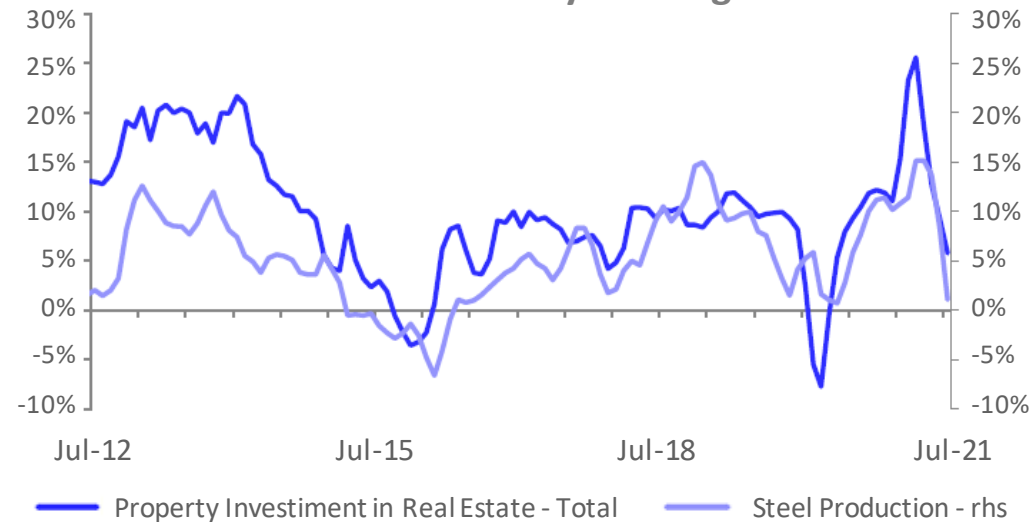


# China: economic activity

### PMI Manufacturing - China



### Real estate activity slowing down

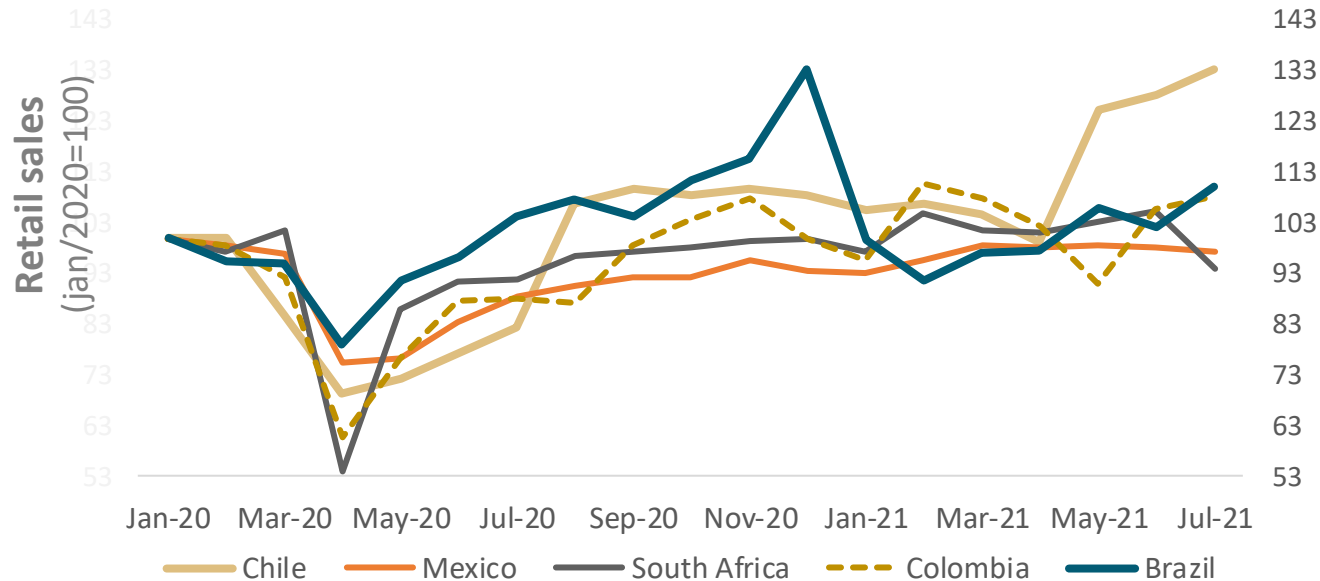
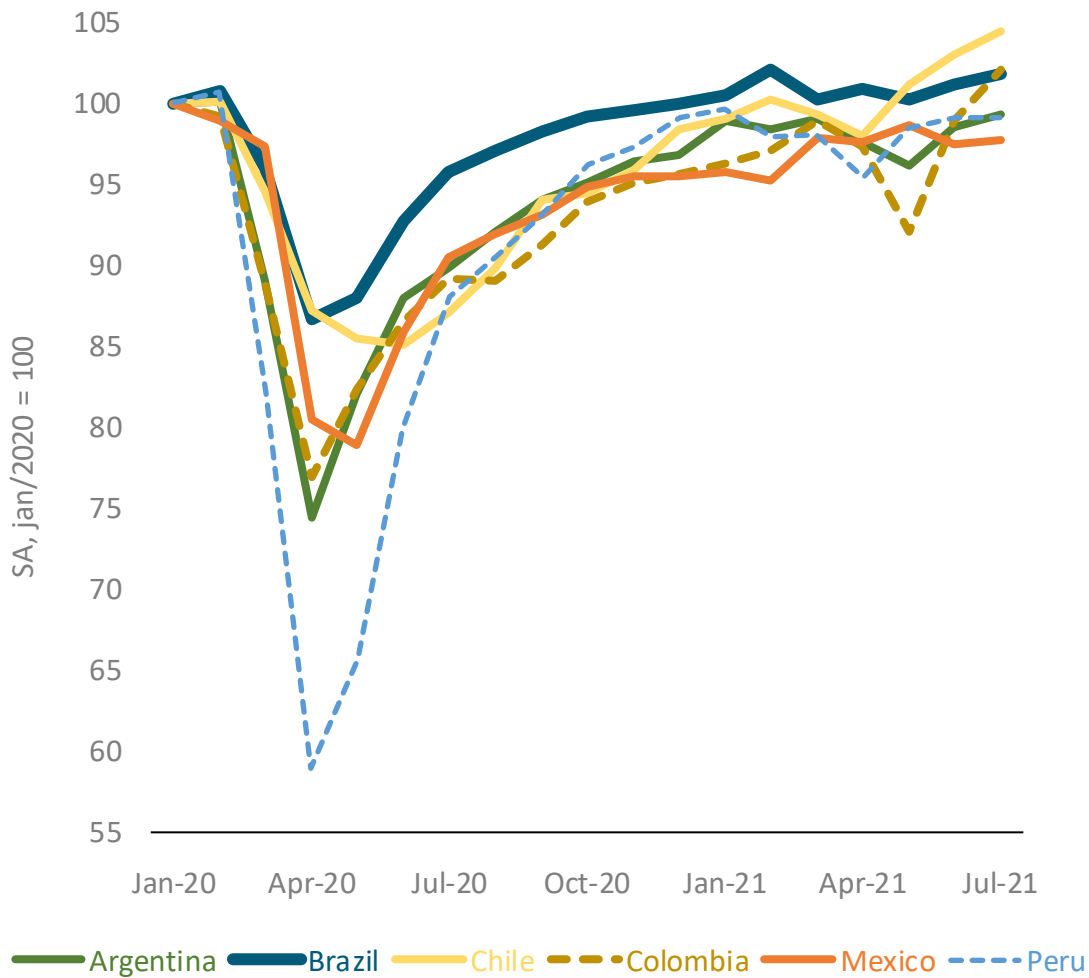


### Hang Seng Properties Index

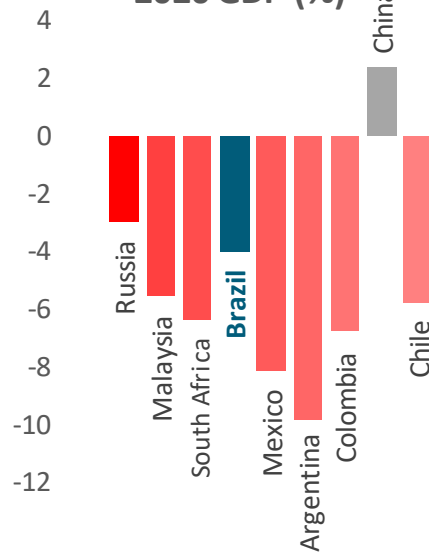


# Emerging economies: economic activity

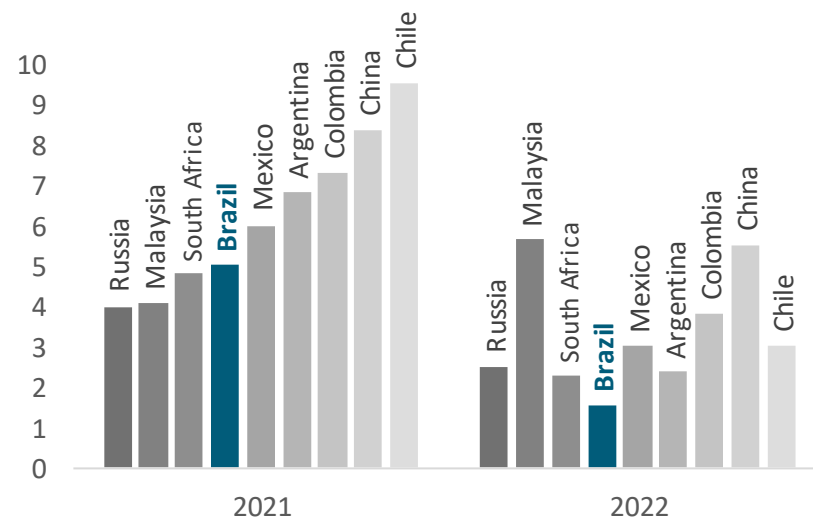
### Economic Activity Index



### 2020 GDP (%)



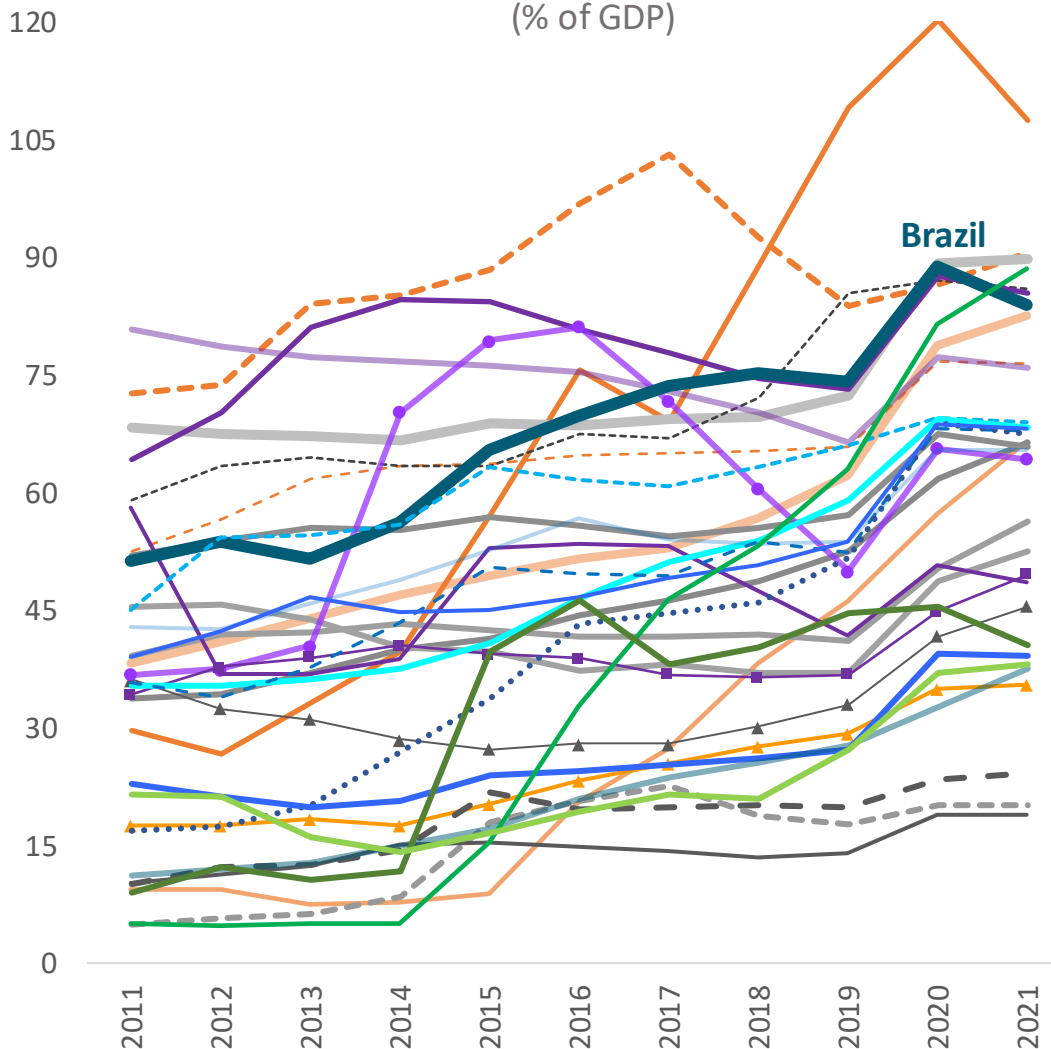
### GDP Forecasts (%)



Sources: Bloomberg, IBGE and BCB (Focus Report).

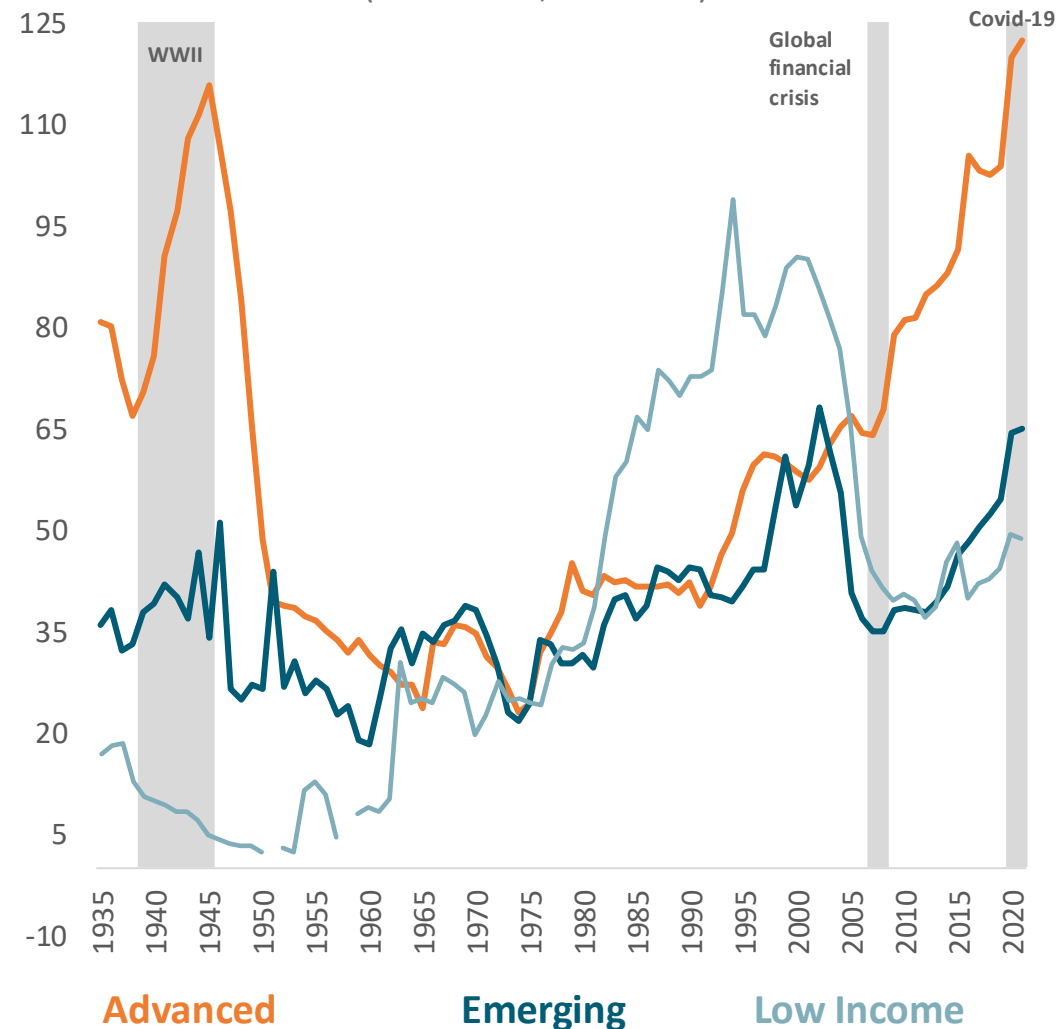
# Fiscal response

### Gross Debt – emerging markets (% of GDP)



- AFRICA**
- Angola
- - - Egypt
- South Africa
- - - Morocco
- Algeria
- ▲ Nigeria
- ASIA EX MIDDLE EAST**
- India
- - - Pakistan
- China
- Malaysia
- ▲ Turkey
- - - Kazakhstan
- - - Azerbaijan
- Russia
- Thailand
- Philippines
- EUROPE**
- Croatia
- Hungary
- Ukraine
- Romania
- Belarus
- Brazil**
- LATIN AMERICA**
- - - Uruguay
- Bolivia
- - - Colombia
- Ecuador
- Peru
- Chile
- MIDDLE EAST**
- Mexico
- Dominican Rep.
- Oman
- Islamic Re. of Iran
- Un. Arab Emirates

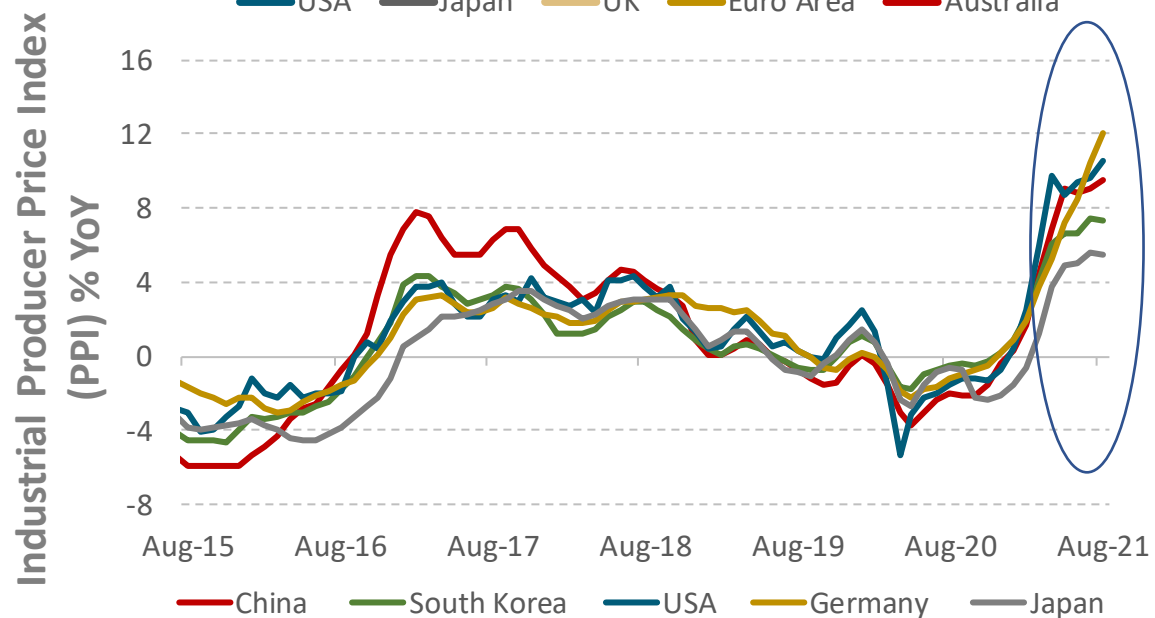
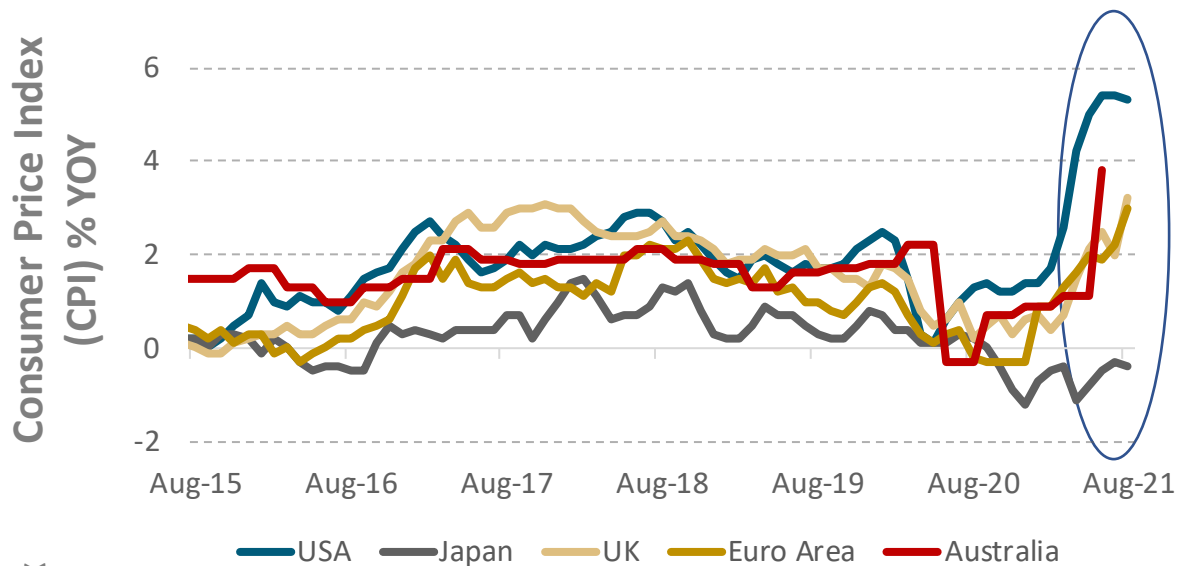
### Historical pattern of general government debt (1935-2020, % of GDP)



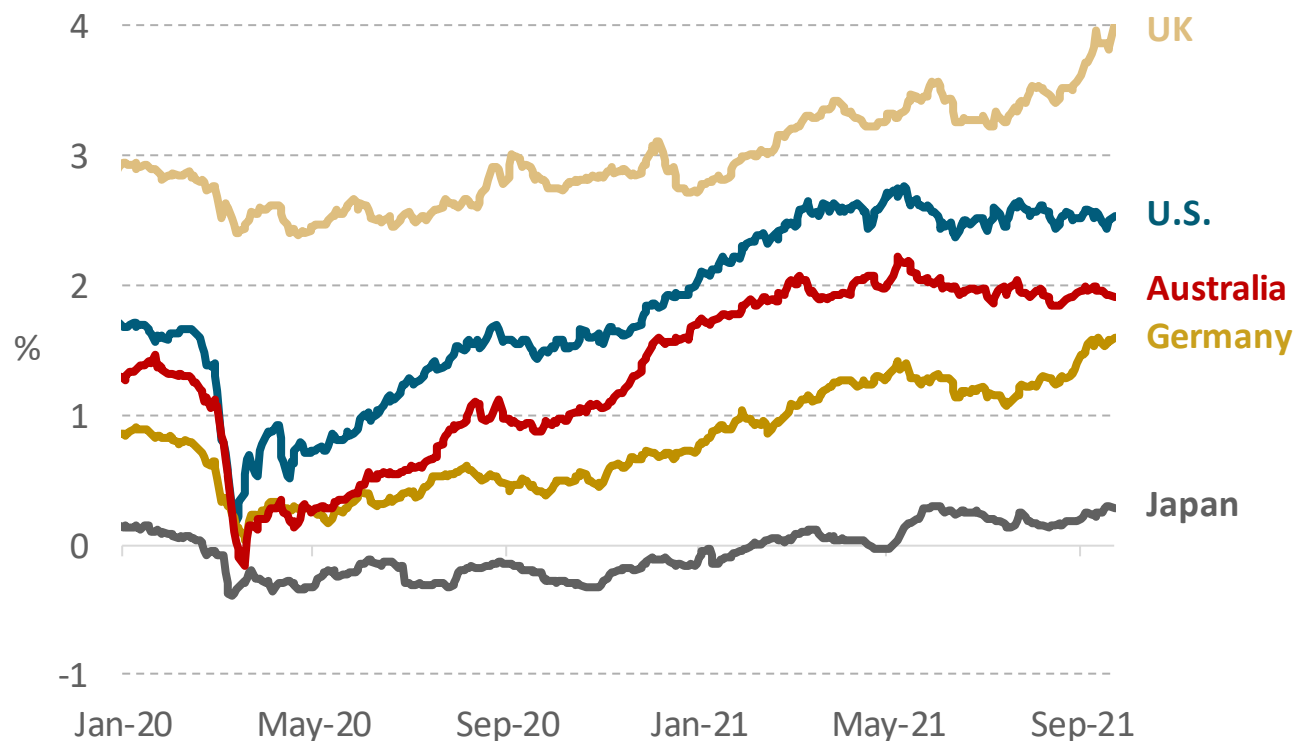
Sources: [1] IMF WEO Apr/21. For Brazil, the source is BCB. Brazil's 2021 figure refers to June. [2] IMF Historical Public Debt Database.



# Advanced economies: inflation

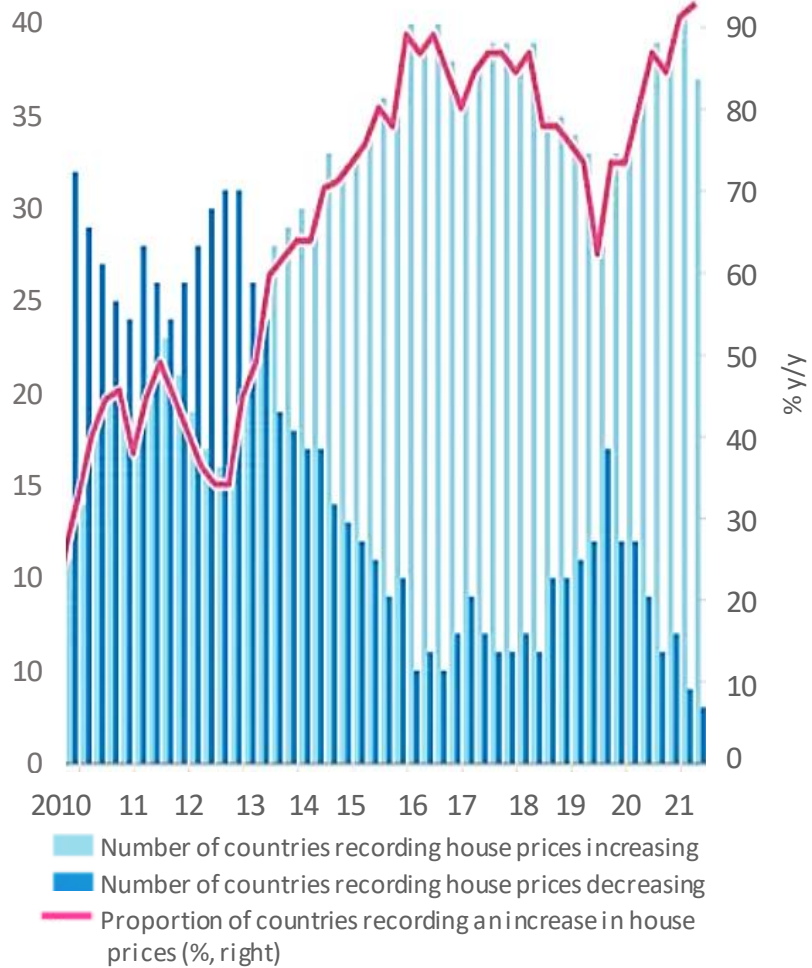


### Implicit inflation (5 years break-even)

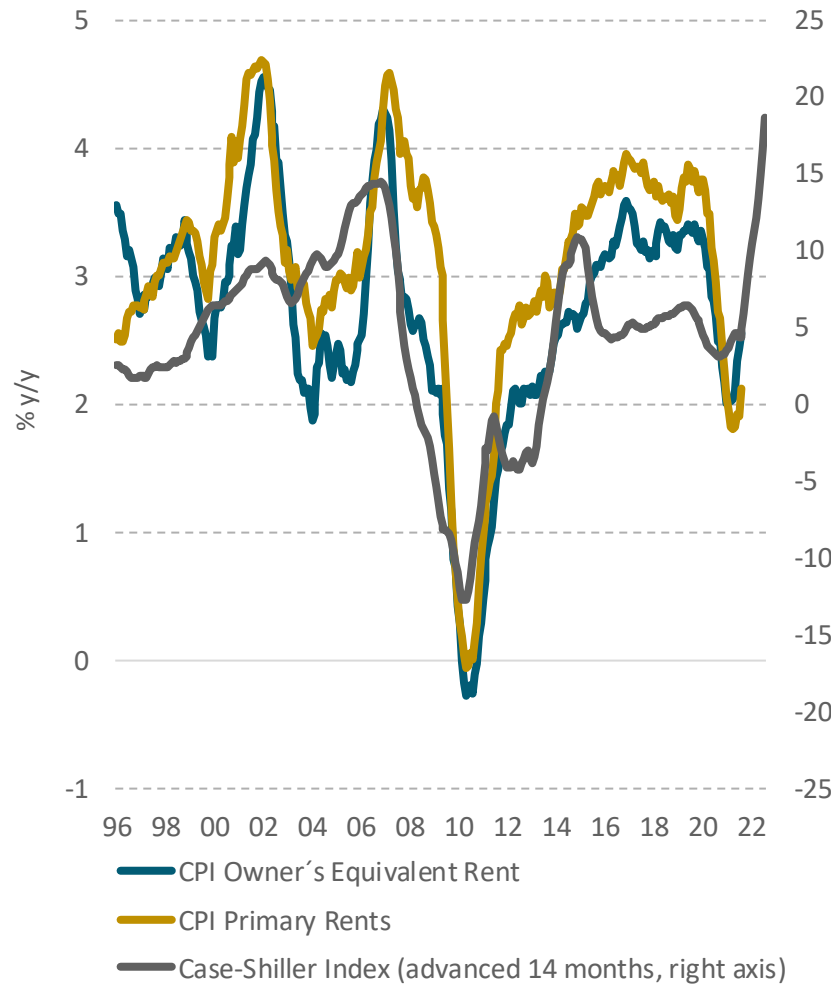


# Housing prices

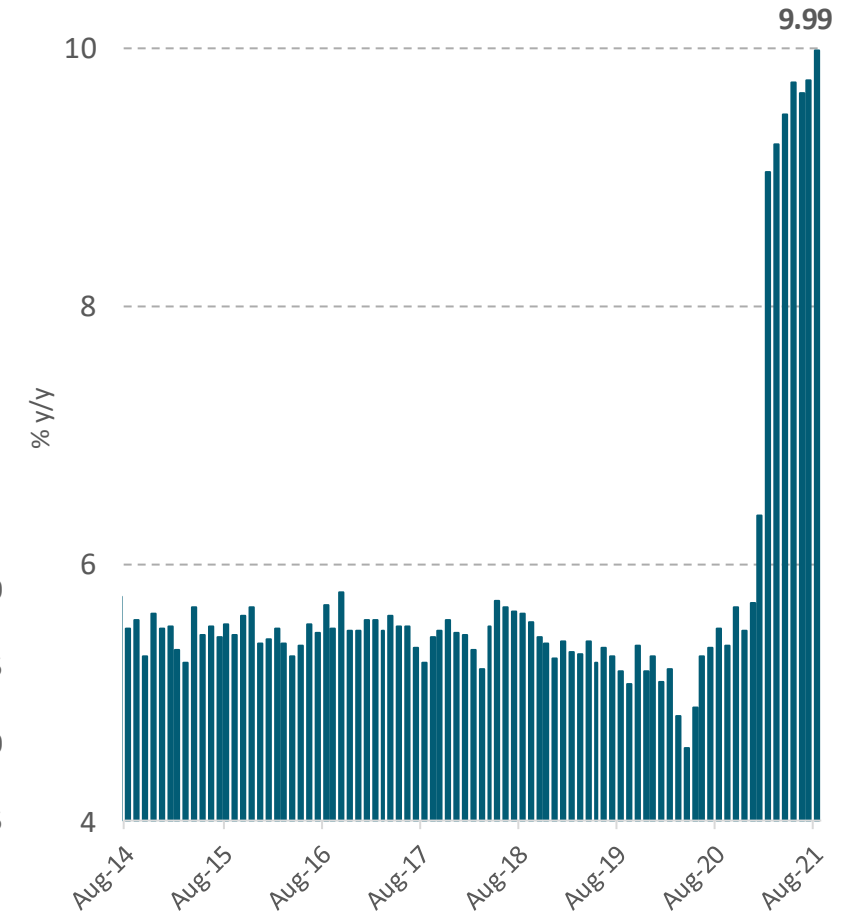
### House prices - countries



### U.S. Housing Components



### U.S. Rent Price Expectation 1 Year Ahead (%)

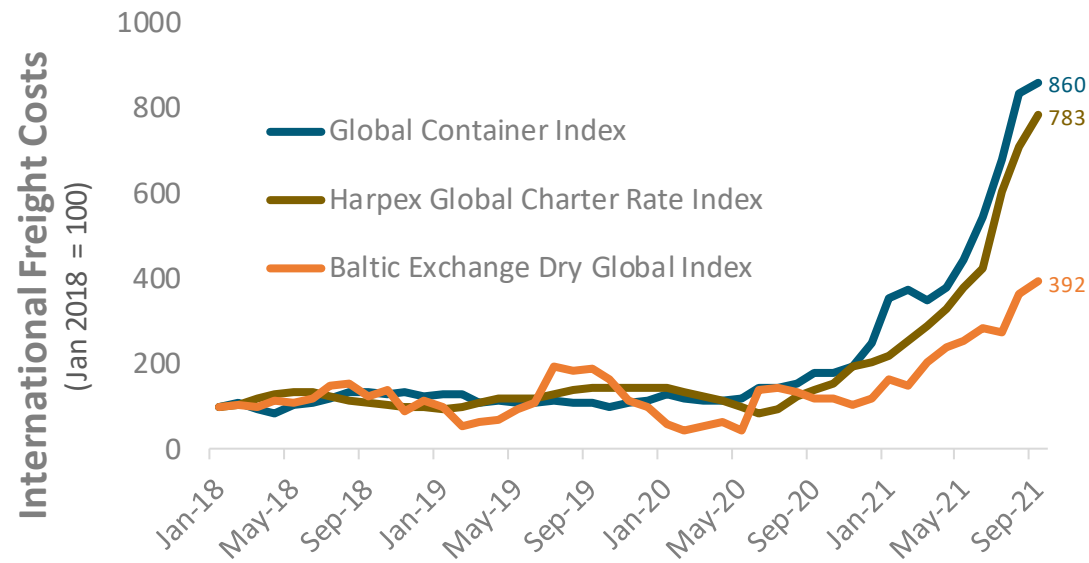
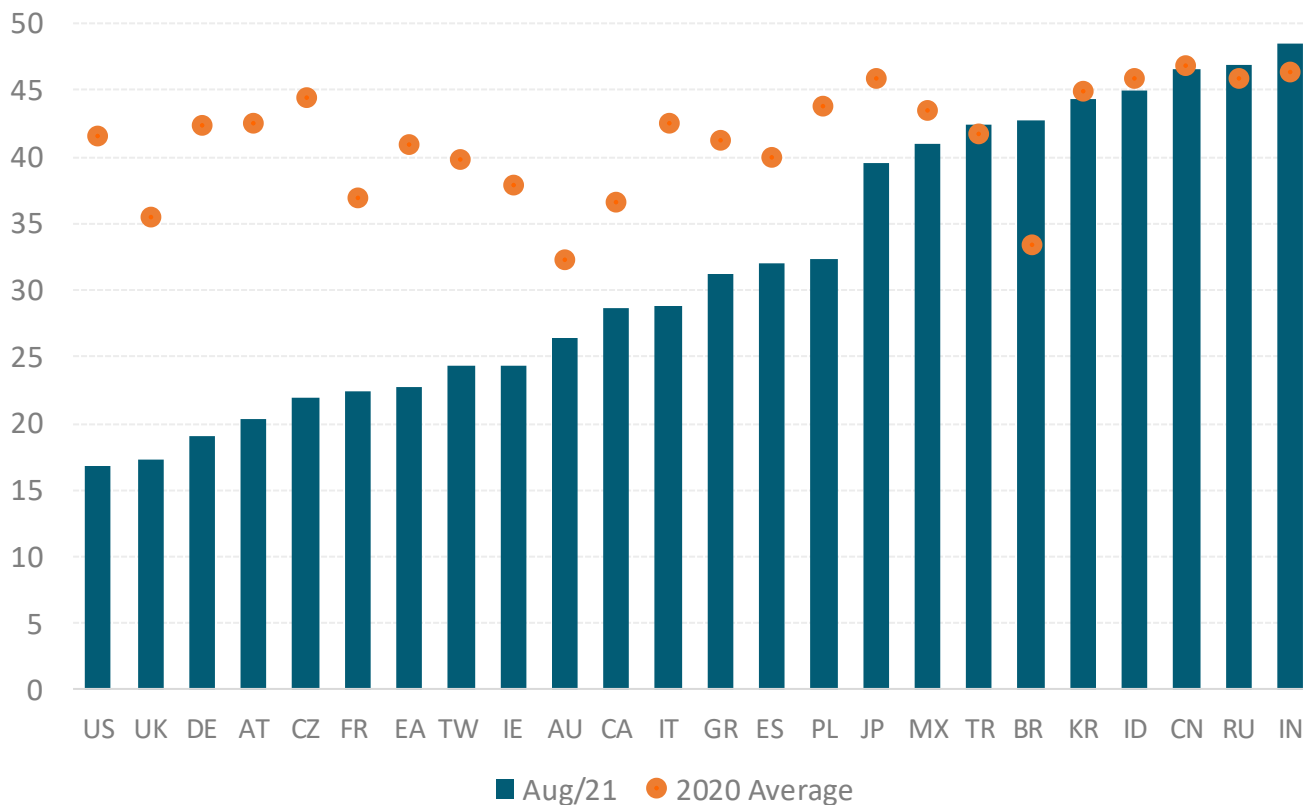


# Sectoral bottlenecks

Indicators suggest bottlenecks in the global economy.

## PMI Manufacturing Delivery Times

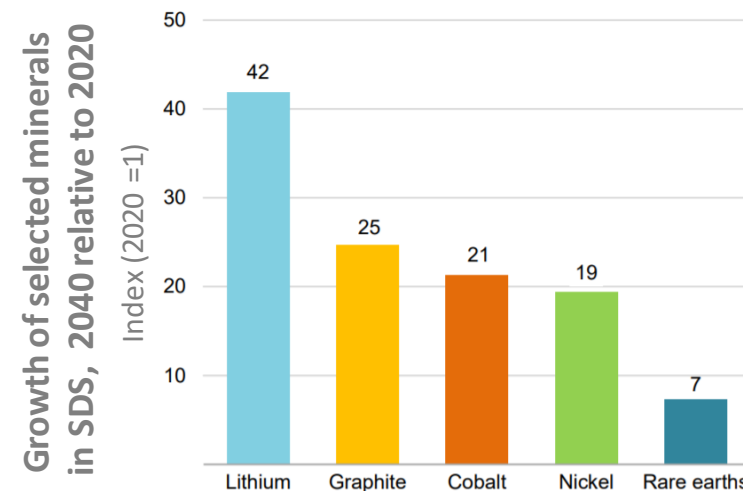
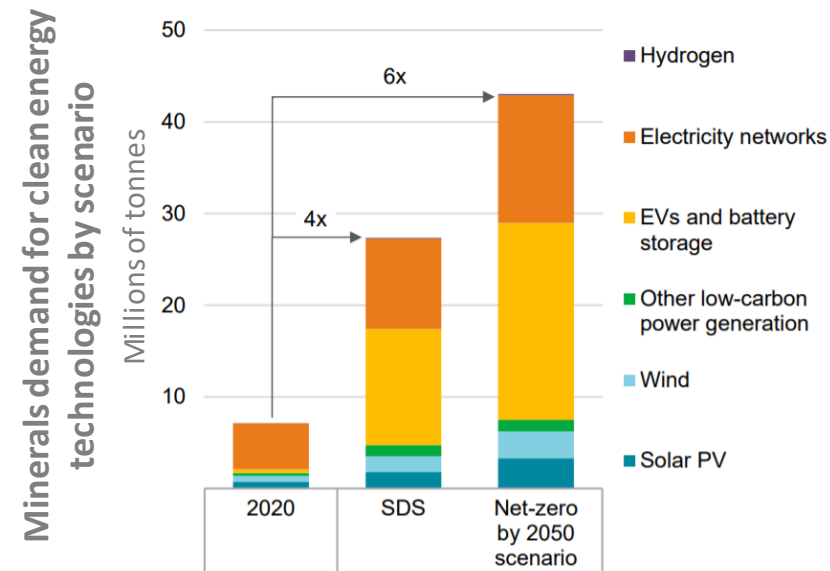
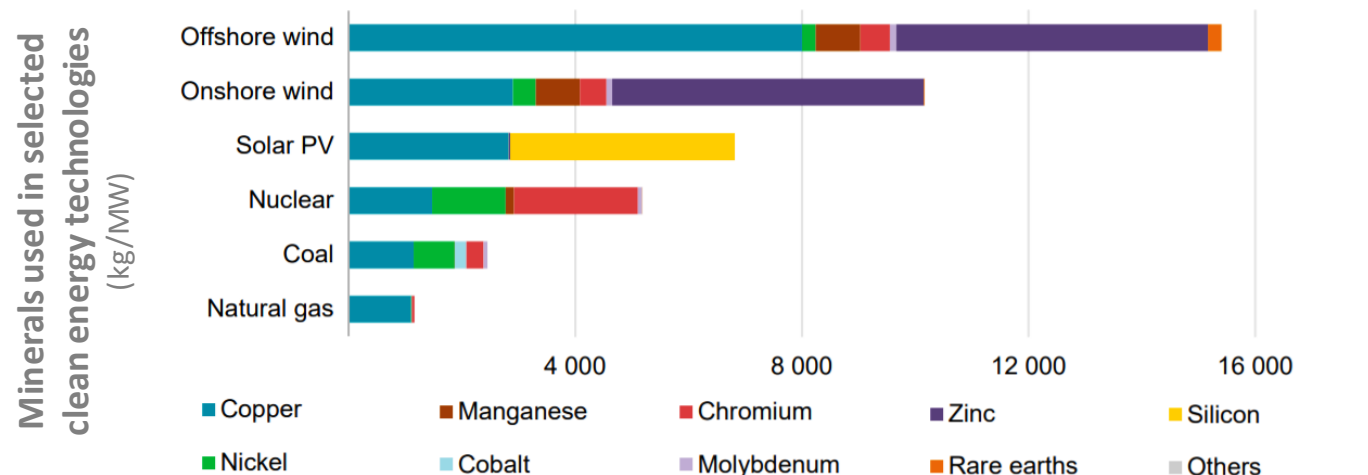
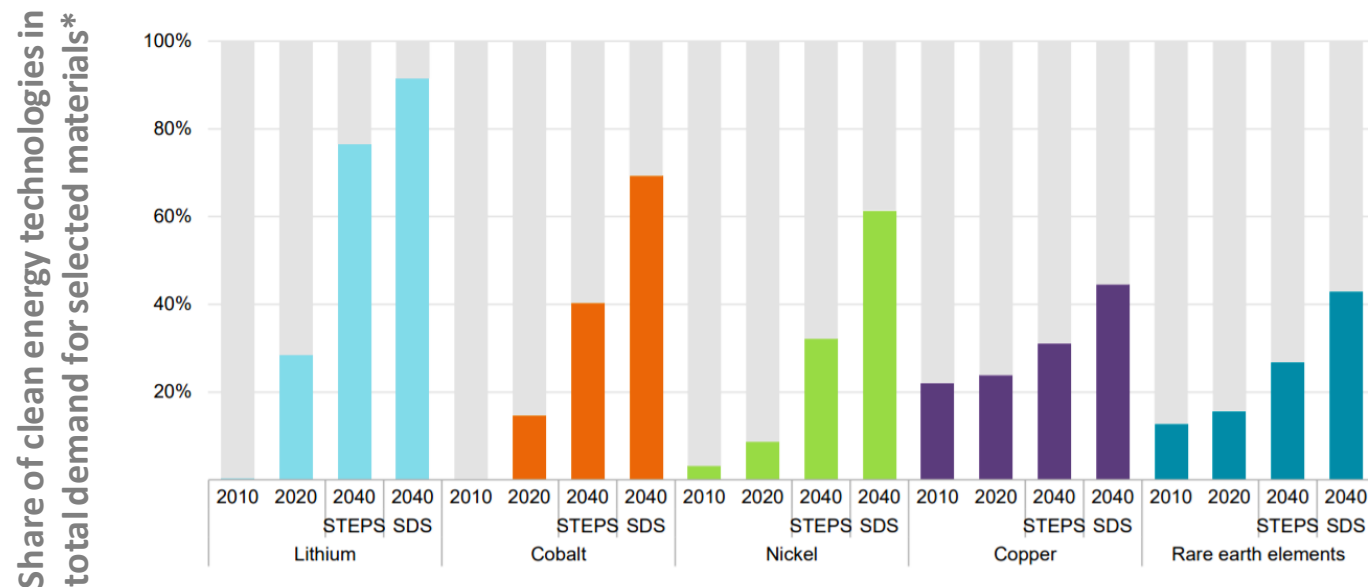
(Smaller numbers represent longer time)



Sources: Bloomberg, Refinitiv.

# Green inflation

The transition for a greener economy is fueling a huge demand for key raw materials.



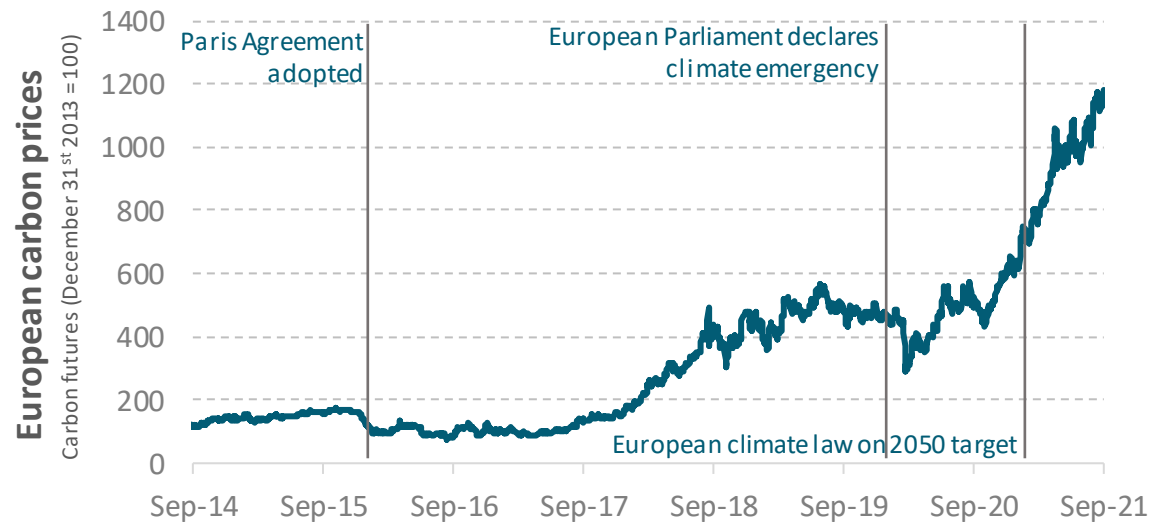
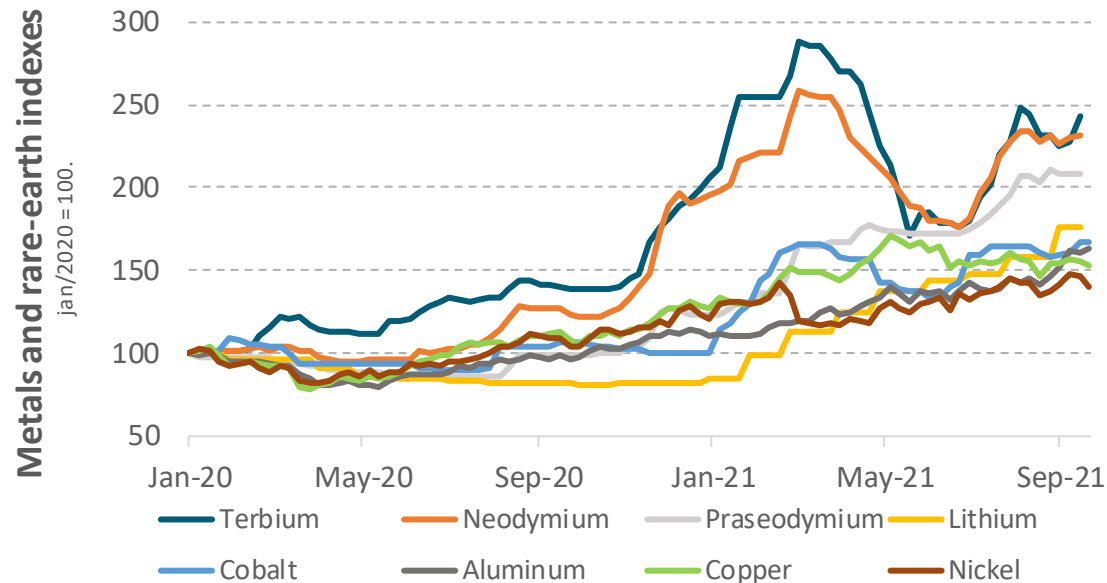
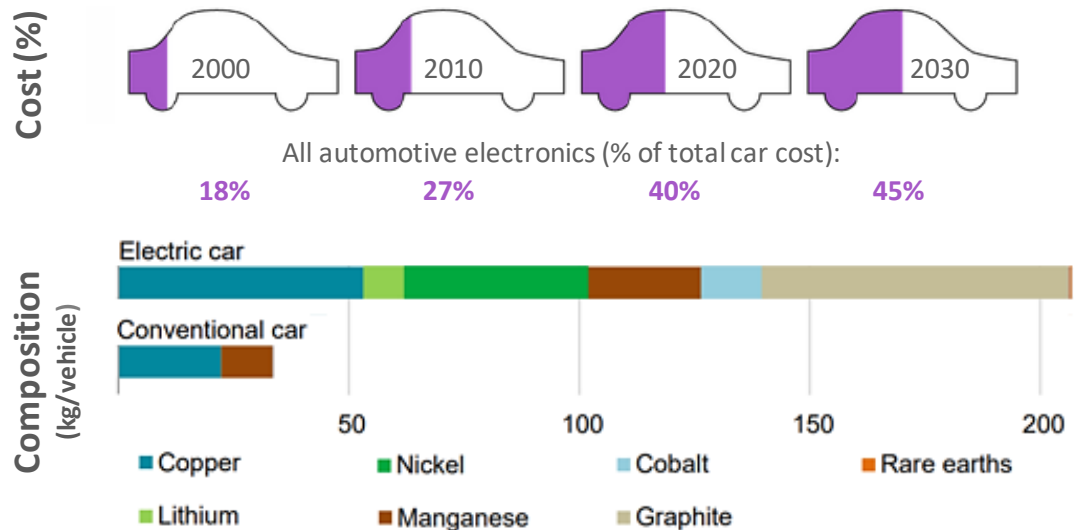
\* Demand from other sectors was assessed using historical consumption, relevant activity drivers and the derived material intensity. STEPS = Stated Policies Scenario, an indication of where the energy system is heading based on a sector-by-sector analysis of today's policies and policy announcements; SDS = Sustainable Development Scenario, indicating what would be required in a trajectory consistent with meeting the Paris Agreement goals.

# Green inflation (cont.)

Mineral demand for clean energy technologies is increasing. The climate-change fight is adding to the global inflation.



Modern cars are relying more on electronics that include semiconductors



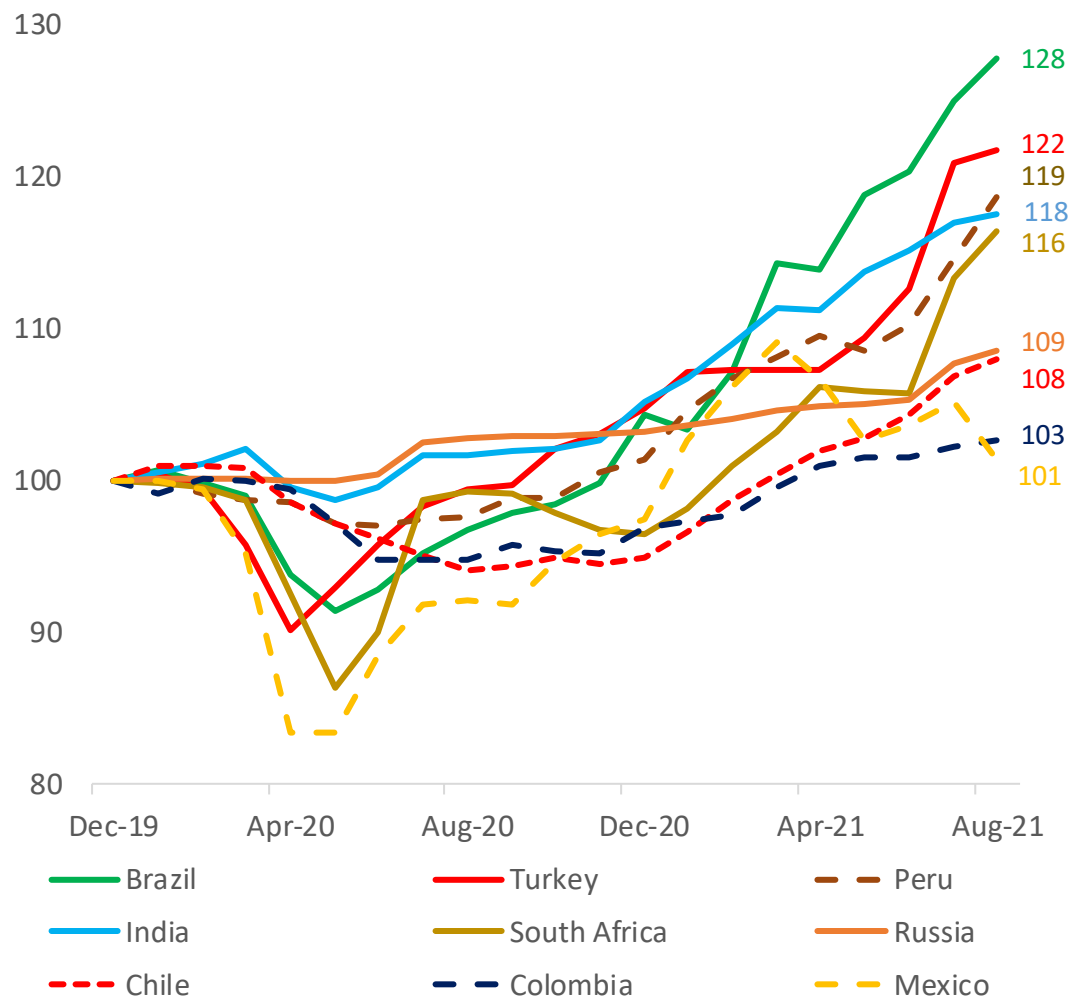
Sources: Researcher and Research (thernrcorp.com), CPM Group, International Energy Agency (IEA), Bloomberg.



# Energy prices

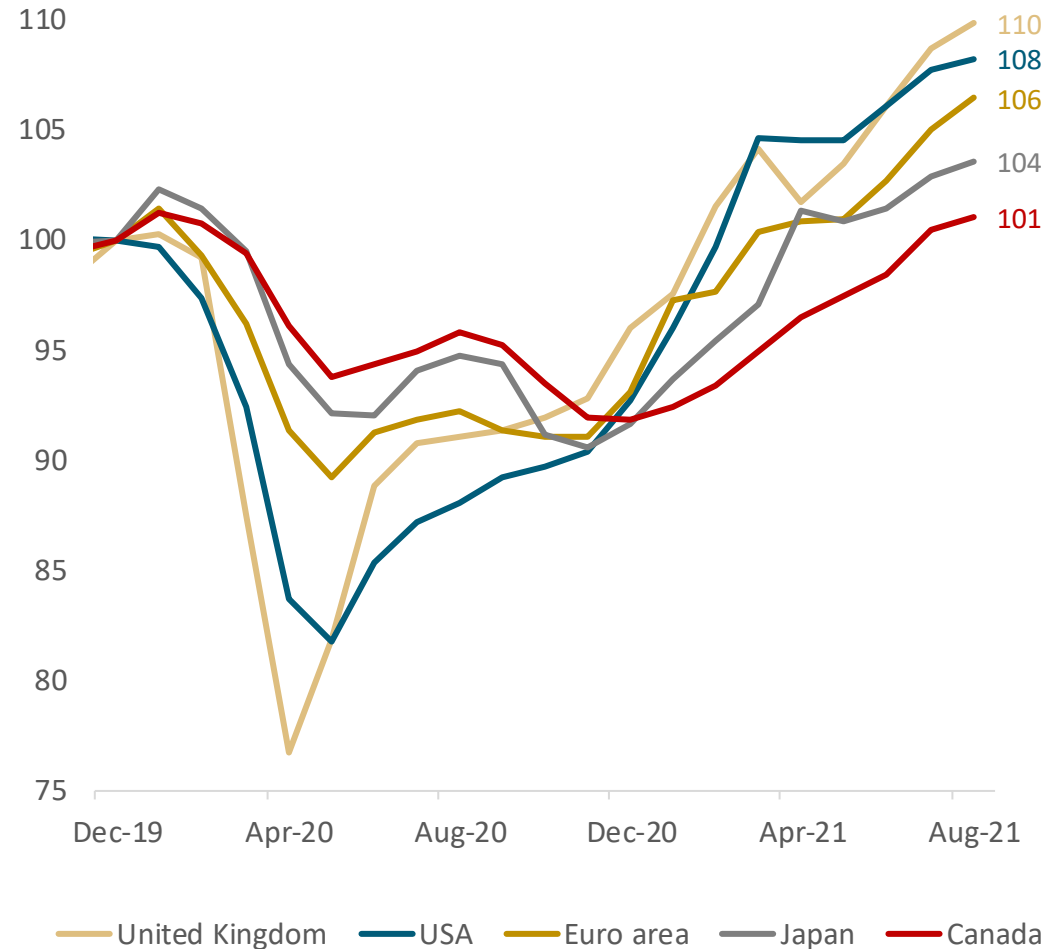
### Energy Prices - Emerging countries

(Dec/19=100)



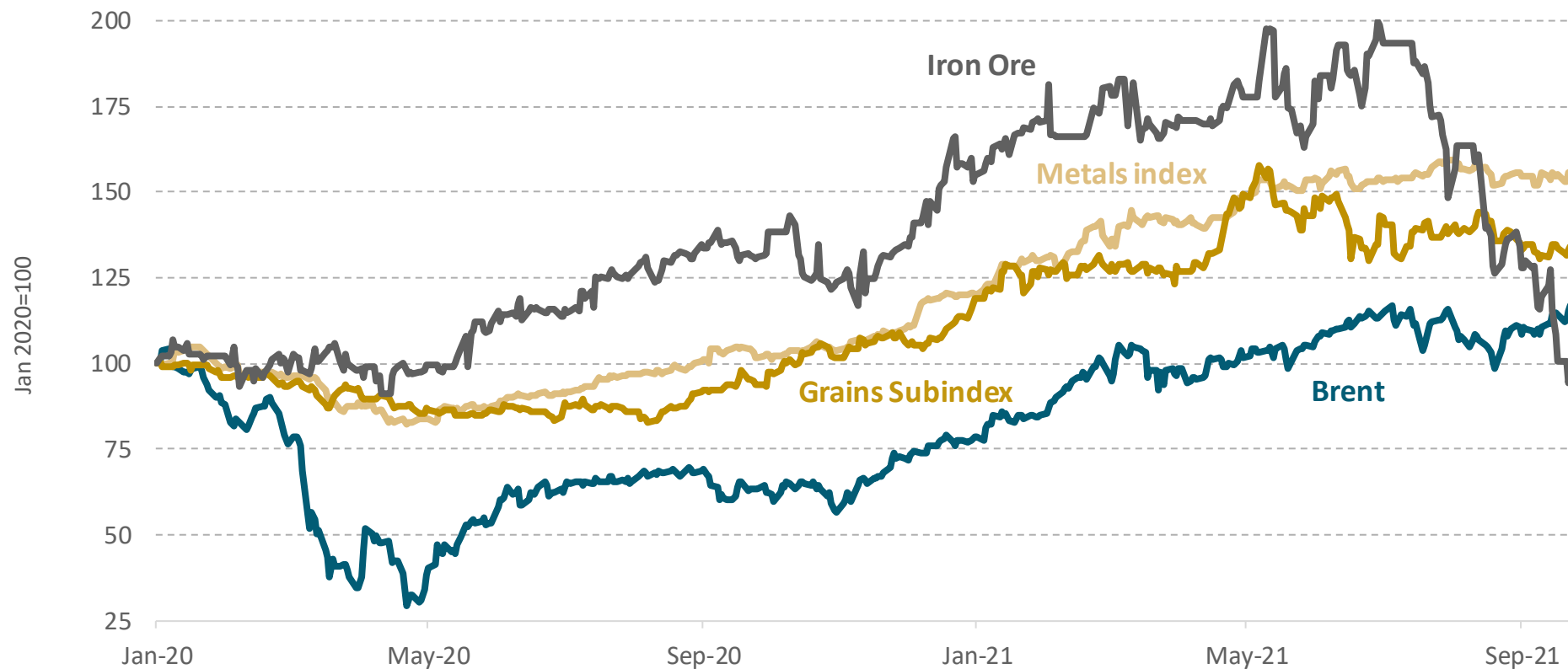
### Energy Prices - Advanced countries

(Dec/19=100)



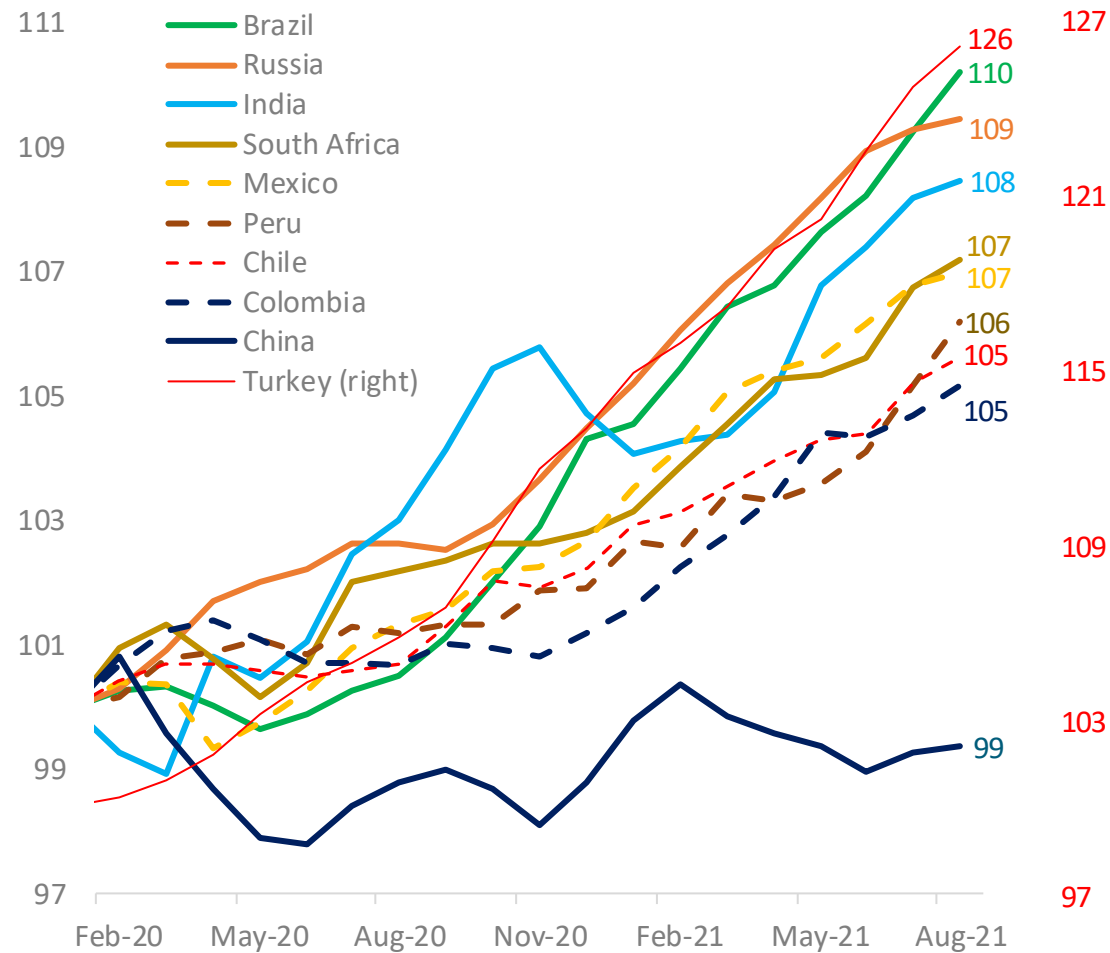
# Commodity prices

## Brent, metals, iron ore and grains

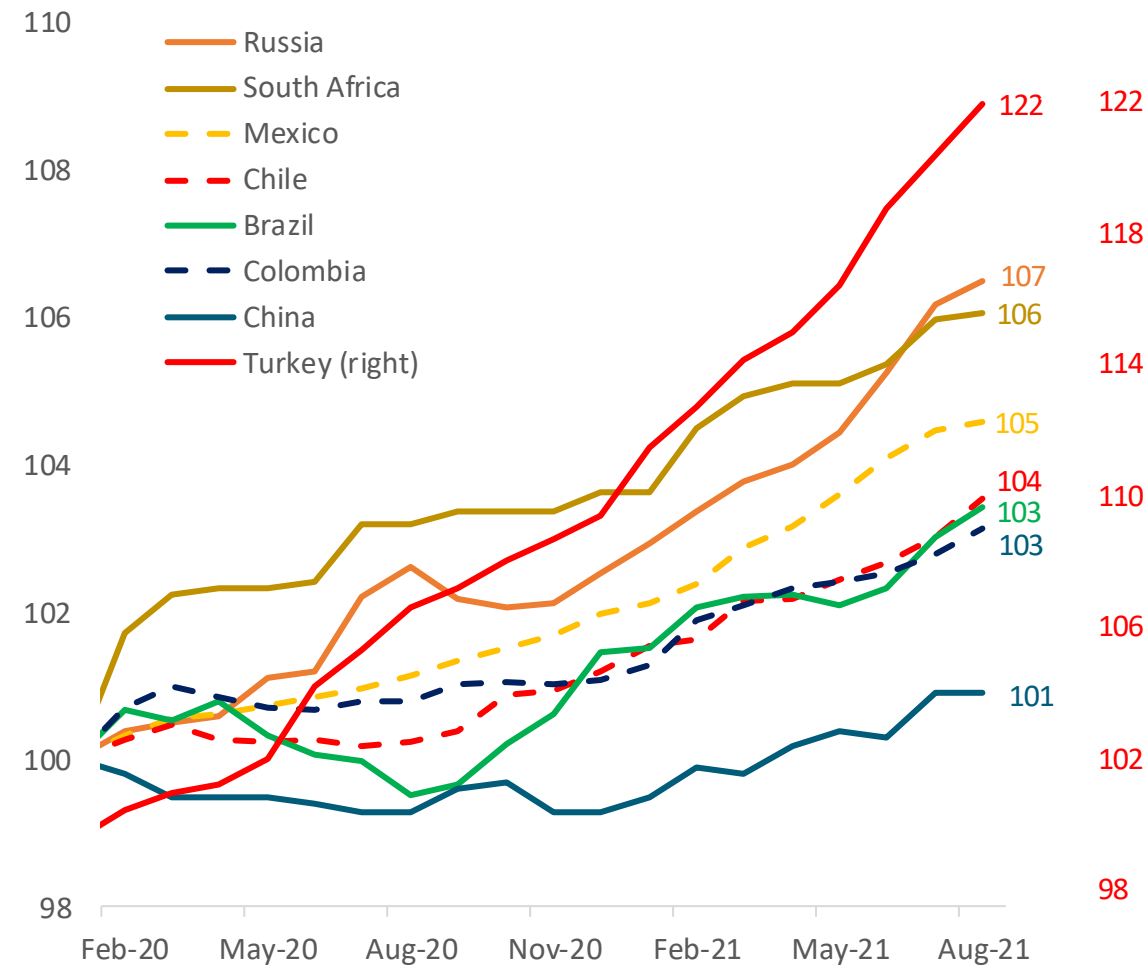


# Emerging economies: inflation

**CPI**  
(jan 2020=100)

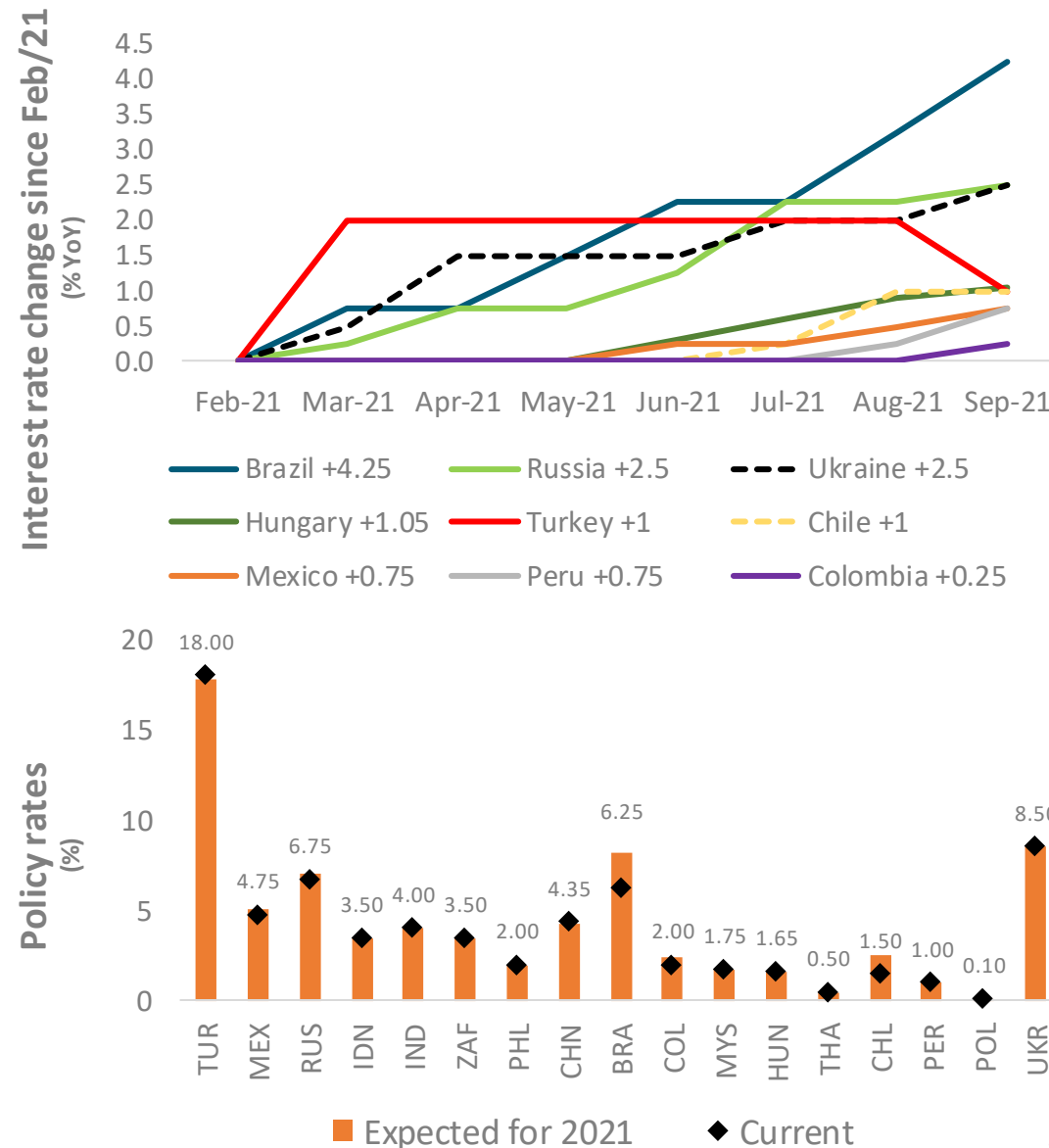
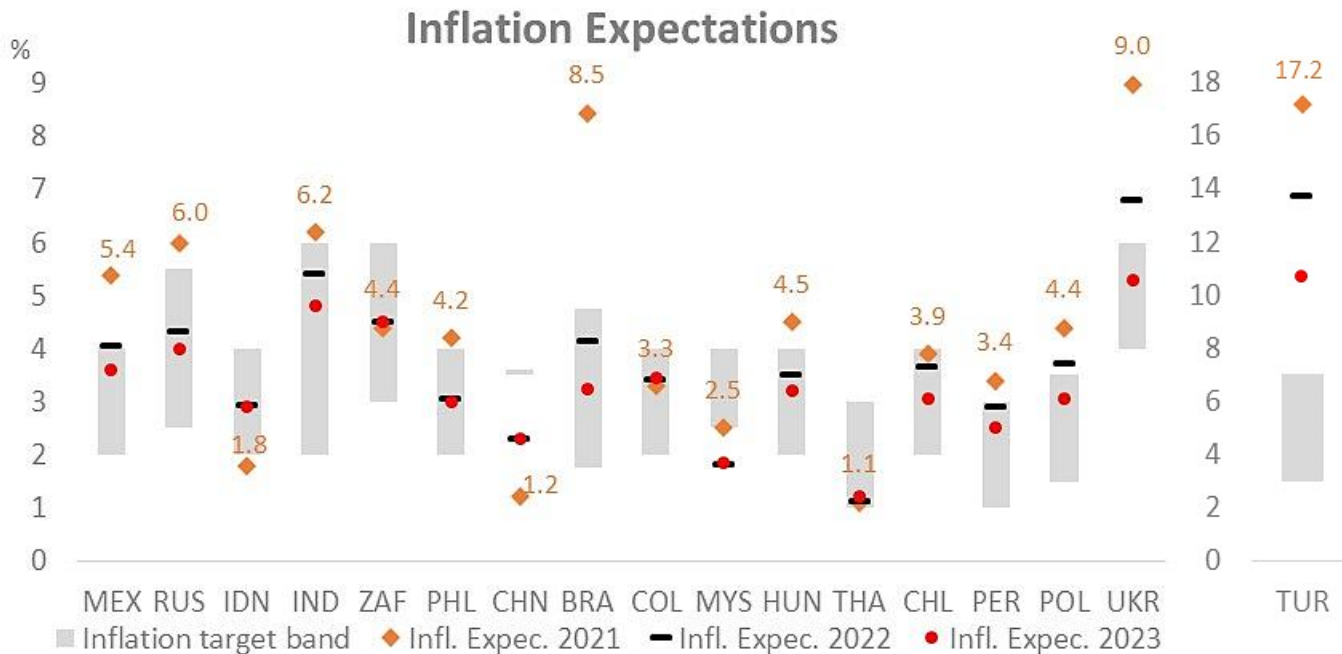


**CPI Services**  
(jan 2020=100)



# EMEs: inflation expectations and monetary policy

Several EMEs facing inflation pressures are raising interest rates. Most EMEs remain with inflation expectations anchored.

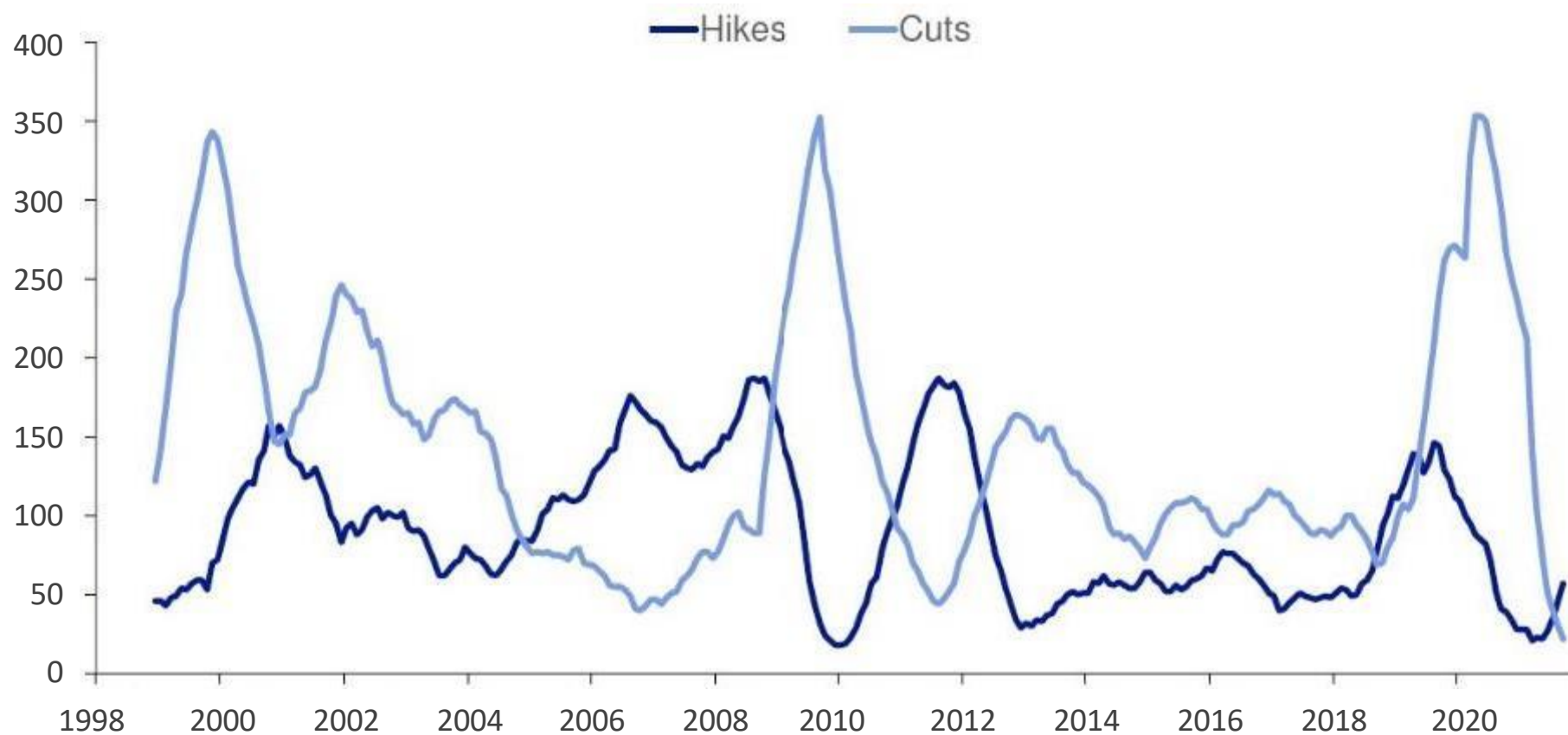


# Monetary Policy

In terms of global central bank decisions of hikes exceeding cuts, we are now at the highest differential for a decade.

## Number of Global Central Bank Decisions - Hikes and Cuts\*

(rolling 12-month basis)



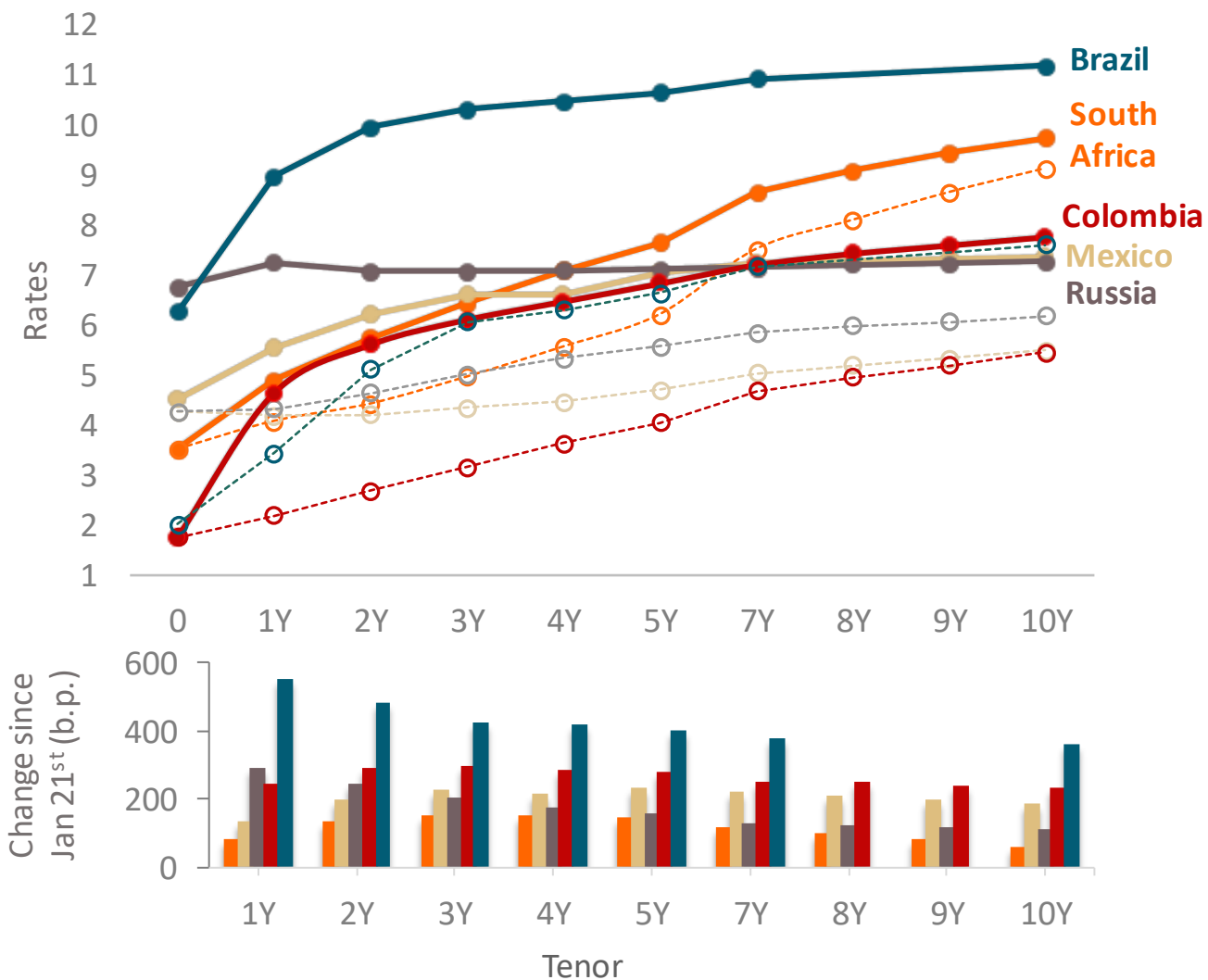
\*Sample 21 countries from 1999, 50 from 2005, 60 from 2007, 70 from 2010, 79 from 2013, 80 from 2015.



# EMEs: interest rates

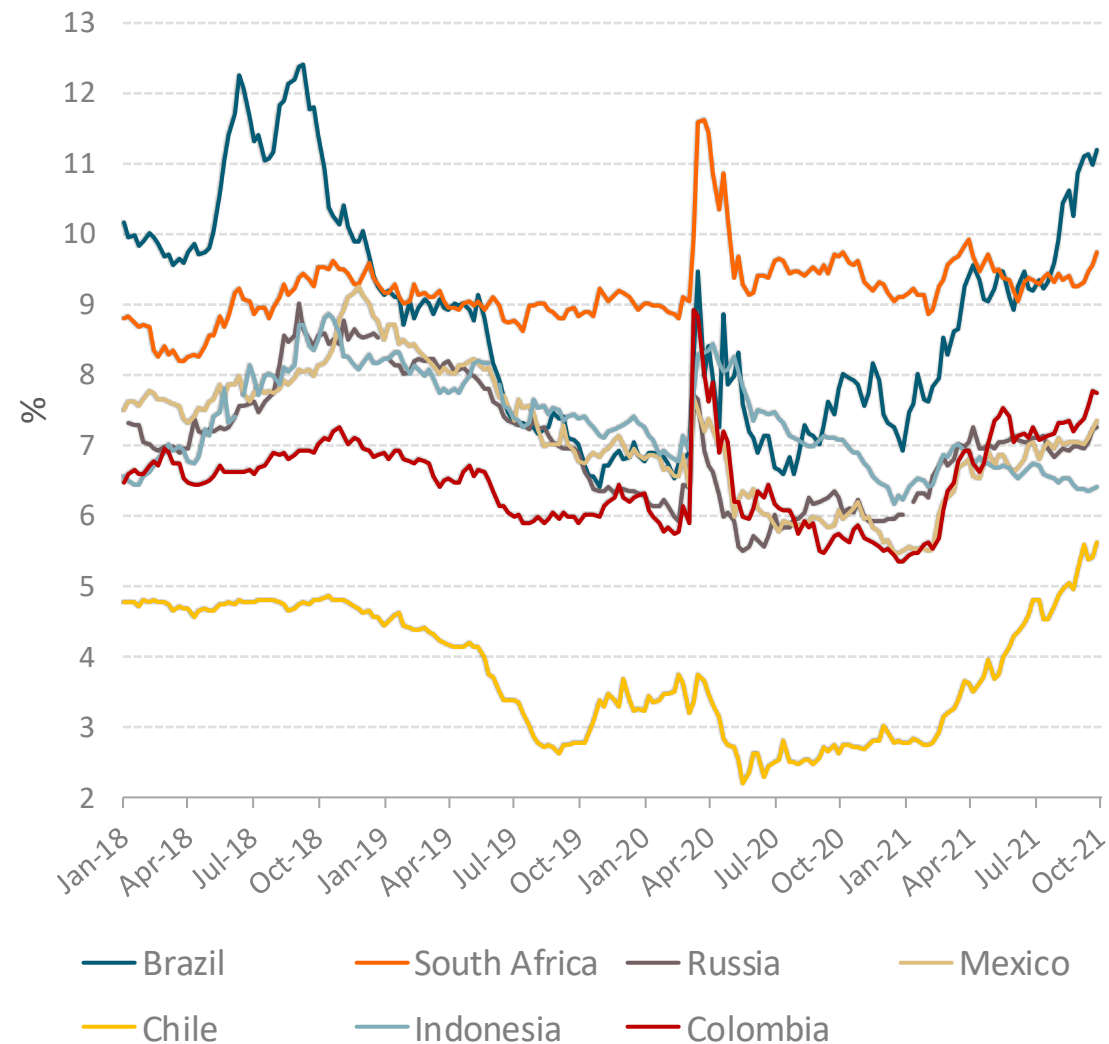
## Yield curves

(Jan 20 (dashed lines) - Sep 23 (continuous line), 2021)



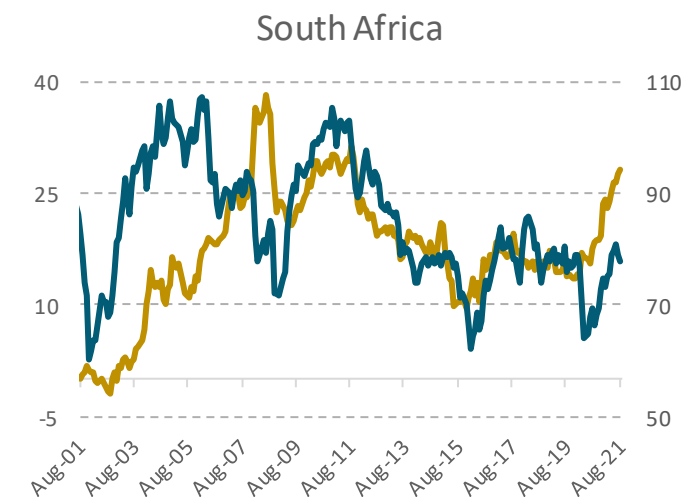
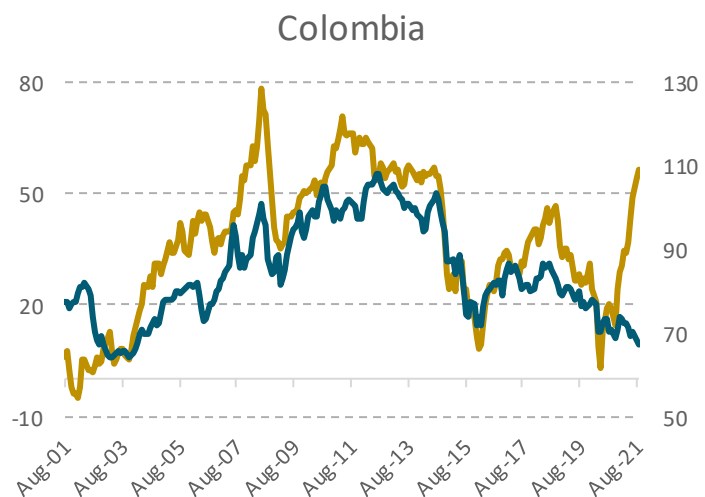
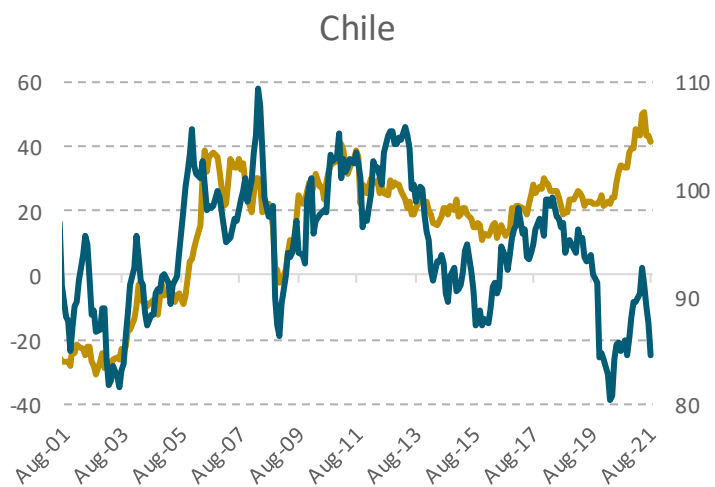
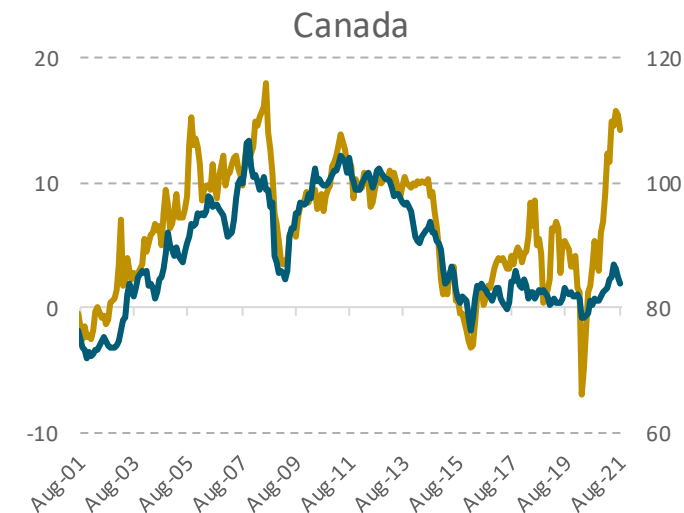
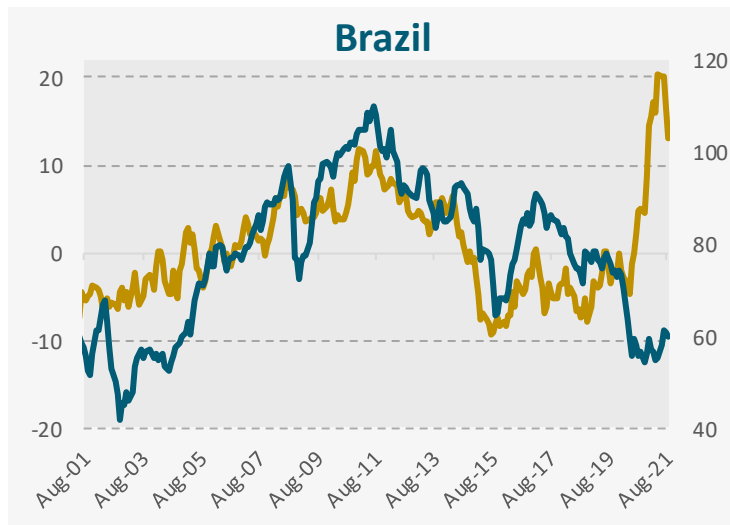
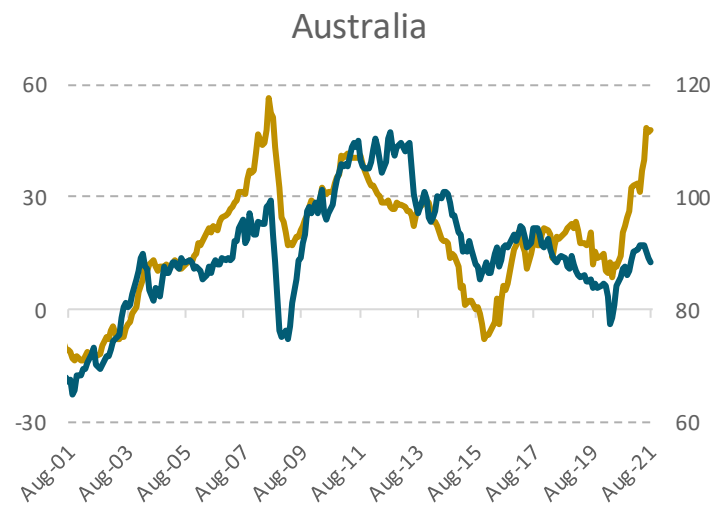
## 10y nominal interest rate

(%)



# Real FX rate and terms of trade

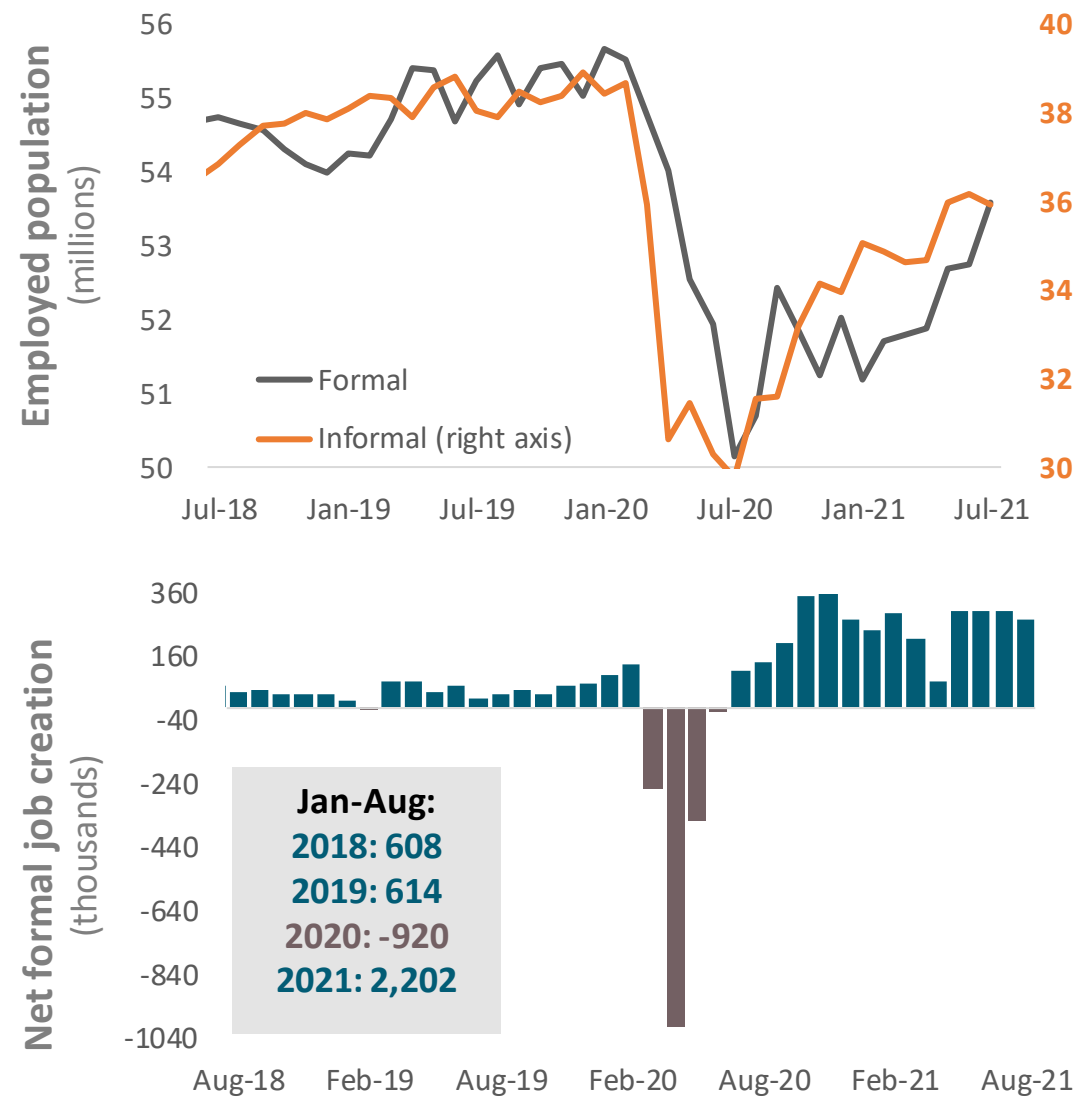
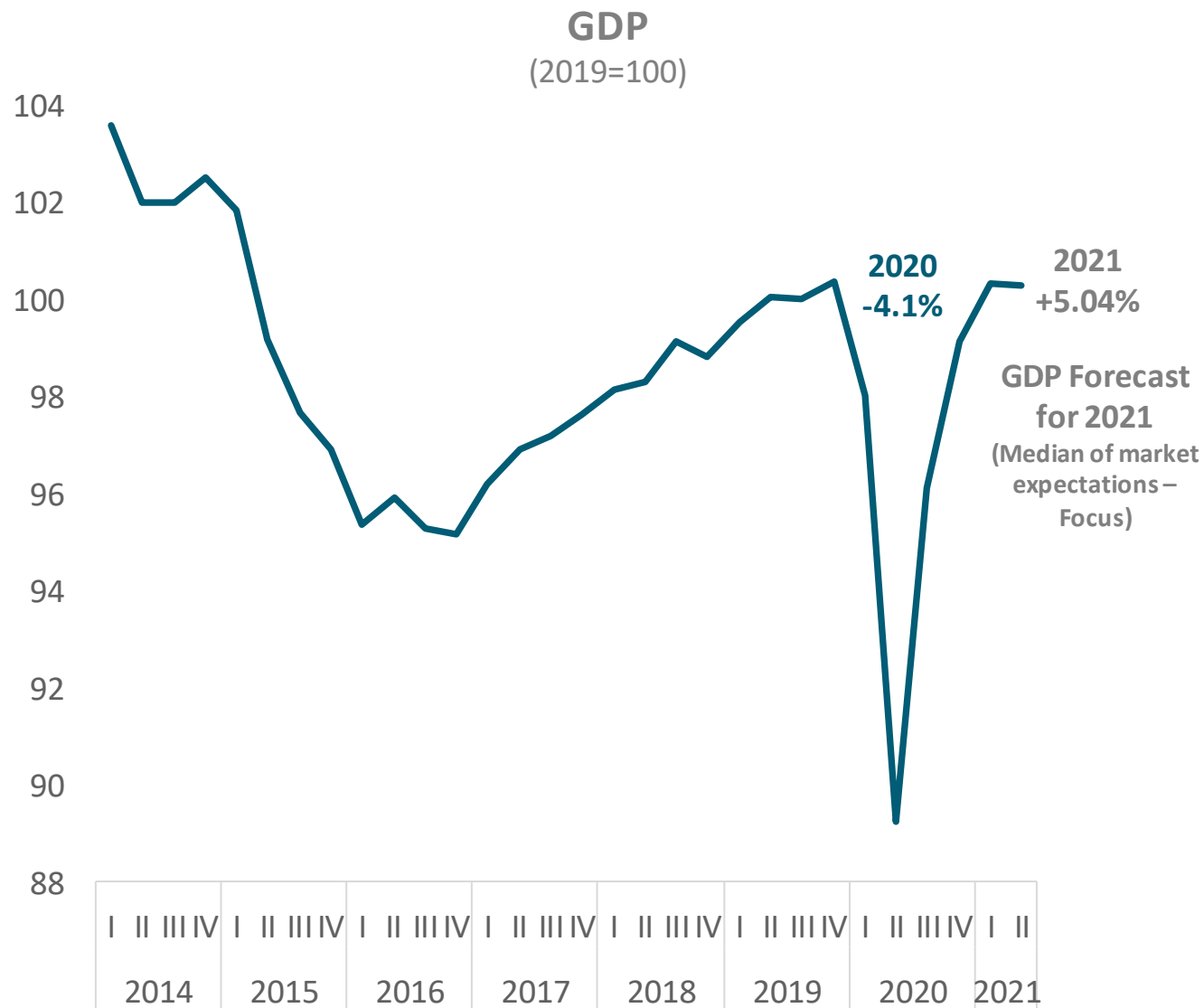
Indexes of effective foreign exchange rate and terms of trade detached



— Terms of trade — Real effective exchange rate (right)

# Brazil: GDP and labor market

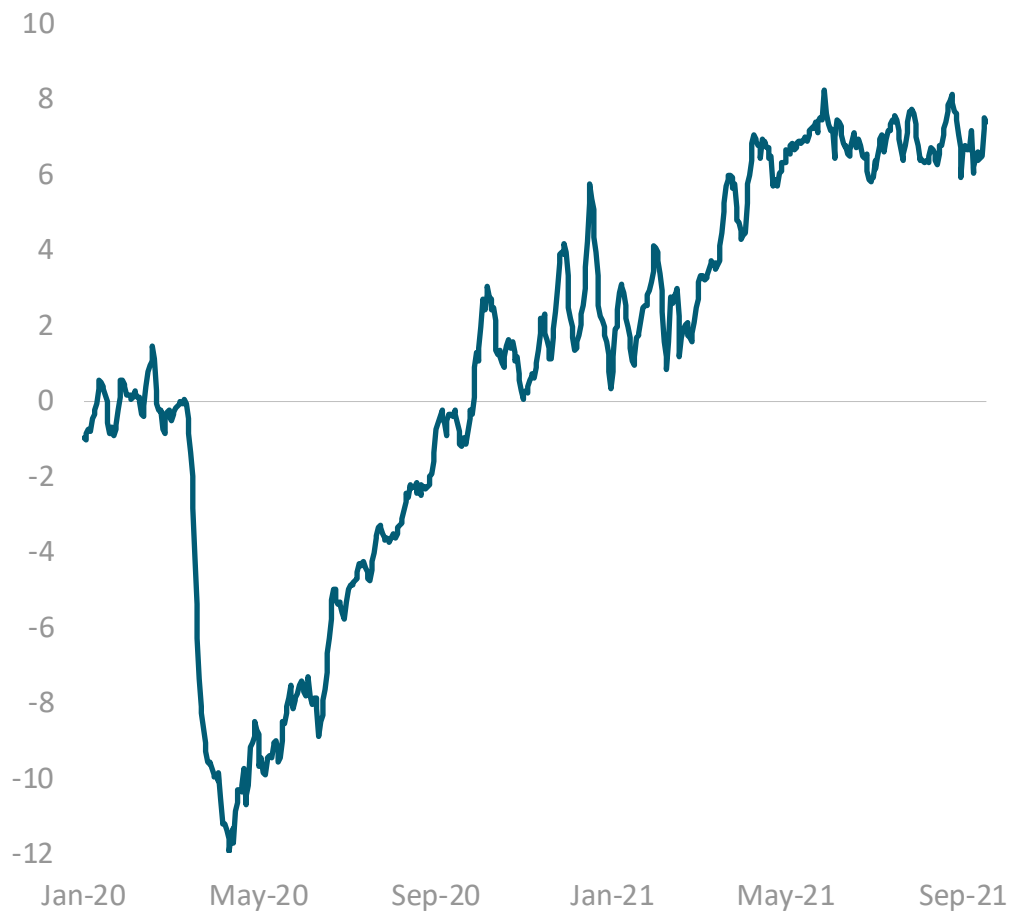
Strong recovery of GDP and jobs in 2021



# High frequency indicators

## Electricity demand

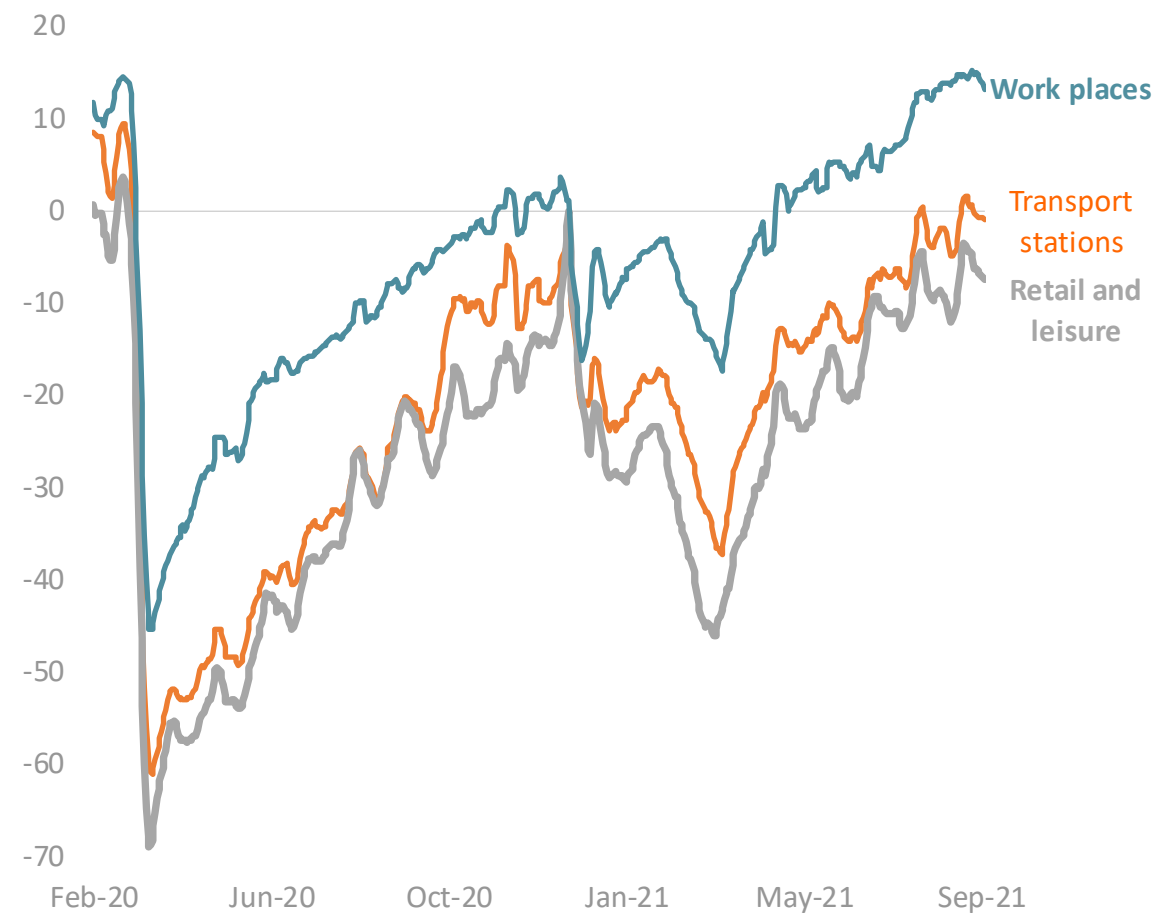
mm7d; % change compared to reference period<sup>1/</sup>



1/ Reference period: 5/Jan/2020 to 22/Feb/2020

## Mobility indicator

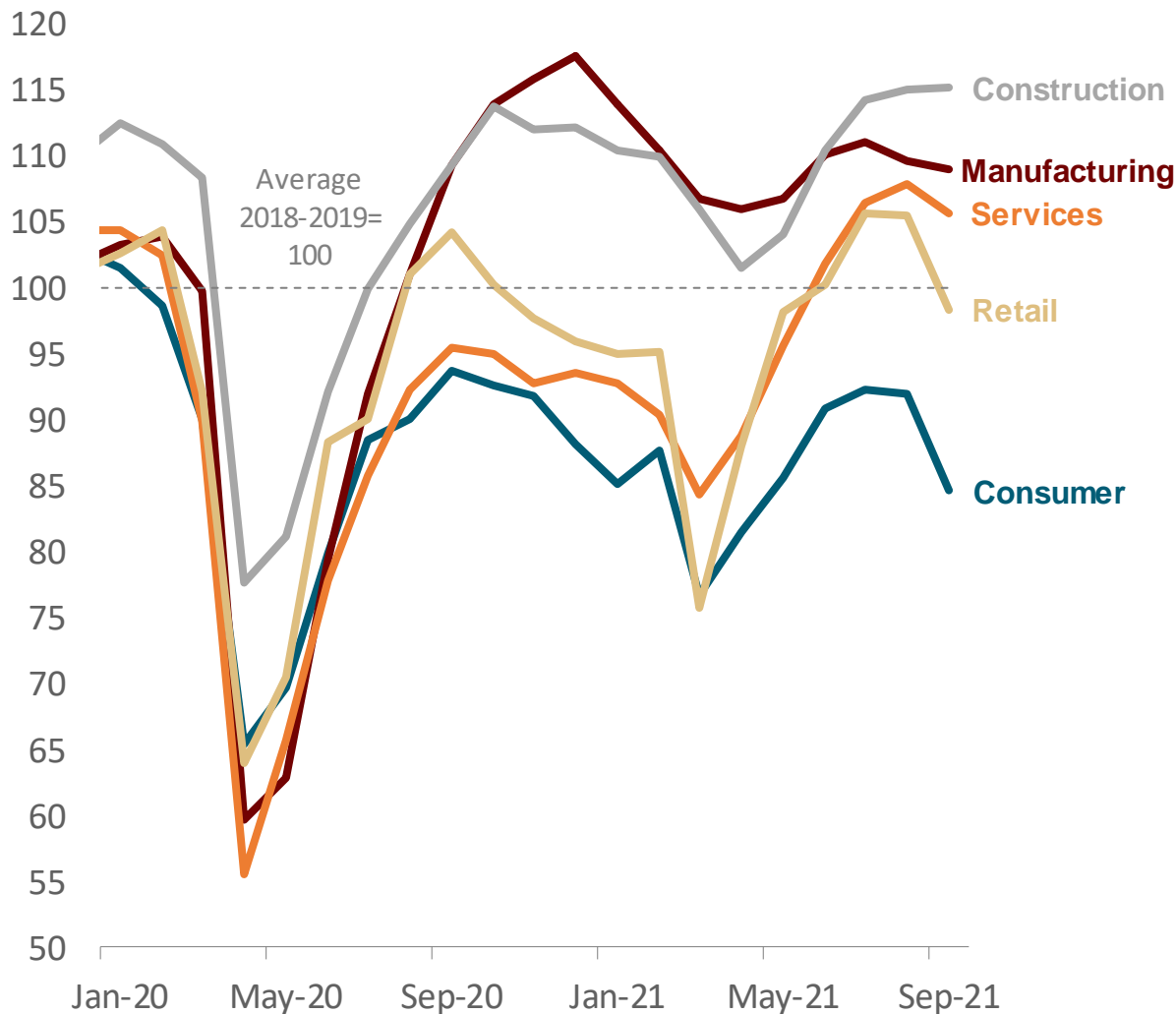
mm7d; % change compared to reference period<sup>2/</sup>



2/ Google Mobility: 3/Jan/2020 to 6/Feb/2020

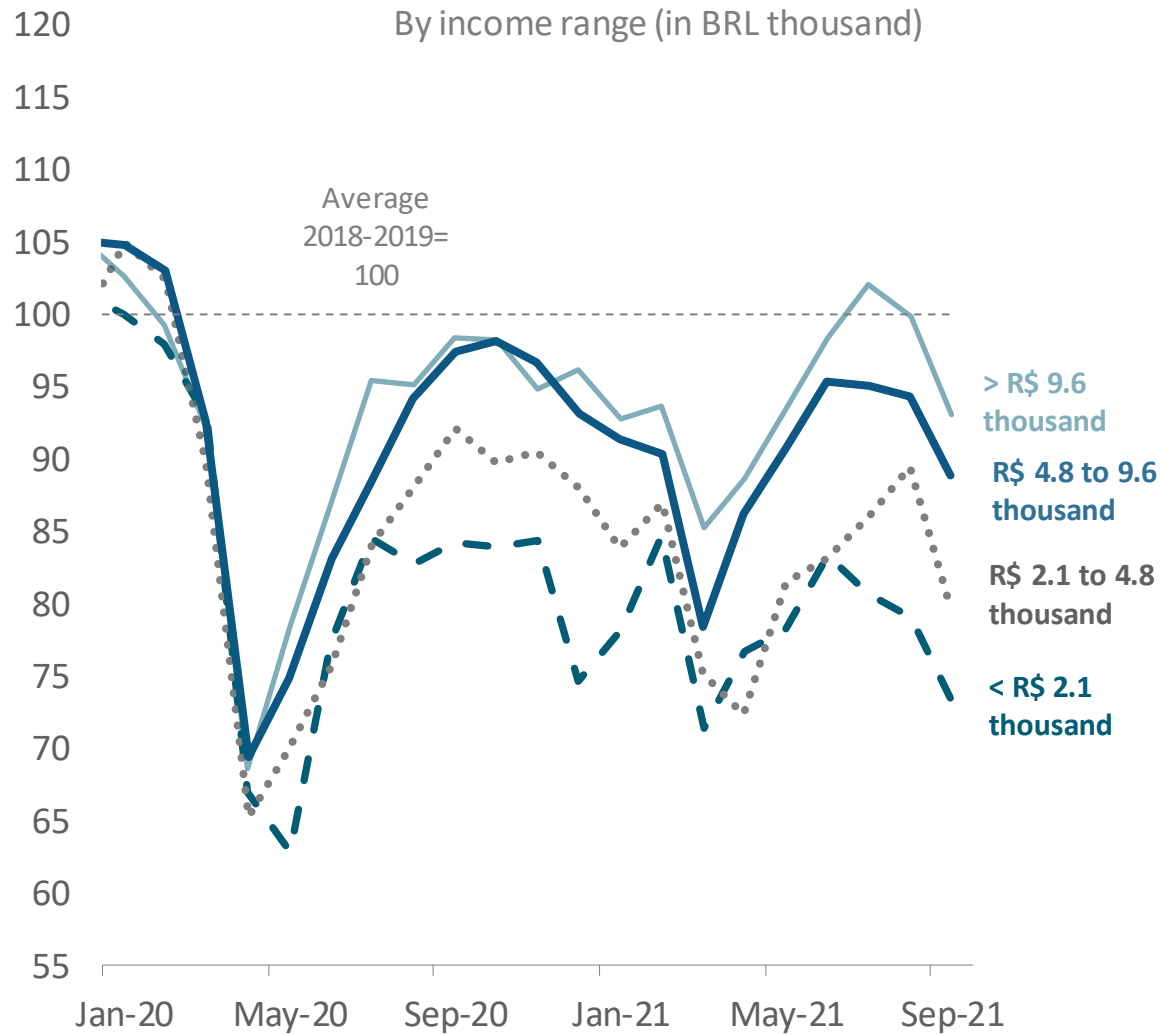
# Confidence indicators

### Business confidence X consumer confidence



### Consumer confidence

By income range (in BRL thousand)

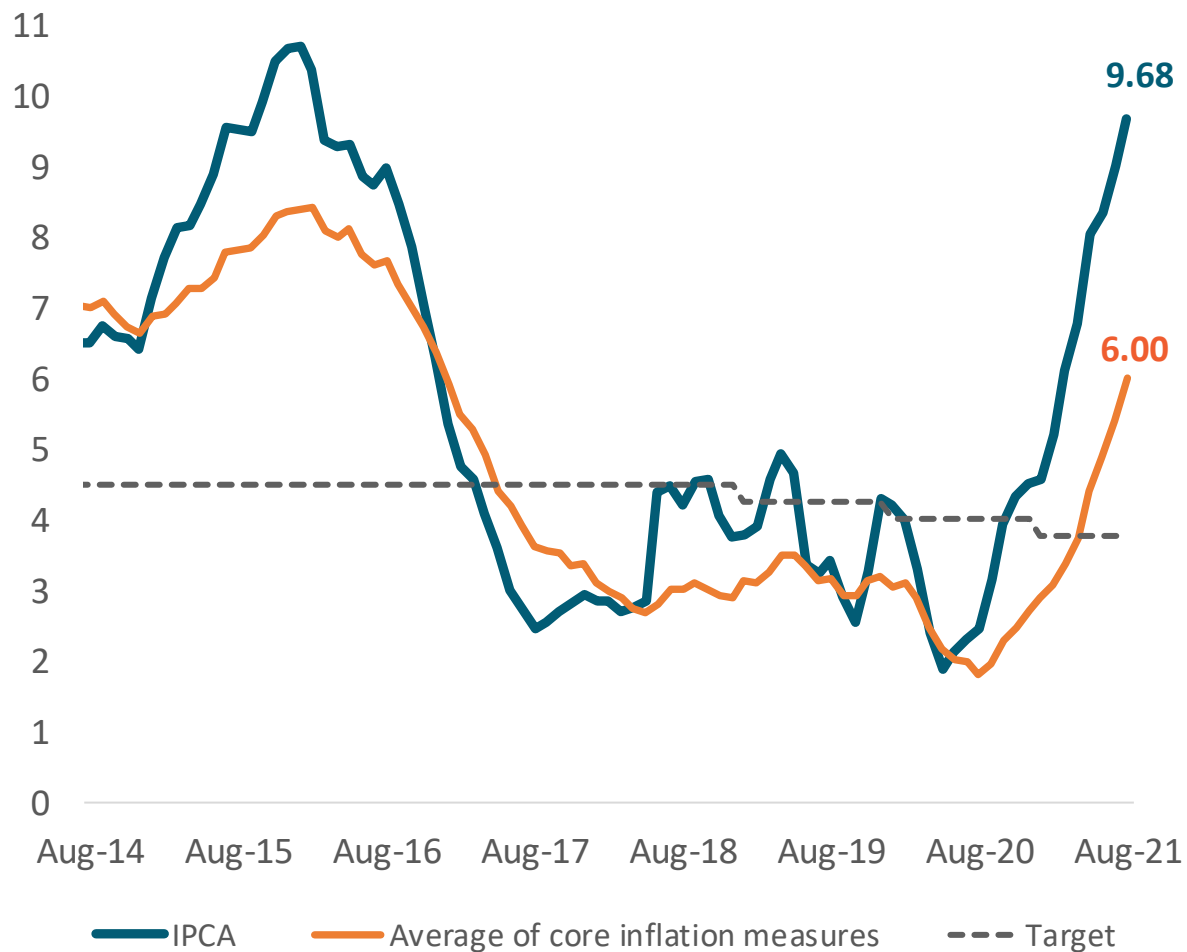


Source: FGV. Seasonally adjusted data.

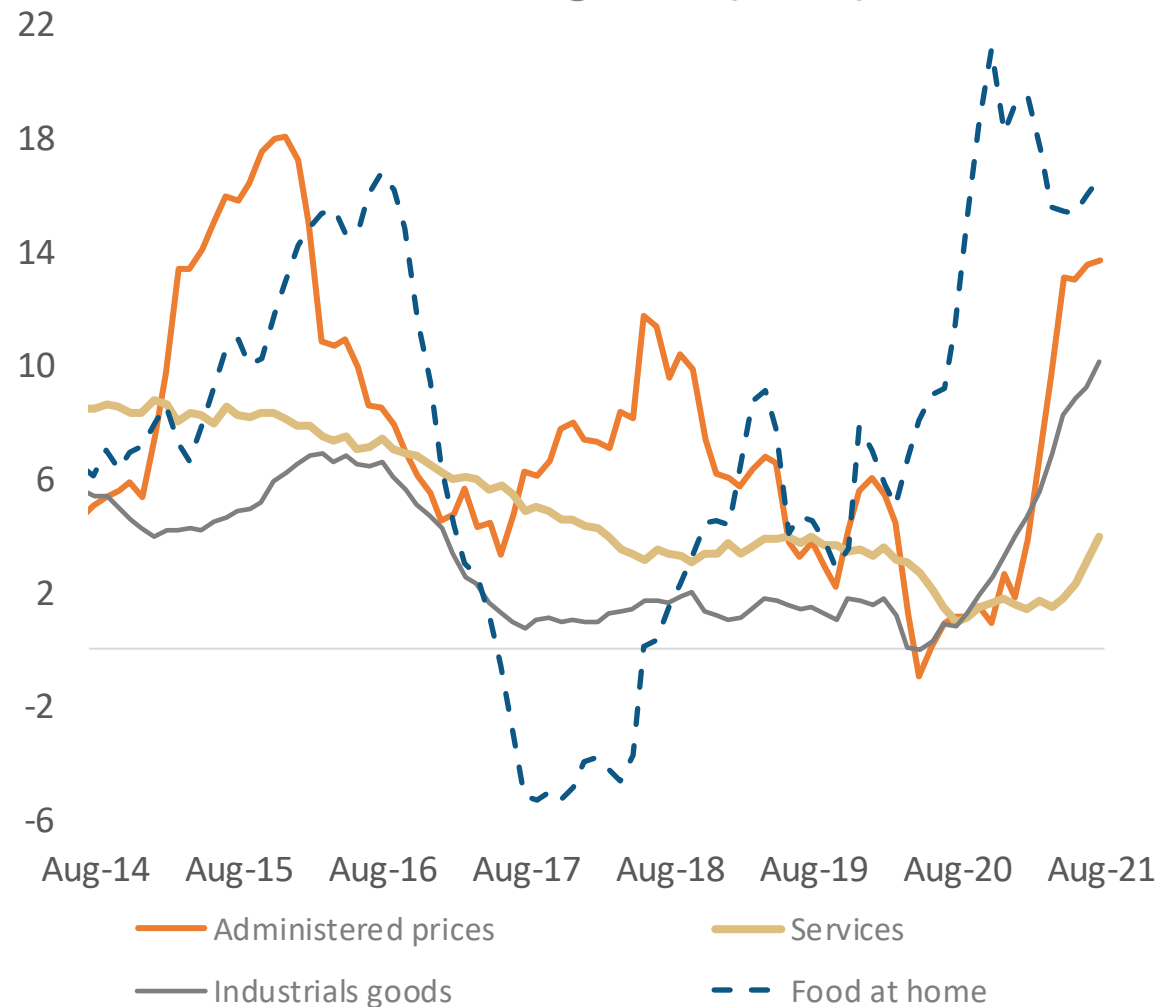


# Consumer inflation

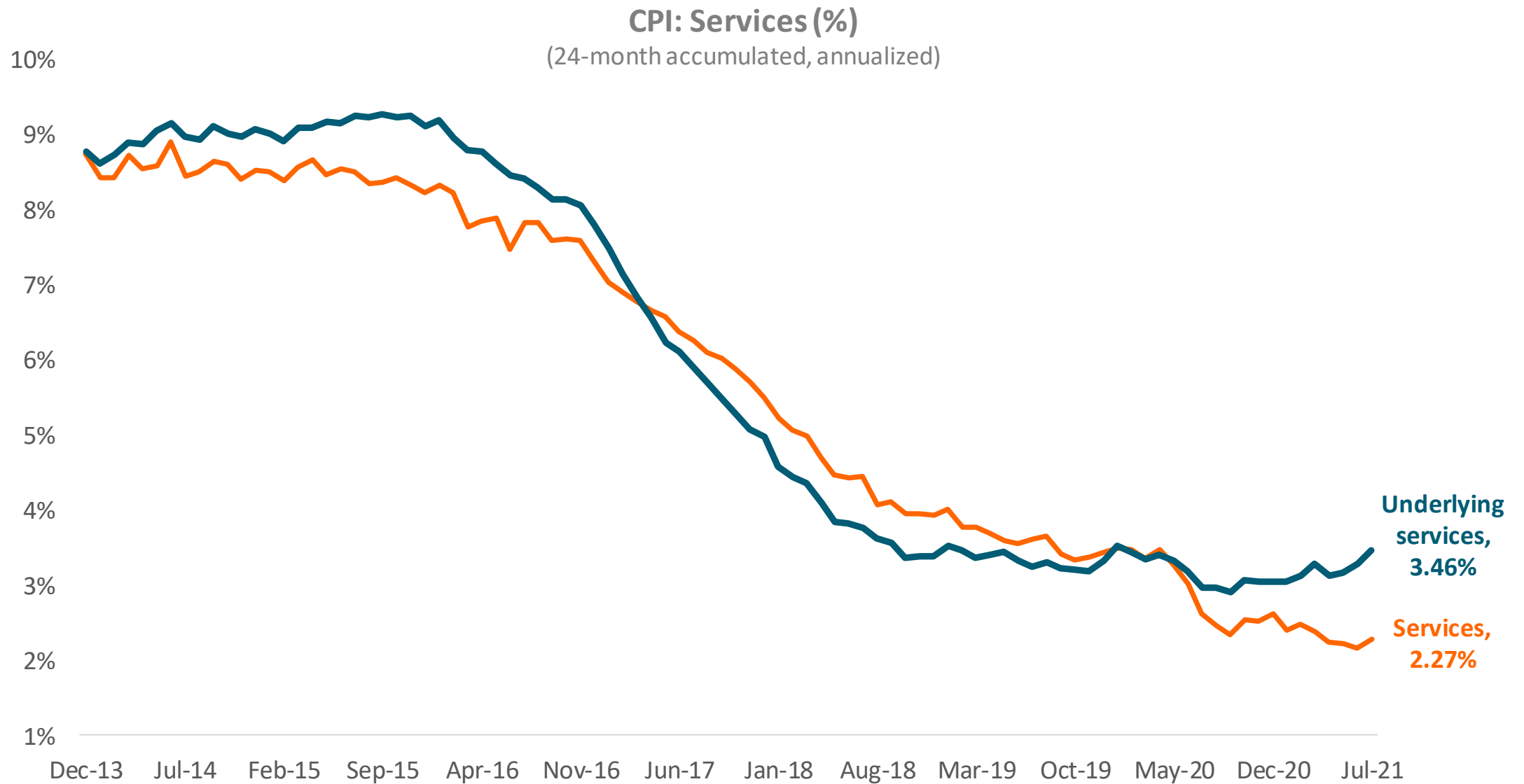
IPCA and target - (% YoY)



Inflation segments (% YoY)

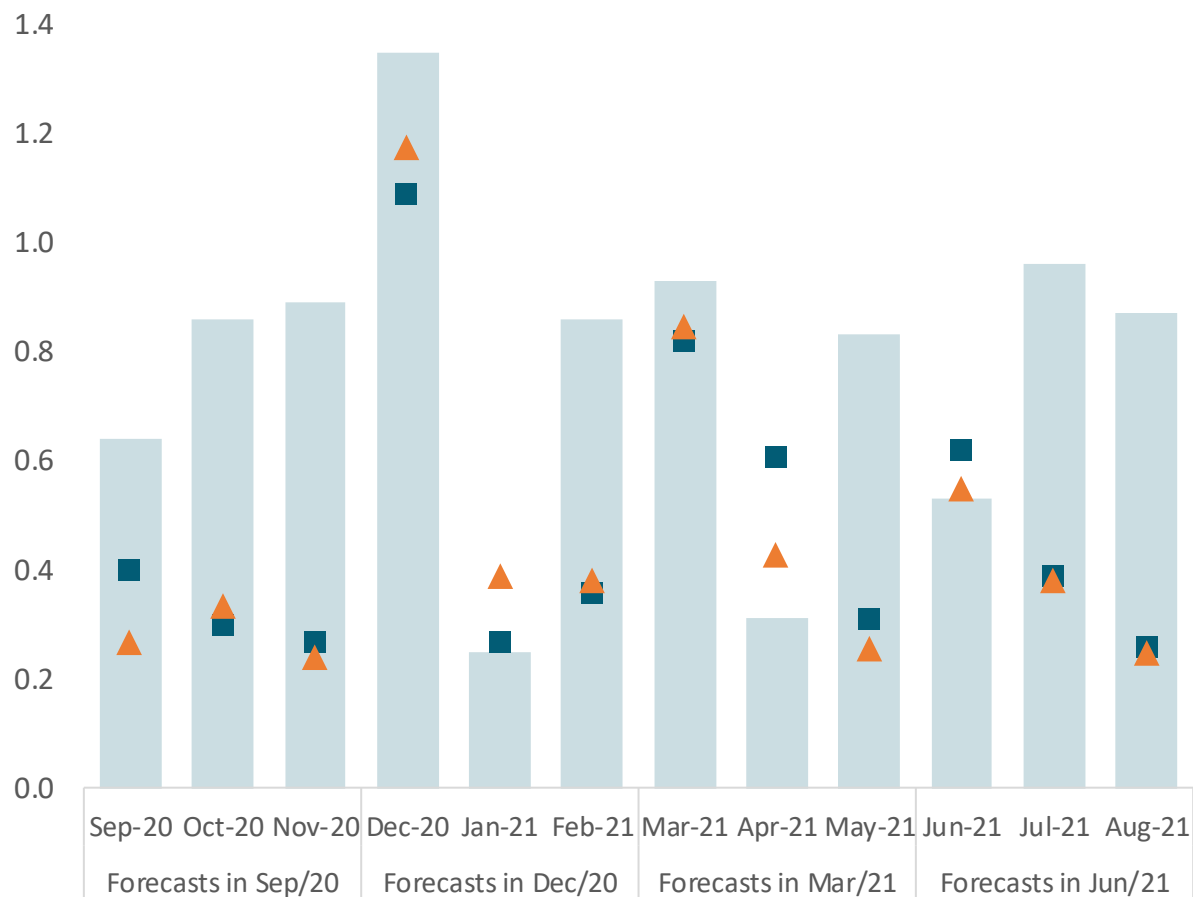


# CPI: Services

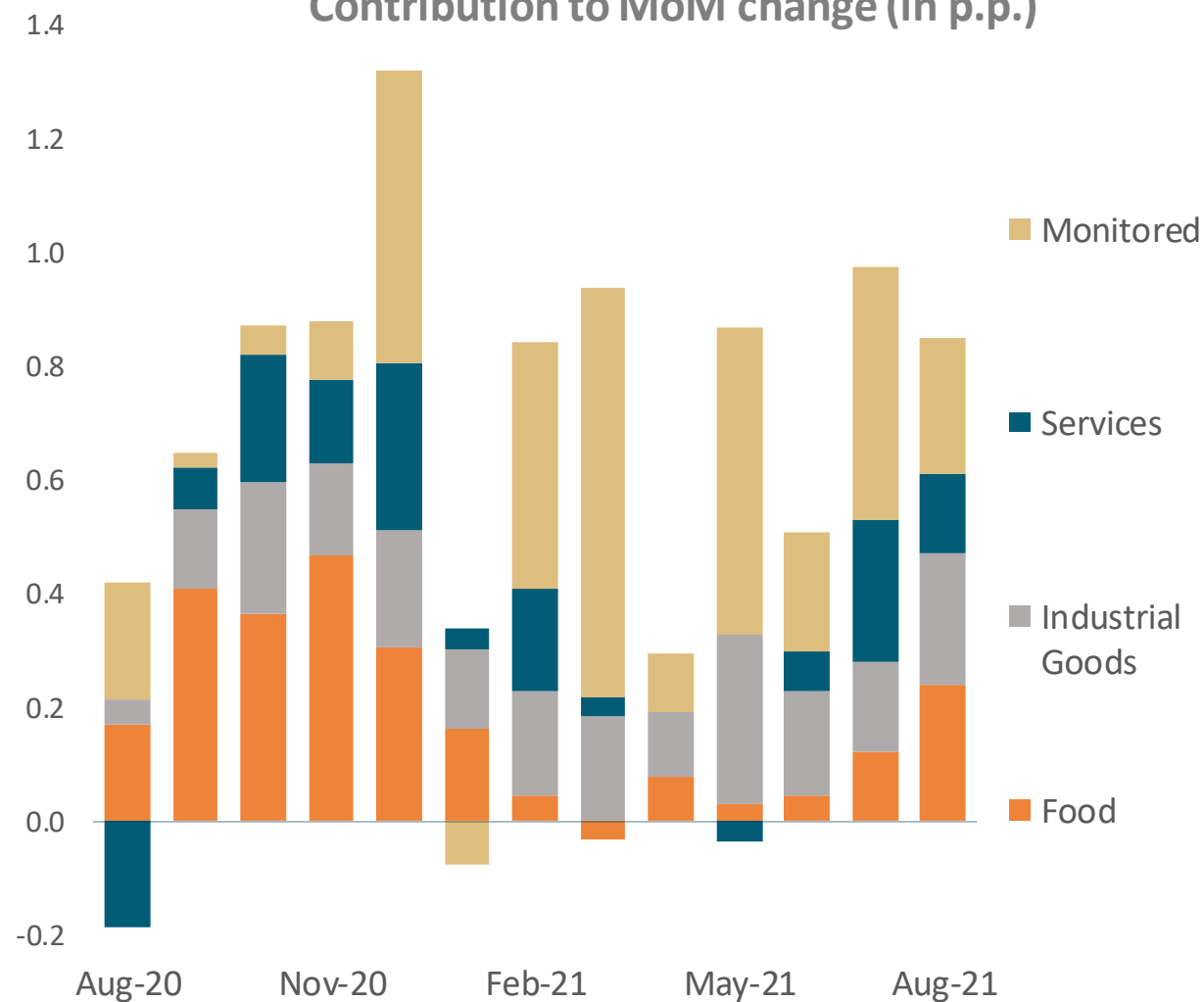


# CPI: Surprises and decomposition

CPI surprises (% MoM)



Contribution to MoM change (in p.p.)

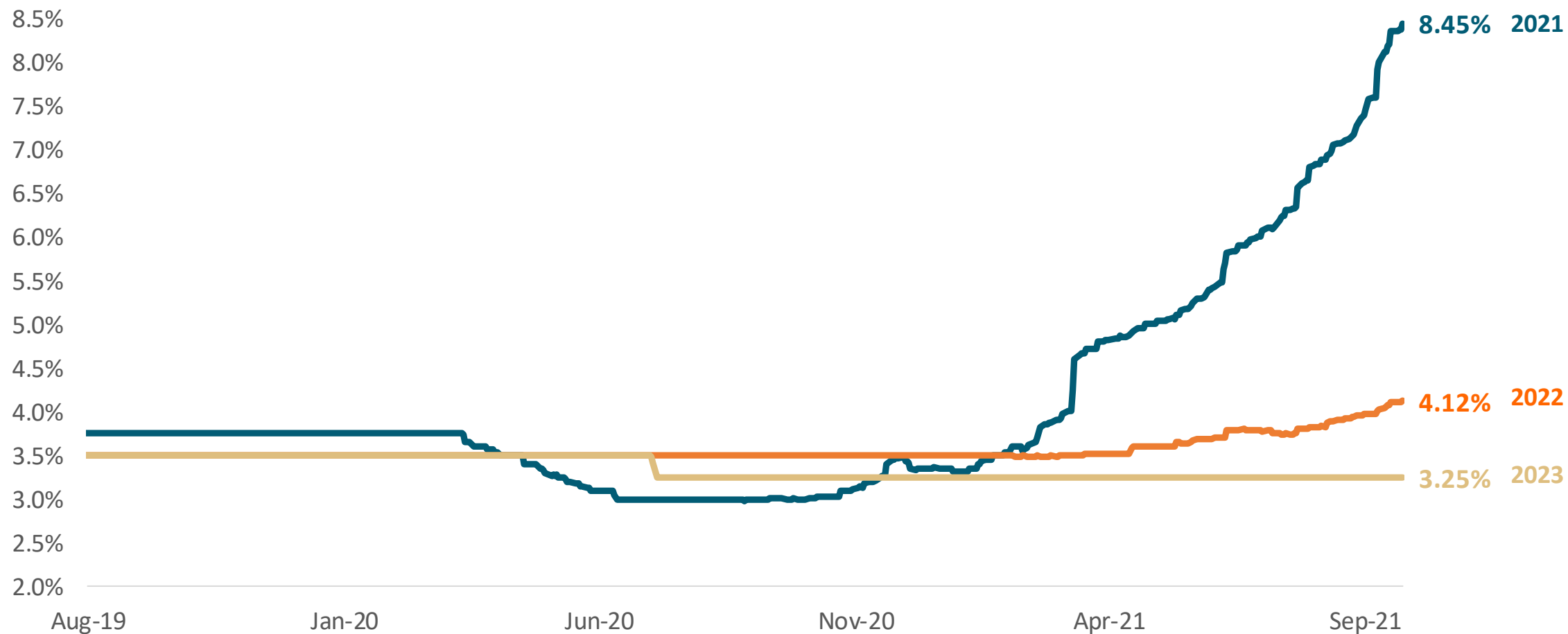


The date of the projections (in September, December, March and June) corresponds to the cutoff date of the Central Bank of Brazil Inflation Report.

Sources: IBGE, BCB.

# Inflation expectations for CPI

## Market expectations – Focus (% p.y.)



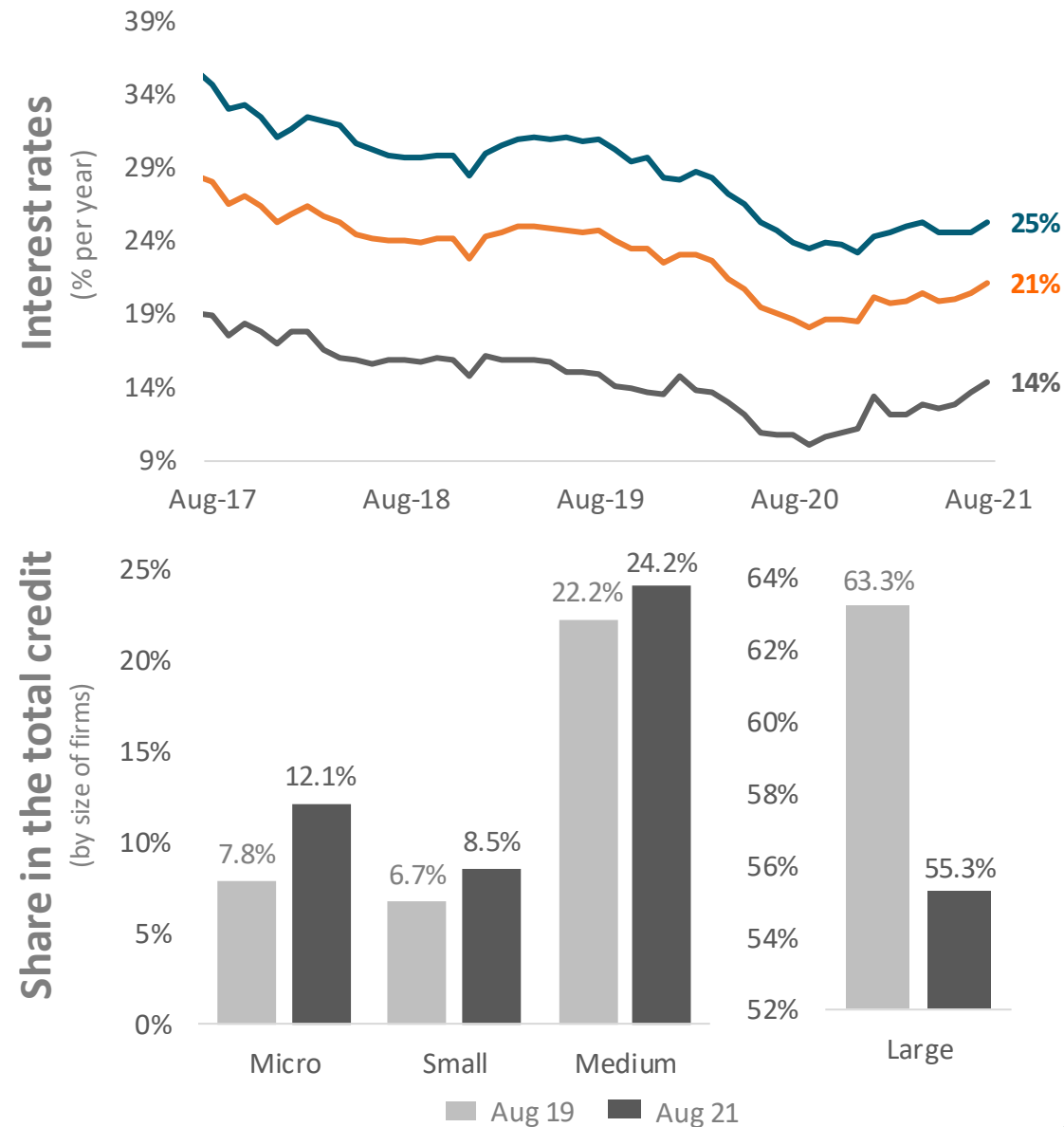
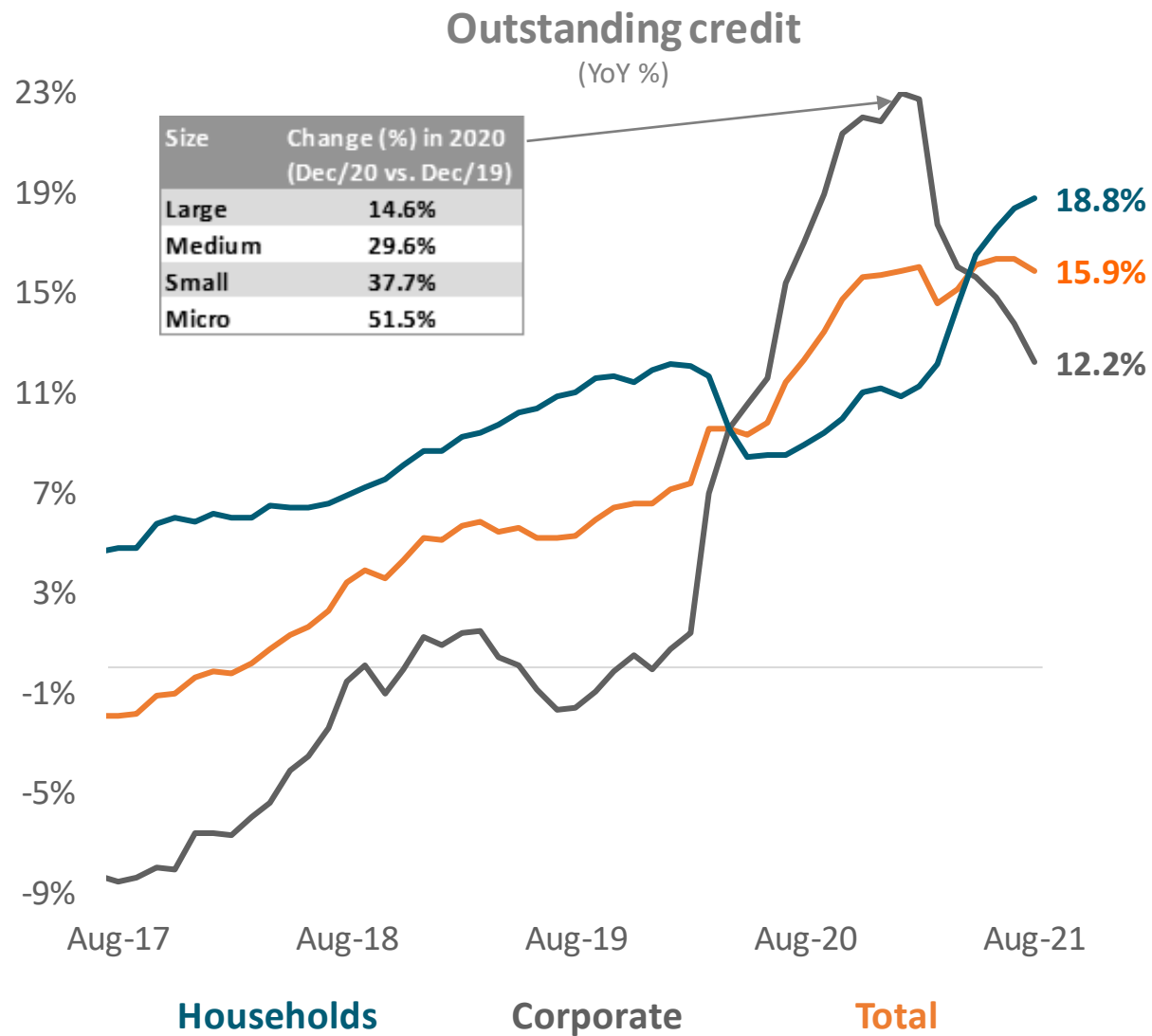
# Monetary policy

## 241st Copom Meeting – September 2021

- In its 241st meeting, the Copom unanimously decided to increase the Selic rate by 1.00 p.p. to 6.25% 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 is consistent with the convergence of inflation to its target over the relevant horizon for monetary policy, which includes 2022 and, to a lesser extent, 2023.
- The Committee considers that, at the present stage of the tightening cycle, this pace is the most appropriate to guarantee inflation convergence to the target at the relevant horizon and, simultaneously, allow the Committee to obtain more information regarding the state of the economy and the persistence of shocks.
- At this moment, the Copom's baseline scenario and balance of risks indicate as appropriate to advance the process of monetary tightening further into the restrictive territory.
- For the next meeting, the Committee foresees another adjustment of the same magnitude. The Copom emphasizes that its future policy steps could be adjusted to ensure the achievement of the inflation target and will depend on the evolution of economic activity, on the balance of risks, and on inflation expectations and projections for the relevant horizon for monetary policy.

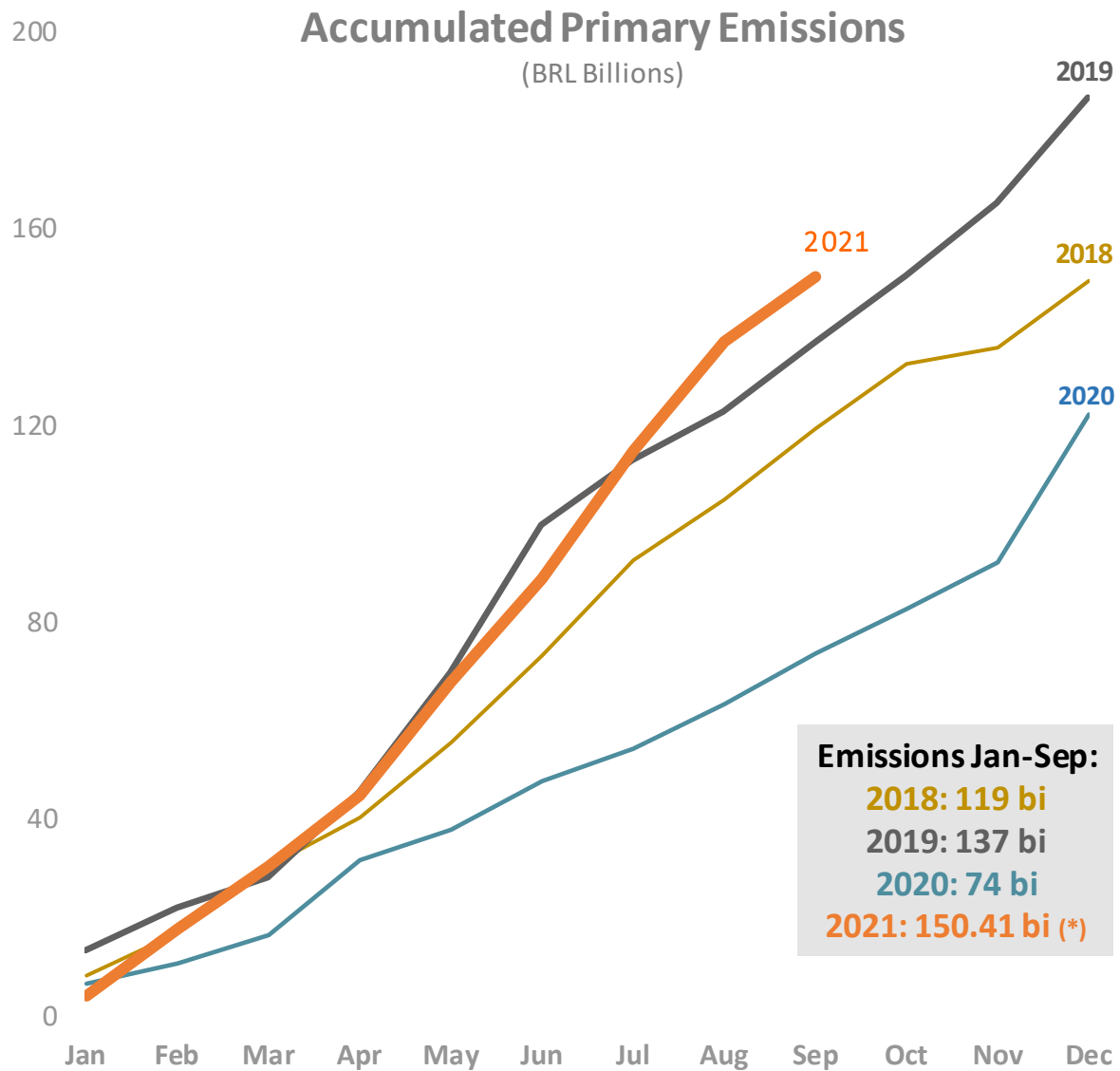
# Credit in the National Financial System

Credit continue to increase. Interest rates close to historically low levels.

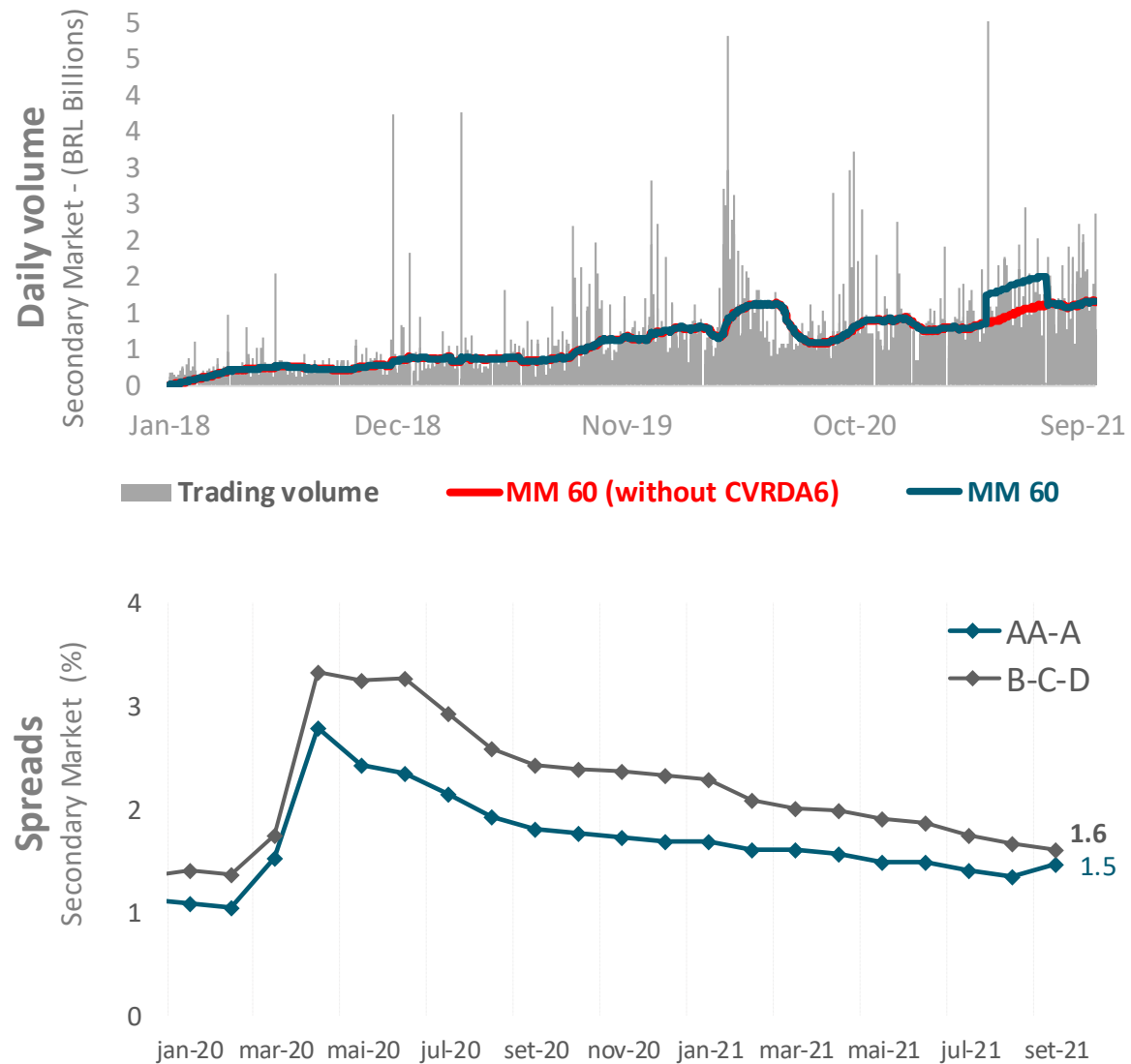




# Corporate Credit



Source: B3. (\*) until September 27<sup>th</sup>, 2021.



# General Government Gross Debt (GGGD)

## GGGD/GDP 2021 forecast

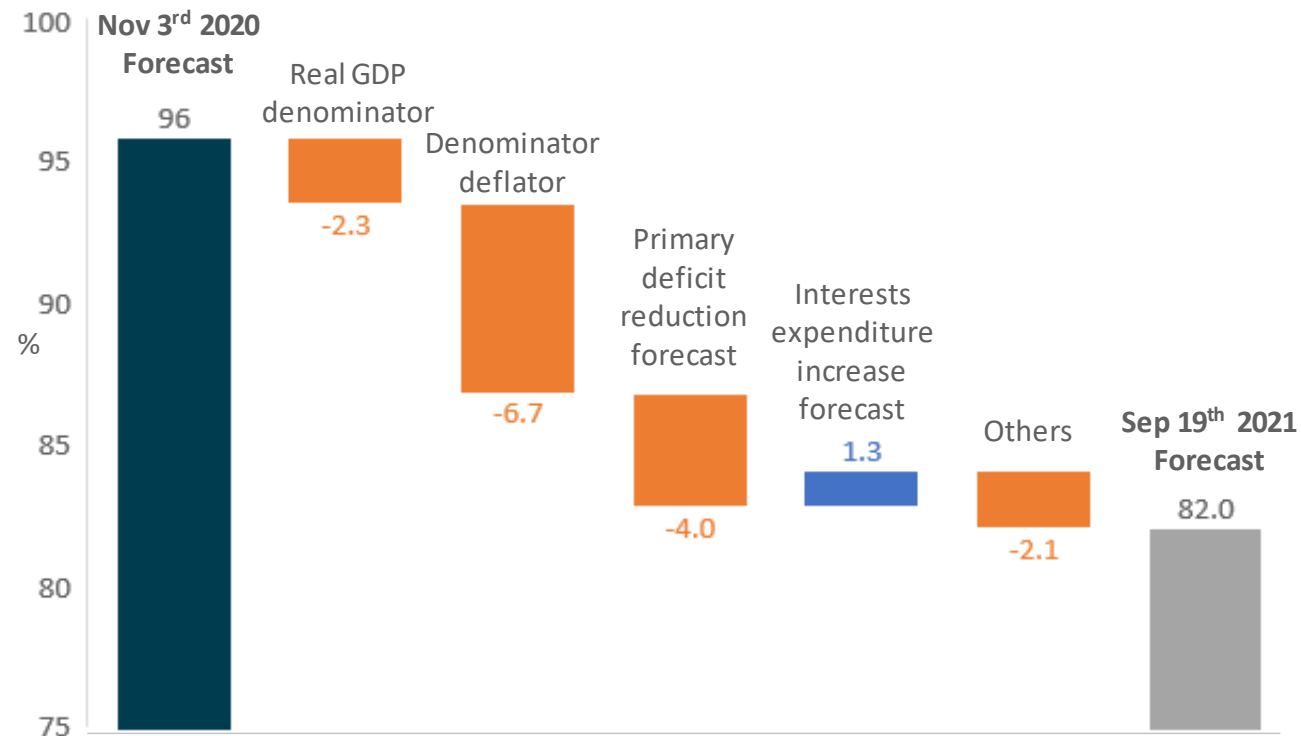
(Focus median)



Updated to 09/24/21

## GGGD/GDP 2021 Focus forecast\*

(disaggregated)

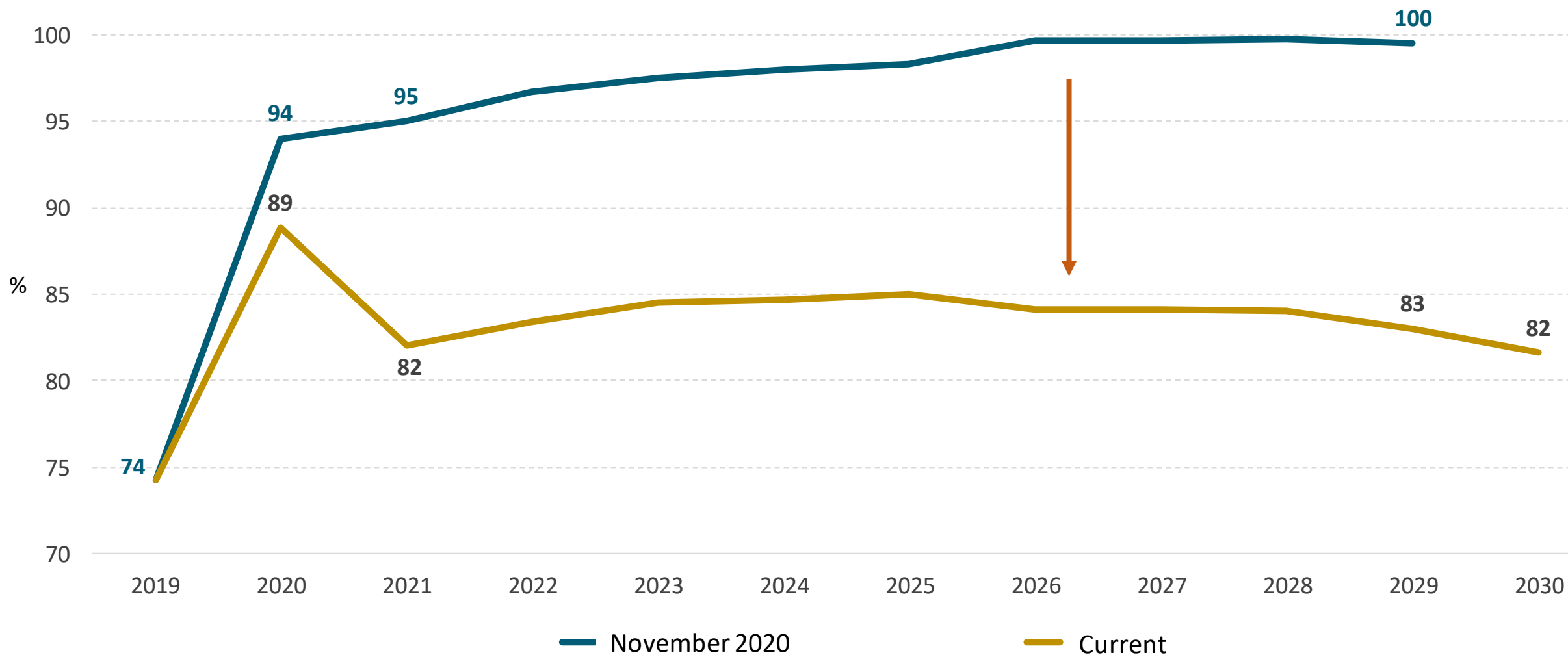


\* Approximate decomposition of the Focus median forecast evolution for GGGD/GDP. Each variable median is considered separately. GDB deflator constructed from Focus CPI forecast. Interest expenditure implicitly calculated from primary and nominal fiscal results forecast. "Others" are residuals (approximations, methodological compatibility, etc.).

# General Government Gross Debt (GGGD)

## Evolution of GGGD/GDP forecast

(median of market analysts forecast – Focus)



 **#Inclusion**

 **#Competitiveness**

 **#Transparency**

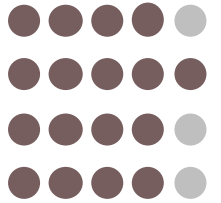
 **#Education**

 **#Sustainability**



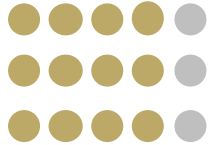
## #Inclusion

Cooperative credit  
Microcredit  
Currency convertibility  
Initiatives for capital market



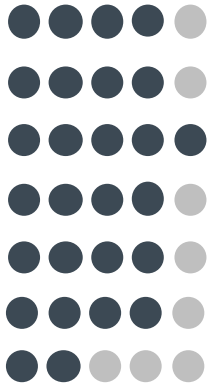
## #Competitiveness

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  
Digital Citizenship



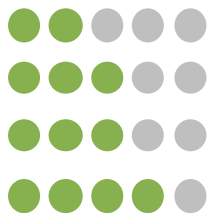
## #Education

Financial education



## #Sustainability

BCB's S&E responsibility  
Regulation  
Supervision  
Partnerships







# *Technology Agenda*



# Pix gains space and becomes popular

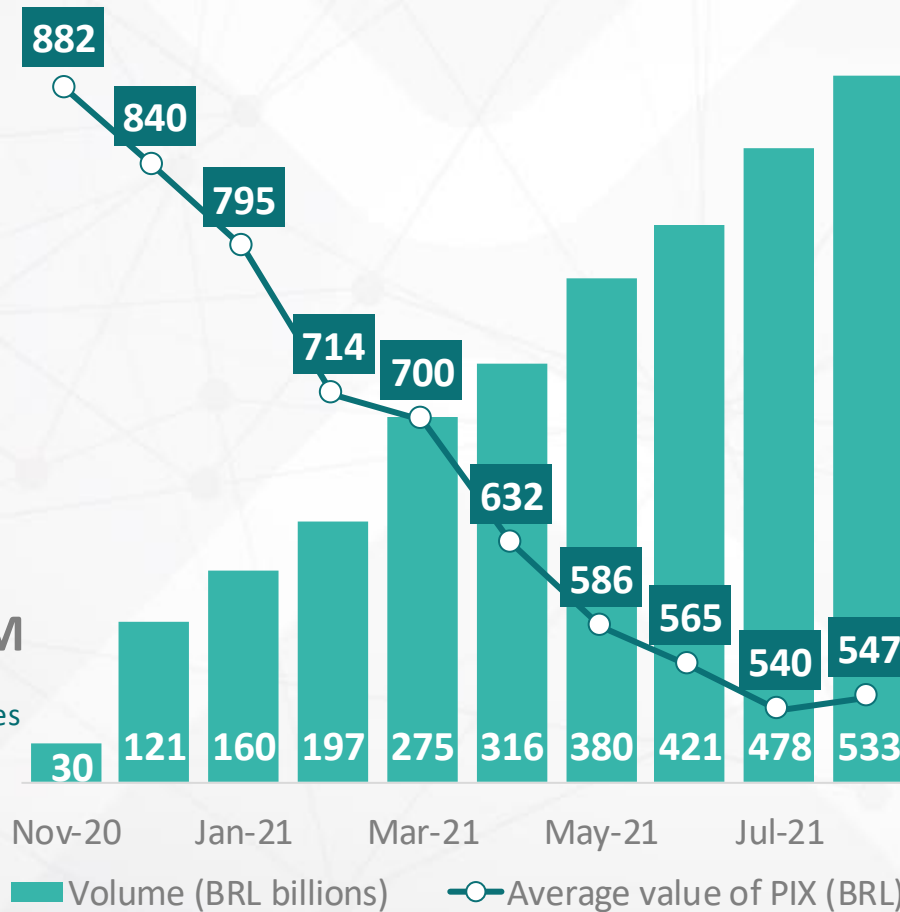
**PIX keys**  
(in millions)

**Total: 313.27 MM**  
in August/2021

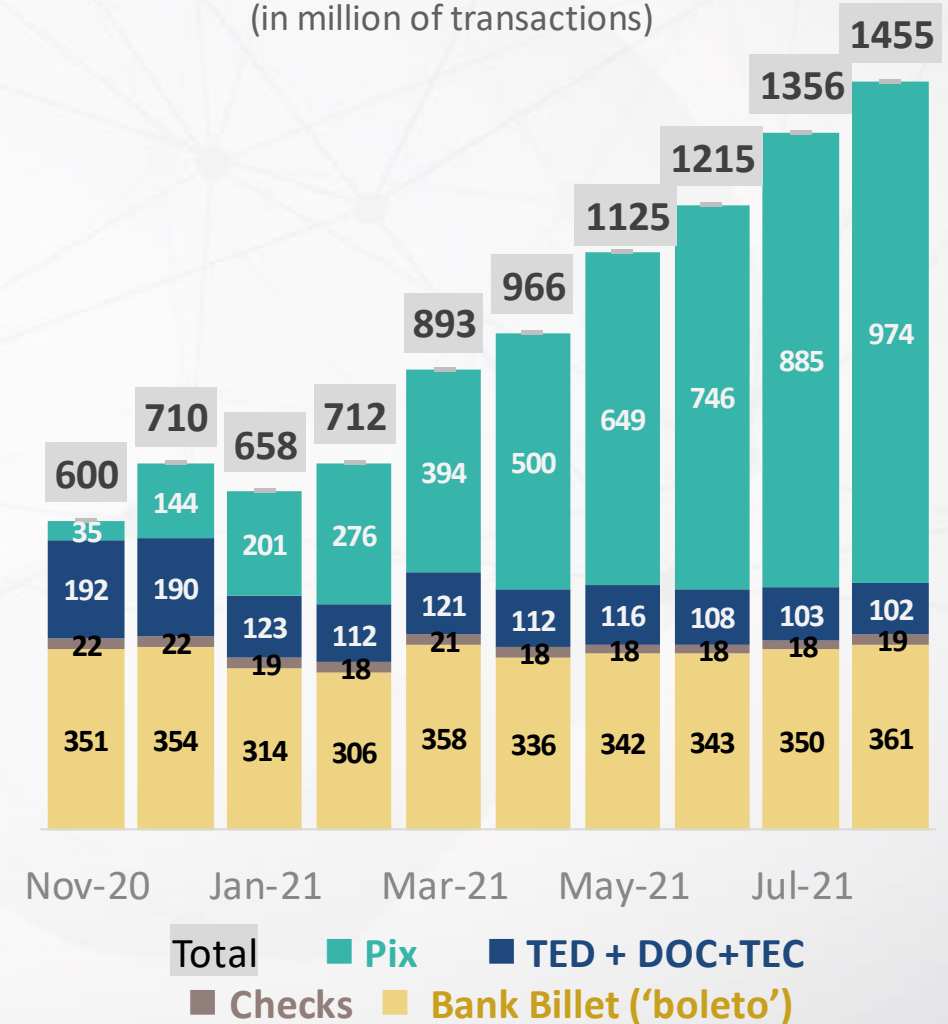
**300.6** million keys  
+  
**12.7** million keys

**99.8 MM** households  
+  
**6.8 MM** legal entities

**Volume of transactions and average value**  
(in BRL billions and in BRL)



**Pix versus other instruments**  
(in million of transactions)



# Pix: Evolution Agenda



\*became mandatory \*\*linked to Open Finance \*\*\*Publication of Operating Rules by BCB, Go Live to be defined

# Open Finance



- Implementation will be gradual

## Goals:

- To promote **competition, efficiency and data safety**
- Proper **balanced conditions** between existing financial institutions and new players

Solutions that can be developed from Open Finance:



**Devices to compare services and fees**



**Apps for financial advice and planning**



**Payment initiation in social medias**



**Credit marketplace**



# Modernization of exchange rate legislation

- **Proposal:**
  - Establishing a modern, compact, and safe legal framework for FX market.
- **Objectives:**
  - Simplify the FX legislation and improve the business environment in Brazil.
  - Ease the connections with payment systems of other countries.



# Regulatory Sandbox

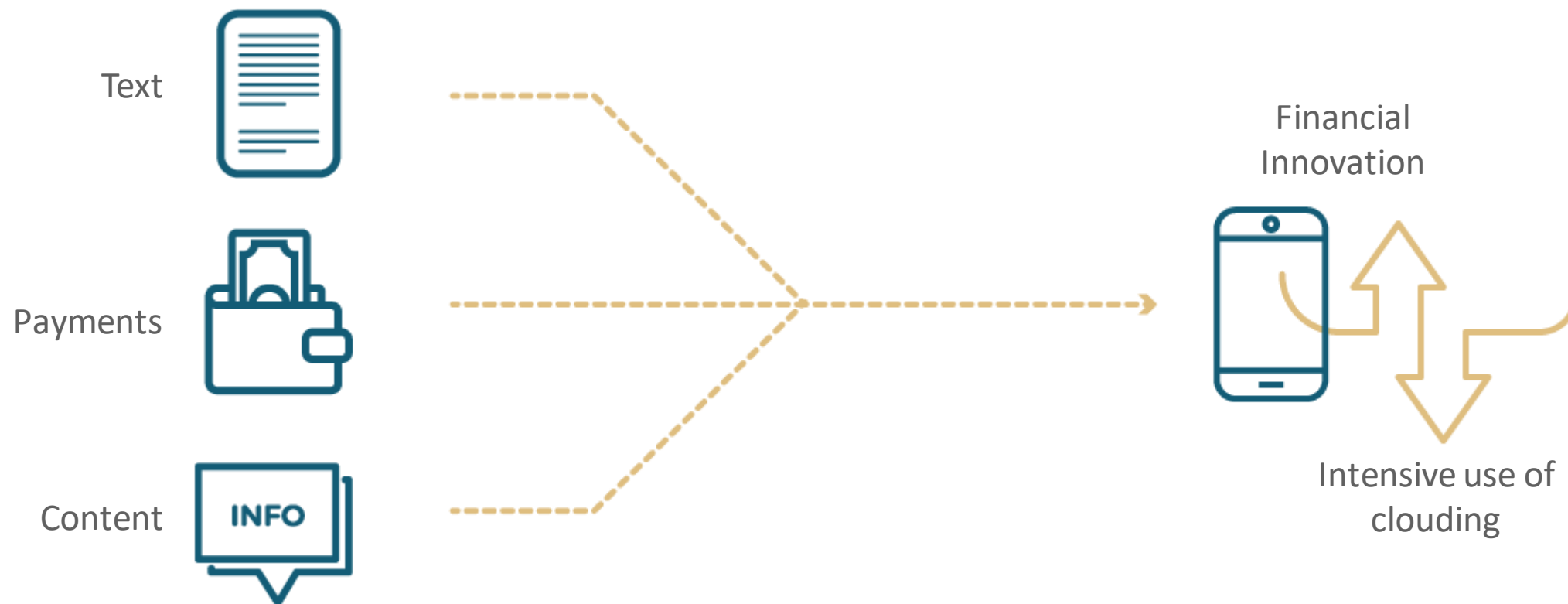
BCB's Regulatory Sandbox starts in 2021 with the Cycle 1.

## TO UNDERSTAND THE REGULATORY SANDBOX



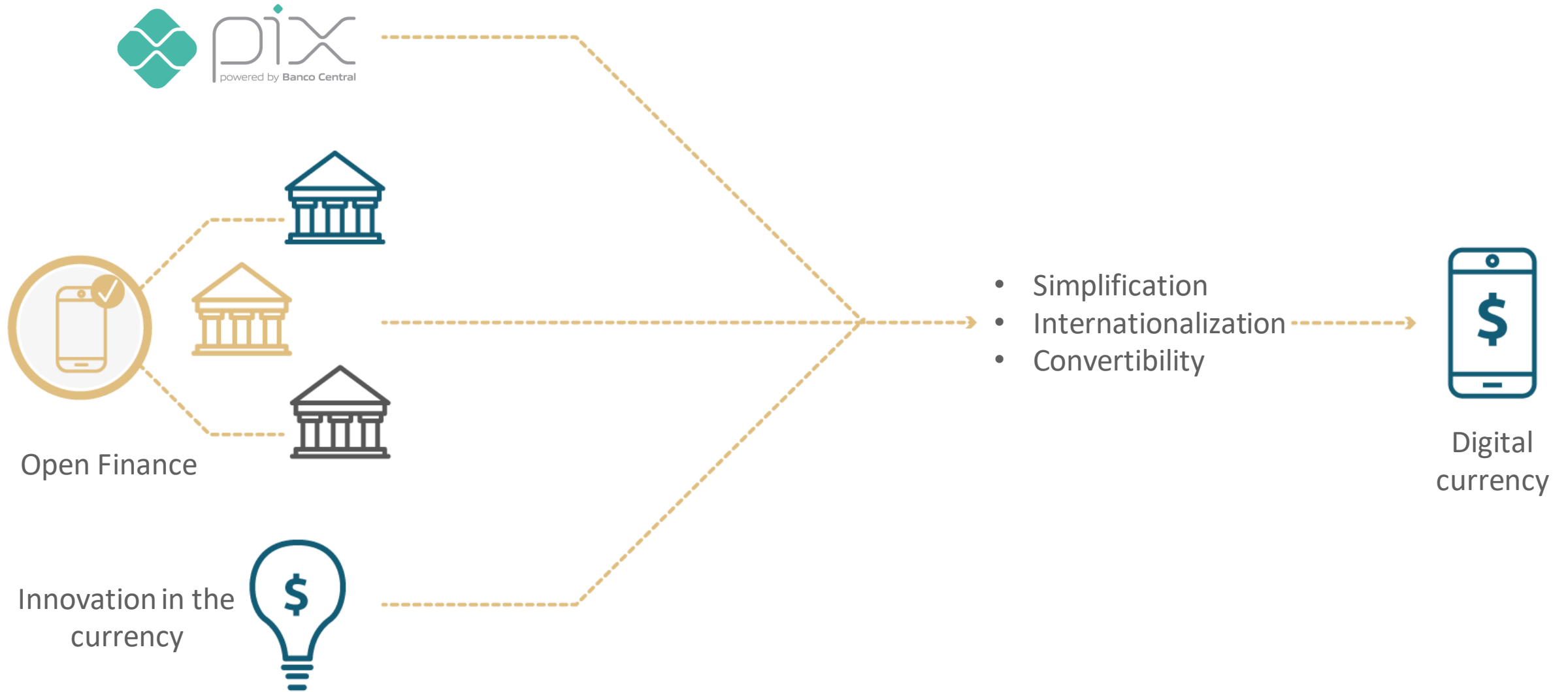
- 1 During the sandbox licensing process, BCB will assess whether the submitted projects comply with the definition of innovative project and whether their development is under the regulatory scope of BCB and CMN, among other criteria.
- 2 Legal persons, notary and registration service providers, public 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.

# Convergence





# Innovation in the financial system



# A CBDC for Brazil: The Digital Real



## Guidelines:

- Extension of the Brazilian real
- Retail payments
- Innovative models development
- Not be interest-bearing
- Guarantee of legal certainty
- Data privacy and security
- Preventing and combating money laundering
- Interoperability and integration
- High cyber security



# BC# 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

October 1st, 2021



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