

# ECB Monetary Policy and challenges

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## **Overview**

## 1. The ECB

- Organization
- Monetary Policy
- 2. Monetary Policy
  - The situation before the pandemic
  - The ECB's monetary policy response to the crisis
  - The outlook today

## 3. Monetary Policy strategy review

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# The ECB

## **Organisation and tasks**

# **The European Central Bank**

# We are an EU institution

We conduct monetary policy for the euro area

We supervise banks in the euro area (+HR and BG)



Around 3.500 staff in 3 buildings in Frankfurt

Employees come from all EU countries

Stable prices and safe banks benefit 340+ million Europeans

# Most EU countries have adopted the euro

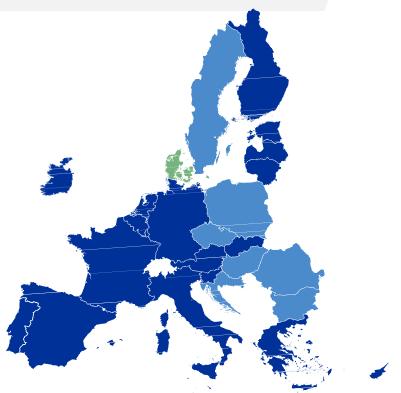
- EU Member States which have adopted the euro
- EU Member States that have not yet adopted the euro
- EU Member States with an exemption



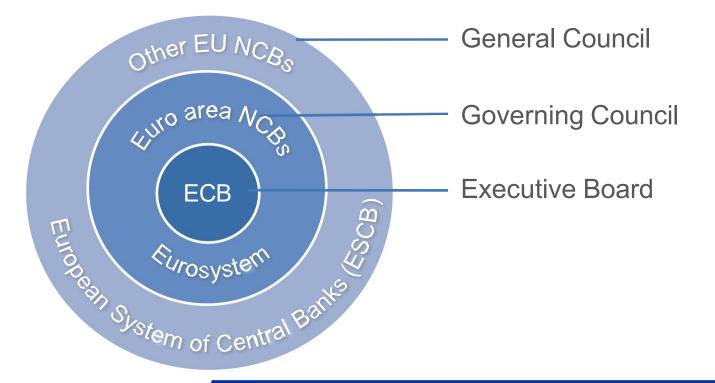
Monetary policy is centralised at supranational level



**Fiscal**, **economic** and **financial policies** are partly formulated at the national level



## The ECB is part of the European System of Central Banks



# The European Council appoints the ECB's Executive Board

Implementation of monetary policy

Preparation of Governing Council meetings

Management of the ECB

Appointed by European Council for 8-year non-renewable term

#### **Executive Board**



Christine Lagarde President of the ECB



Luis de Guindos Vice-President of the ECB



Philip R. Lane



Frank Elderson

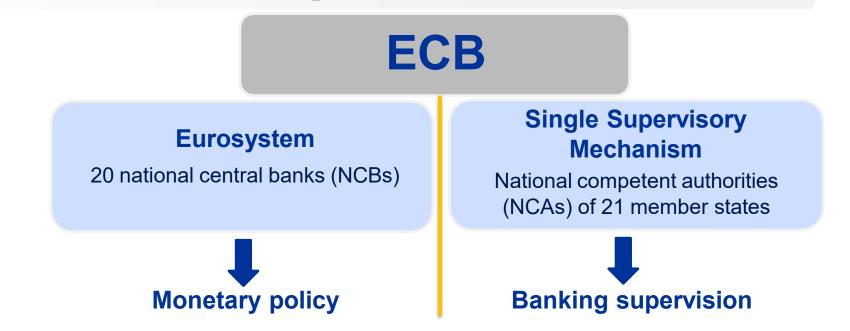




Isabel Schnabel



## **The ECB's monetary and supervisory functions are separated**



Other tasks relate to: payment systems, financial stability, banknotes, cooperation

# The ECB's strategy review in a nutshell: Content of the review





Price stability objective



Analytical framework





Inflation measurement

Climate change



Inflation expectations

Monetary policy communication





Monetary policy instruments

Fiscal and monetary policy in a monetary union

Monetary policy and financial stability



Digitalisation

Productivity, innovation and technological progress



Globalisation

# **Price stability is the ECB's primary objective**

Article 127 of the Treaty on the Functioning of the European Union:

*"1. The primary objective of the ESCB [Eurosystem] shall be to maintain price stability.* 

Without prejudice to the objective of price stability, the ESCB [Eurosystem] shall support the general economic policies in the Union [...]."

The ECB's Governing Council has defined price stability as annual **inflation below, but close to, 2% over the medium term**.

ECB's Strategy has been updated

See next slide

# The ECB's strategy review in a nutshell: Outcome of the review



The new monetary policy strategy of the European Central Bank (ECB) was published on 8 July 2021. While the mandate is conferred upon the ECB by the Treaties, the ECB has to devise its monetary policy strategy. This strategy sets out how to achieve the primary objective of maintaining price stability in the euro area, referring to an appropriate set of monetary policy instruments, indicators and intermediate targets, as well as how to take into account other considerations without prejudice to price stability. A monetary policy strategy serves two main purposes: first, it provides policymakers with a coherent analytical framework that maps actual or expected economic developments into policy decisions; second, it serves as a vehicle for communicating with the public. The ECB's monetary policy strategy was last reviewed in 2003 and the changes that have since occurred to the economic and financial backdrop as well as to the predominant policy challenges warranted an update. This overview details the rationale and thinking behind the strategy and its main elements.

#### **1** Introduction

- 2 The economic backdrop and the past inflation narrative
- 3 The new ECB monetary policy strategy
- 4 The ECB's integrated analytical framework
- 5 The communication of the ECB's monetary policy decisions 6 A regular review cycle

**Core elements** of the new strategy:

- Updated price stability definition (symmetric 2%-target)
- Roadmap to update HICP
- Take further relevant considerations within the ECB's price stability mandate into account, including climate change considerations.

## The ECB's strategy review in a nutshell: *Outcome of the review*

### Aim:

- monetary policy strategy → fit for purpose
   Content:
- All aspects related to price stability mandate
- One of them: measurement of inflation (<u>Occasional Paper</u>)
   → review of HICP including Owner-Occupied Housing
   Price Index (OOHPI)

### Stakeholders:

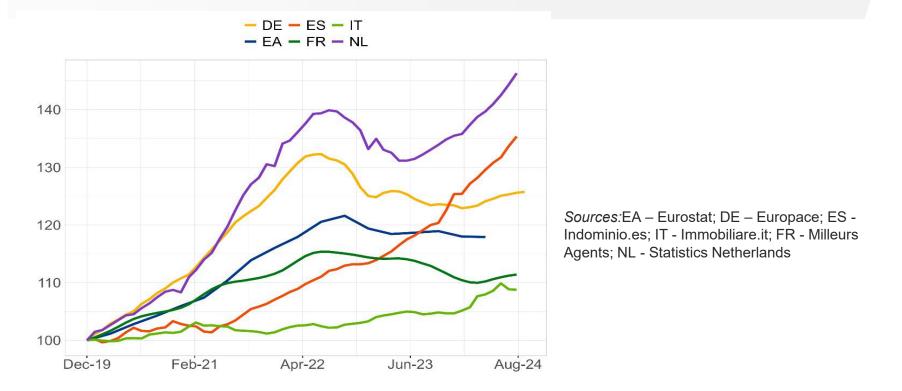
 Governing Council = ECB Board Members + Governors of National Central Banks

### Main messages on Owner-Occupied Housing

- Inclusion of OOH in HICP: most pressing in inflation measurement
- Importance attached by citizens ("ECB Listens")
- GovC welcomes good progress made by European Statistical System
- Steps:
  - (i) Quarterly HICP + OOHPI: experimental, by 2023
  - (ii) Amending the legal basis
  - (iii) HICP + monthly & timely OOHPI: important target
- Investment (asset component) vs. consumption: requires further research

## Housing prices:

Euro area (EA) House Price Index and national data from various timely sources, annual percentage change



# Price stability supports income and employment



### How? By contributing to:

Recognizing changes in relative prices

Avoiding "inflation risk premium"

The productive use of resources

Maintaining social cohesion and stability

Reducing the distortionary impact of tax and social security systems Financial stability

# Single Supervisory Mechanism (SSM)



Key pillar of the banking union. Ensures:

- safety and soundness of the banking system
- financial integration and stability
- consistency

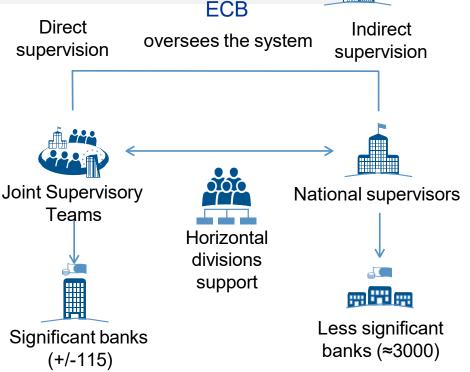
Based on common rulebook

Micro- and macro-prudential powers

Separation from monetary policy

Open to non-EA EU countries (BG, HR joined)

ECB 'call back right' for non-significant banks











# 2.

# **Monetary Policy**

- The situation before the pandemic
- The ECB's monetary policy response to the pandemic crisis
- The situation today

# The situation before the pandemic

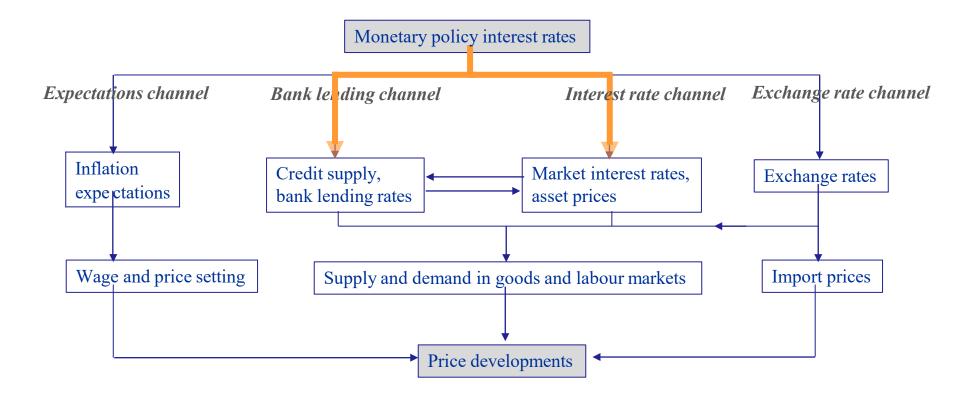


 The ECB tries to steer financial market interest rates by setting the price of <u>short-term</u> credit to commercial banks (official interest rates) and determining the amount of that credit (liquidity) to ultimately influence price developments

 In crisis situations and when official interest rates are no longer effective (zero lower bound), the ECB has to use alternative instruments to influence financial market conditions (nonstandard instruments)

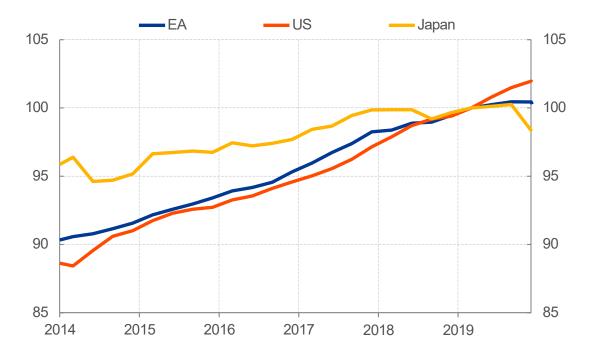


#### Transmission channels of monetary policy decisions



### Economic dynamics weakening in Europe already before the pandemic...

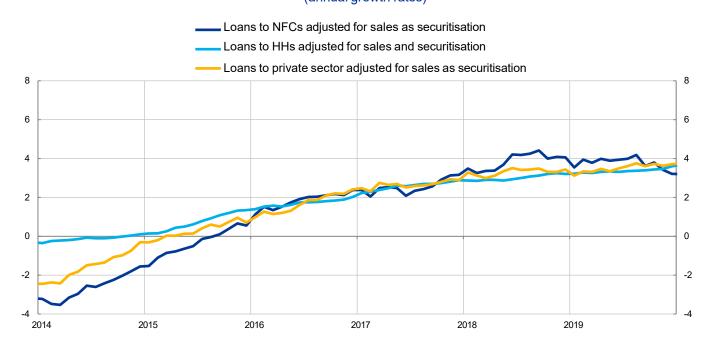
**Real GDP** (index, 2019Q1=100)



Sources: Eurostat, BEA, Cabinet Office, ECB calculations. Latest observation: 2019Q4 for the euro area, the US, and Japan.

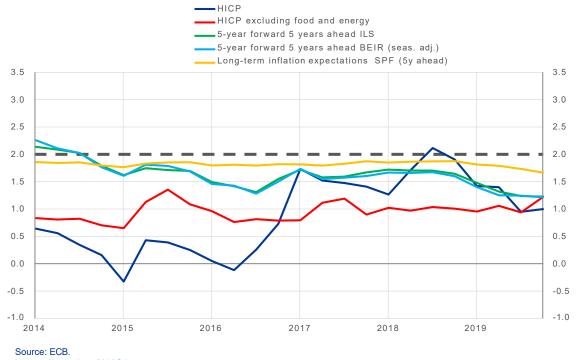
#### ... with credit growth slowing down...

#### MFI loans to the private sector (annual growth rates)



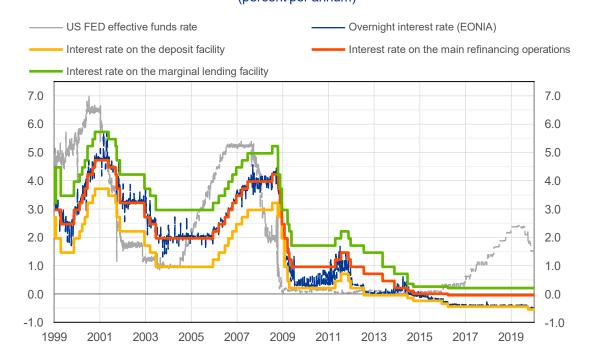
Source: ECB. Notes: Monthly data. "NFCs" stands for non-financial corporations and "HHs" stands for households. Latest observation: December 2019.

## HICP inflation and inflation expectations (percent)



#### With limited space for additional stimulus via policy rates in Europe...

#### Key interest rates (percent per annum)



Source: ECB and Federal Reserve Bank of New York. Latest observation: in the chart December 2019.

- **1** Negative interest rates (on deposit facility)
- 2 Forward guidance
- **3** Asset Purchase Programme (APP)
- 4 Targeted Longer-Term Refinancing Operations (TLTRO)

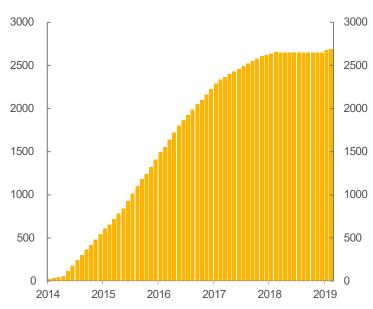
### Asset purchase programme (APP)

#### Cumulative net purchases under the APP

(EUR billion, book value)

APP

#### Federal Reserve System Open Market Account holdings (USD billion, book value)



Source: ECB. Latest observation: December 2019.



#### FED SOMA

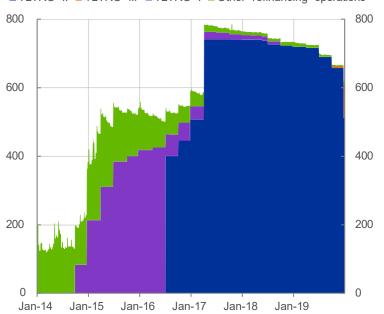
Source: Federal Reserve Bank of New York. Latest observation: December 2019.

### **Targeted long-term refinancing operations (TLTRO)**

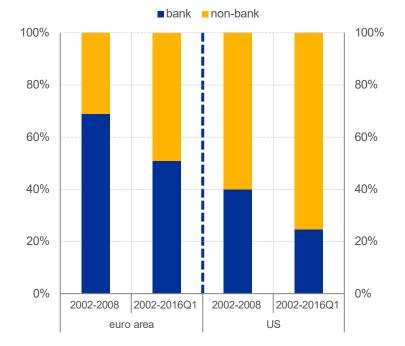
#### Outstanding credit operations (EUR bn)

## Share of bank and non-bank financing in total non-financial corporation financing

(cumulated transactions, percentages)



Source: ECB and ECB calculations. Latest observation: 31 Dec 2014.



Source: ECB, Federal Reserve System. Notes: Calculations are based on cumulated transactions since 2002. Latest observation: Q12016.

#### ■ TLTRO II ■ TLTRO III ■ TLTRO I ■ Other refinancing operations

The ECB's monetary policy response to the pandemic crisis

# **The ECB uses non-standard measures**

### **Rationale of non-standard measures:**

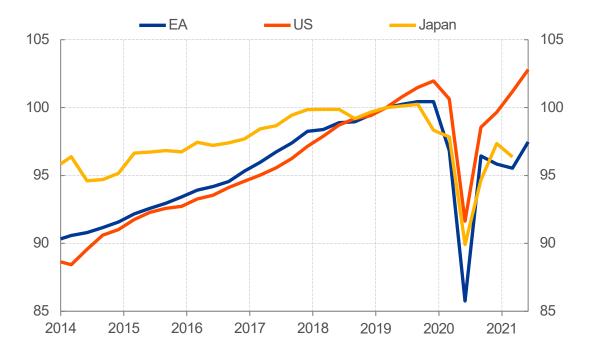
- Providing further monetary accommodation at the effective lower bound ('quantitative easing')
- Ensuring that key interest rates are appropriately transmitted through the financial sector to the real economy ('credit easing')
- Funding reassurance for the banking system ('lender of last resort')

#### **Core elements:**

| Asset purchases<br>(public & private assets)           | Targeted longer-term refinancing operations (TLTROs)              |  |
|--------------------------------------------------------|-------------------------------------------------------------------|--|
| <b>Forward guidance</b><br>(on future monetary policy) | Negative interest rates (for banks' deposits with the Eurosystem) |  |

#### Unprecedented decline in economic activity...

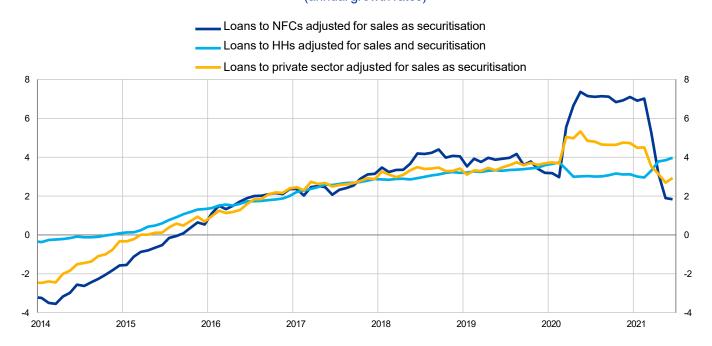
**Real GDP** (index, 2019Q1=100)



Sources: Eurostat, BEA, Cabinet Office, ECB calculations. Latest observation: 2021Q2 for the euro area and the US, 2021Q1 for Japan.

### ... high demand for credit to bridge the lockdown...

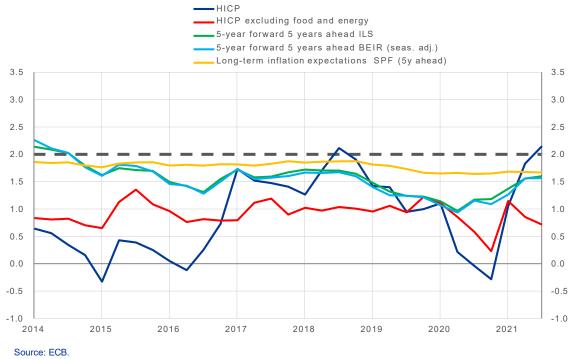
#### MFI loans to the private sector (annual growth rates)



Source: ECB. Notes: Monthly data. "NFCs" stands for non-financial corporations and "HHs" stands for households. Latest observation: June 2021.

#### ... and rapid disinflation

## HICP inflation and inflation expectations (percent)

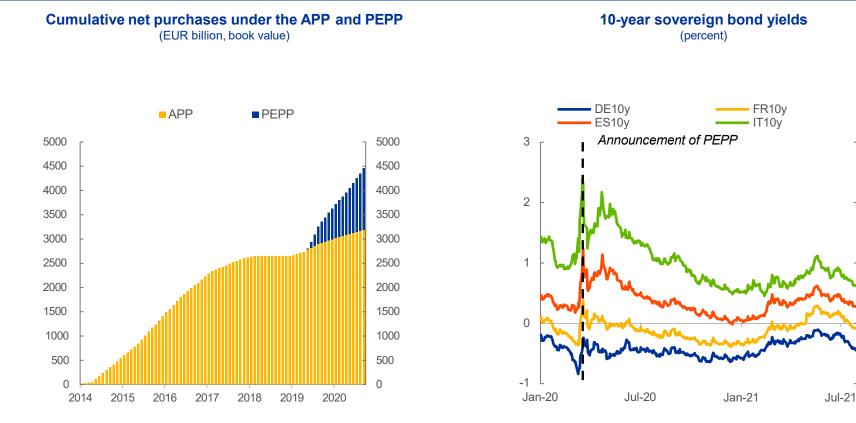


Latest observation: 2021Q3.

### The ECB's measures in response to the pandemic

| Mar. 2020                                                                                                                                                                                                                                                                           | Apr. 2020                                                                                                                                                                                                                       | Jun. 2020                                                                                                                                                                                                               | Dec. 2020                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APP expansion<br>• Additional €120bn until Dec. 2020 while<br>continuing APP monthly purchases of €20bn<br>• NFC paper CSPP-eligible (also under PEPP)                                                                                                                              | Temporary collateral easing measures         TLTRO-III recalibration         • Interest rate set at MRO -50bps from Jun. 2020 to Jun. 2021         • Rate reduction to DFR -50bps if eligible net lending reaches the threshold | <ul> <li>PEPP expansion</li> <li>Increase by €600 to €1,350 billion and extension until at least Jun. 2021</li> <li>Reinvestment of the principal payments from maturing securities purchased under the PEPP</li> </ul> | APP - Continuation of :<br>• €20 billion net monthly purchases<br>• Reinvesting principal payments from<br>maturing securities in full                                                                                                                             |
| PEPP introduction<br>• €750 billion until Dec. 2020<br>• Include all asset categories eligible under<br>APP<br>• Waiver of eligibility requirements                                                                                                                                 |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         | <ul> <li>PEPP expansion</li> <li>Increase by €500 to €1,850 billion</li> <li>Extension by 6 months until at least Mar. 2022</li> <li>Reinvestments at least until end 2023</li> </ul>                                                                              |
|                                                                                                                                                                                                                                                                                     | PELTROs introduced         • 7 operations from May 2020, maturing by Sep. 2021         • Interest rate of -25 bps         • Maturity between JulSep. 2021                                                                       | FG<br>▪ Confirmed                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                    |
| TLTRO-III recalibration<br>Interest rate set at MRO -25bps from June<br>2020 to June 2021<br>Rate reduction to DFR -25bps if eligible net<br>lending                                                                                                                                |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         | <ul> <li>TLTRO-III recalibration</li> <li>Favourable borowing rate -100 bps until<br/>June 2022</li> <li>Three additional operations between June<br/>and Dec. 2021</li> <li>Borrowing entitlement from 50 to 55% of their<br/>strate definitive larger</li> </ul> |
| LTRO-bridge announcement<br>• End in June 2020<br>• Fixed rate tender procedure with full<br>allotment<br>• Interest rate set at DFR                                                                                                                                                |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         | <ul> <li>stock of eligible loans.</li> <li>Recalibrated conditions available only to<br/>banks that achieve a new (higher) lending<br/>target</li> </ul>                                                                                                           |
| <ul> <li>Interest rate set at DFR</li> <li>FG</li> <li>Sep. 2019 formulation confirmed as regards<br/>interest rates, monthly net asset purchases<br/>under the APP, and reinvestment of the<br/>principal payments from maturing securities<br/>purchased under the APP</li> </ul> |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         | <ul> <li>PELTROs expansion</li> <li>Four additional PELTROs in 2021, which<br/>will continue to provide an effective liquidity<br/>backstop</li> </ul>                                                                                                             |
|                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         | Temporary collateral easing measures                                                                                                                                                                                                                               |

#### Pandemic emergency purchase programme offsets transmission risks and eases



Source: ECB. Latest observation: July 2021.

Source: Refinitiv. Latest observation: 30 July 2021.

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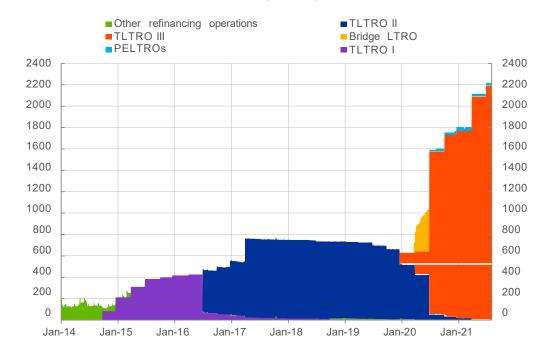
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#### Special interest rates under TLTRO III avoid banks deleveraging

#### Outstanding credit operations (EUR bn)



Source: ECB and ECB calculations. Latest observation: 02 Aug 2021.

## The situation today





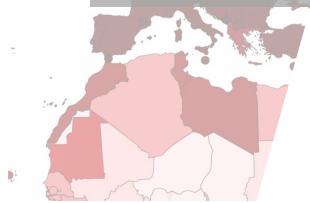


EUROPEAN CENTRAL BANK

## The ECB and the Russian invasion of Ukraine

"The Russian invasion of Ukraine is a watershed for Europe. The Governing Council expresses its full support to the people of Ukraine. We will ensure smooth liquidity conditions and implement the sanctions decided by the European Union and European governments. We will take whatever action is needed to fulfil the ECB's mandate to pursue price stability and to safeguard financial stability."

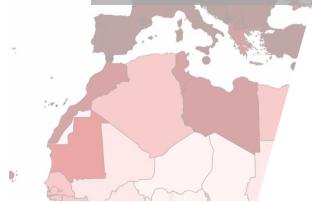




Christine Lagarde Press Conference March 2022

# The ECB and the Russian invasion of Ukraine

"In view of the highly uncertain environment caused by the Russian invasion of Ukraine and the risk of regional spillovers that could adversely affect euro area financial markets, the Governing Council decided to extend the Eurosystem repo facility for central banks (EUREP) until 15 January 2023. [...] Requests from non-euro area central banks for individual euro liquidity lines will be assessed by the Governing Council on a case-by-case basis."



Christine Lagarde Press Conference March 2022

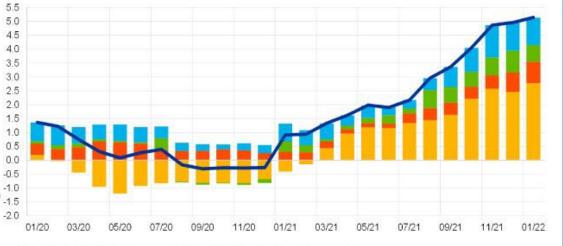


## **Monetary policy outlook**

Energy prices continue to be the main reason for higher inflation.



#### HEADLINE INFLATION AND ITS COMPONENTS

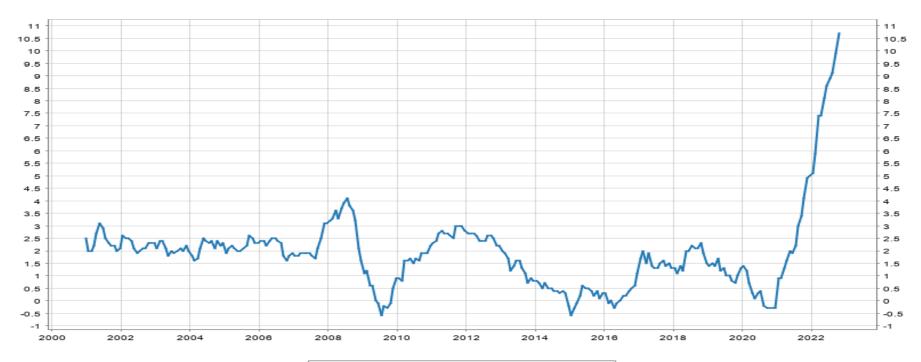


(annual percentage changes; percentage point contributions)

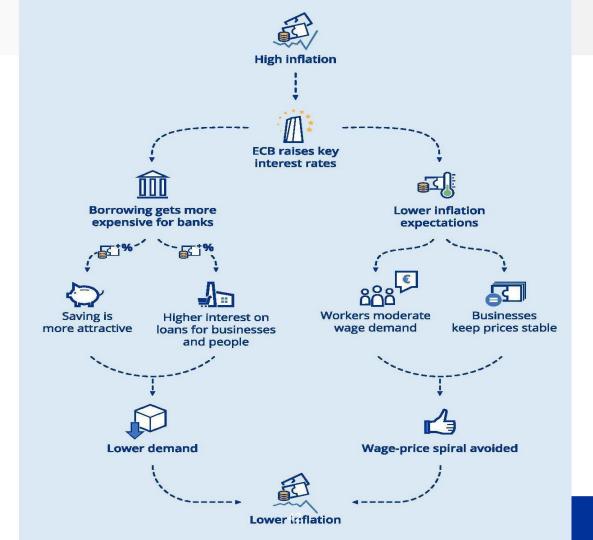
Source: Eurostat and ECB staff calculations

## **Monetary policy outlook**

#### Euro area HICP (annual rate of change)



ICP.M.U2.N.000000.4.ANR (Percentage change )



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### **Monetary policy outlook**

21 July 2022 - ECB raises interest rates for the first time in 11 years



EUROPEAN CENTRAL BANK | EUROSYSTEM

Following its July 21 meeting, the Governing Council of the ECB has decided to raise its three key interest rates by 50 basis points. This is the first time that the ECB has raised interest rates since 2011, and comes in response to a period of surging inflation above the 2% target.

## Monetary policy outlook – further rates hikes and inflation under control

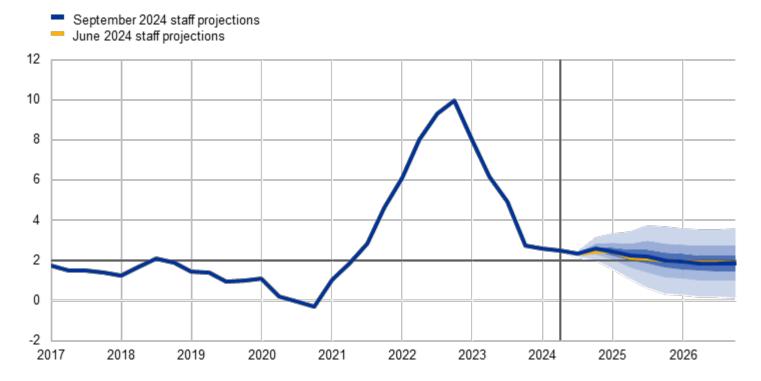


EUROPEAN CENTRAL BANK | EUROSYSTEM

EUROPEAN CENTRAL BANK | EUROSYSTEM

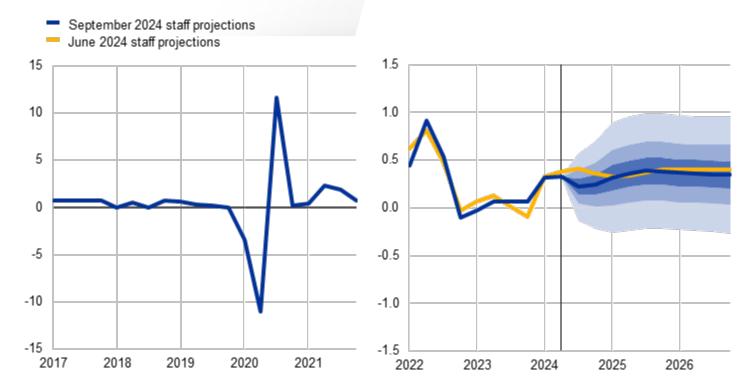
#### **Euro area HICP inflation**

#### (annual percentage changes)



#### Euro area real GDP growth

(quarter-on-quarter percentage changes, seasonally and working day-adjusted quarterly data)



## What is happening in our economy?



- The economy is doing worse than expected
- People are saving more of their money instead of spending it
- Inflation is the lowest it has been in years
- Many people are in jobs
- Firms are demanding more loans

## **March 2024**

### Targeted Long-Term Refinancing Operations (TLTRO)

- Introduced a new round of TLTROs with favorable terms.
- Objective: Encourage bank lending to businesses and households.

#### June 2024

• Lowered rates by 0.50%.

#### September 2024 •Forward Guidance Adjustment

- Lowered rates by 0.50%
- Signal: Continued accommodative stance to support the economy.

### **Monetary policy outlook**



EUROPEAN CENTRAL BANK | EUROSYSTEM

The monetary policy measures will take some time to be effective.

## **ECB Key Interest Rates**



The Governing Council is determined to ensure that inflation returns to its 2% medium-term target in a timely manner.



## 3. Monetary Policy strategy review

## **Overview of the ECB Strategy Review**

Last strategy review 2003

Duration 18 months

January 2020 to July 2021



**14** separate Workstreams

12 seminars of the ECB Governing Council



**18** "ECB listens" events

across the euro area

**4000** online contributions from citizens

#### The ECB's strategy review

- Launched in January 2020, first results announced in July 2021.
- Why a review of the strategy now?
  - Economy has changed fundamentally since 2003 review.
    - "Smartphones were not around!"
    - Declining trend growth and lower natural rate of interest.
    - Climate change, digitalisation, (de)-globalisation, and other transformations impacting inflation dynamics & functioning of the economy.

#### - Reduced scope for conventional MP instruments.

#### - Changing financial structures.

• Affecting the way monetary policy is transmitted through economy

#### - Enhance public trust in the ECB.

- Reaching out to a wide set of stakeholders.
- Reviewing the ECB monetary policy communication.

#### Identify directions for future research<sub>4</sub>.

# Making the ECB's monetary policy fit for the future

STRATEGY **REVIEW** 

| <b>Climate change</b><br>Examines the risks posed by climate change and<br>how these risks feed into the monetary policy<br>framework.                                                            | <b>Digitalisation</b><br>Studies the implications of digitalisation for the<br>functioning of the economy and the conduct of<br>monetary policy.                                 | <b>Eurosystem modelling</b><br>Assesses knowledge gaps in the main models<br>used for monetary policy decision-making.                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fiscal & monetary policy in a<br>monetary union<br>Takes stock of the fiscal policy landscape in the<br>euro area and assesses the implications for<br>monetary policy.                           | <b>Globalisation</b><br>Assesses the impact of globalisation on the<br>transmission of monetary policy decisions to the<br>economy and inflation.                                | <b>Inflation expectations</b><br>Analyses how inflation expectations are formed<br>and deepens the understanding of their main<br>drivers.                                          |
| <b>Inflation measurement</b><br>Analyses the most accurate method of<br>measuring inflation, and assesses potential<br>measurement issues.                                                        | Macropru, mon.pol. & financial<br>stability<br>Contributes to the assessment of the interaction<br>between macroprudential policies, financial<br>stability and monetary policy. | <b>Monetary policy communication</b><br>Assesses the ECB's communication strategy in<br>relation to monetary policy decisions and the<br>general public's understanding of the ECB. |
| <b>Non-bank fin. intermediation</b><br>Examines how the changing structure of the<br>financial sector, in particular the growing role of<br>non-banks, affects the conduct of monetary<br>policy. | <b>Price stability objective</b><br>Provides analysis on the ECB's numerical<br>formulation of price stability and alternative<br>approaches to achieving price stability.       | <b>Productivity, innov &amp; techn. progr.</b><br>Assesses developments in productivity and technology, and analyses the implications of these developments for monetary policy.    |

ECB-UNRESTRICTED

- The 2% inflation target provides a **clear anchor for inflation expectations**.
- Harmonised Index of Consumer Prices (HICP) remains the appropriate price measure for assessing price stability.
- However, GC recognises that **costs related to owner-occupied housing** would capture the inflation rate that is relevant for households (a multi-year project with Eurostat).
- An **inflation buffer above 0%** provides policy with space for interest rate cuts in the event of adverse developments and a safety margin against the risk of deflation.
- We have seen a trend decline in equilibrium real interest rates that reduces room of manoeuvre.
- In a low inflation environment, this implies that the effective lower bound (ELB) on nominal interest rates will more frequently constrain monetary policy.

## ECB's price stability objective has evolved

#### **Governing Council in October 1998:**

 "Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term."

#### **Clarification in 2003**

 The Governing Council (GC) aims to maintain inflation rates at levels below, but close to, 2% over the medium term.

#### Strategy Review in 2020-21

- The GC aims to maintain inflation rates at **2% over the medium term**.
- This target is symmetric: both negative and positive deviations are equally undesirable.
- See press release at:

https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708~dc78cc4b0d.en.html

- Forceful monetary policy measures are needed when economy is close to ELB to avoid low inflation expectations becoming entrenched.
- GC will employ forward guidance, asset purchases and longer-term refinancing operations, as appropriate, plus the standard MP measures.
- Monetary policy decisions are based on an **integrated assessment** by means of:
  - economic analysis focussing on real and nominal economic developments; and
  - **monetary and financial analysis**, focussing on the monetary transmission mechanism and possible risks to medium-term price stability from financial imbalances and monetary factors.
- As climate change has also implications for price stability, the GC has also committed to an ambitious climate-related action plan. See press release at: <u>https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708\_1~f104919225.en.html</u>
- Monetary policy decisions will be communicated through Monetary Policy Statement, at Press Conference, the Economic Bulletin and the monetary policy accounts.

## **Outcome of the Review – key points**

- New symmetric 2% inflation target
- Inclusion of owner-occupied housing in inflation measurement
- Unconventional monetary policy
   instruments become conventional
- New analytical framework
- Action plan on climate change
- Modernised communication



Thank you

www.ecb.europa.eu

## Main decision-making body is the ECB's Governing Council

#### **Governing Council**

- Six members of the Executive Board, plus the • governors of the national central banks of the 20 euro area countries
- main decision-making body of the ECB ٠

#### **Executive Board**



**Christine Lagarde** President



Philip Lane



Luis de Guindos Jurado Vice-President



Frank Elderson



**Piero Cipollone** 

Isabel Schnabel



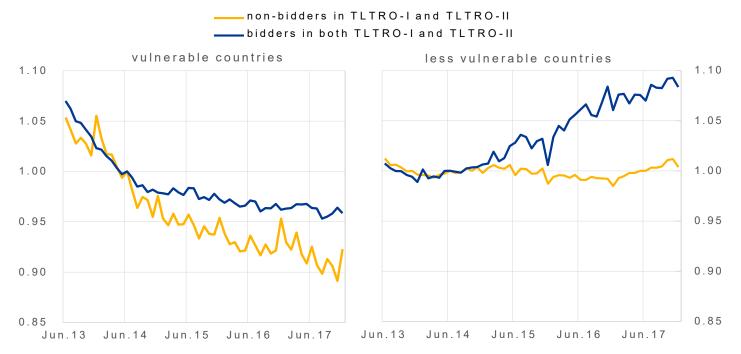




#### **TLTROs reinforce incentives for banks to lend on borrowed funds**

Lending to NFCs by TLTRO-bidders and non-bidders

(index=1 in June 2014)



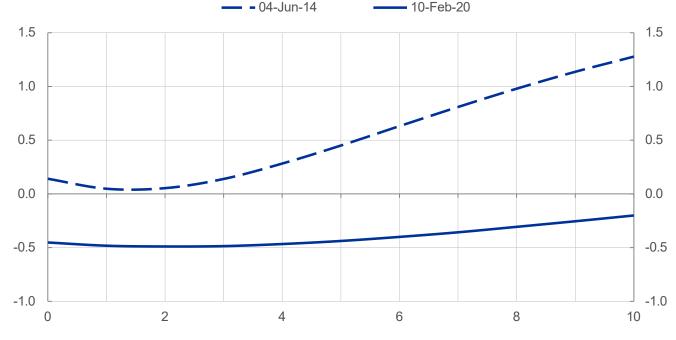
#### Source: ECB.

Notes: Notional stock of loans to non-financial corporations. It is constructed by adding the net flows of loans to NFCs to the stock of NFC loans as of June 2013. Depicted is the aggregate evolution for the group of banks that borrowed from both the TLTRO-I and II and the group of banks which did not access any of the two. Based on sample of euro area MFI for which individual balance sheet information is available. Vulnerable countries are Spain, Italy, Greece, Cyprus, Portugal and Slovenia. Less vulnerable countries are the remaining euro area countries. The series are not seasonally adjusted. Latest observation is December 2017.

#### APP compresses term premia over the whole range of the yield curve

#### **OIS term structure**

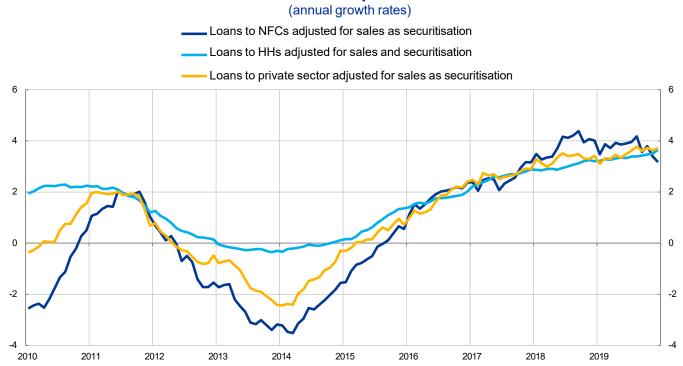
(percentages per annum)



Sources: Reuters, ECB. Last observation: 10 Feb 2020.

#### ... and restored credit growth

#### MFI loans to the private sector

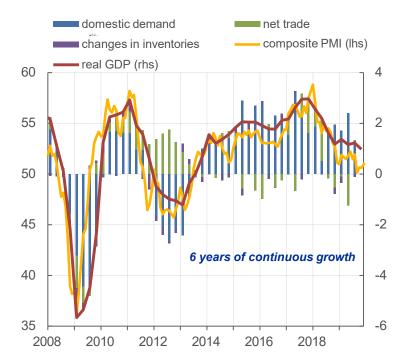


Source: ECB. Notes: Monthly data. "NFCs" stands for non-financial corporations and "HHs" stands for households. Latest observation: December 2019.

#### Significant economic improvements

#### Real GDP growth, main components and PMI

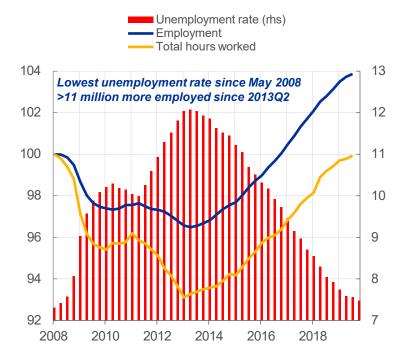
(lhs: balances; rhs: y-on-y growth and pp contributions)



Sources: Eurostat, Markit, and ECB calculations. Latest observations: 2019Q4 for real GDP, 2019Q3for GDP components and Jan 2020 for PMI.

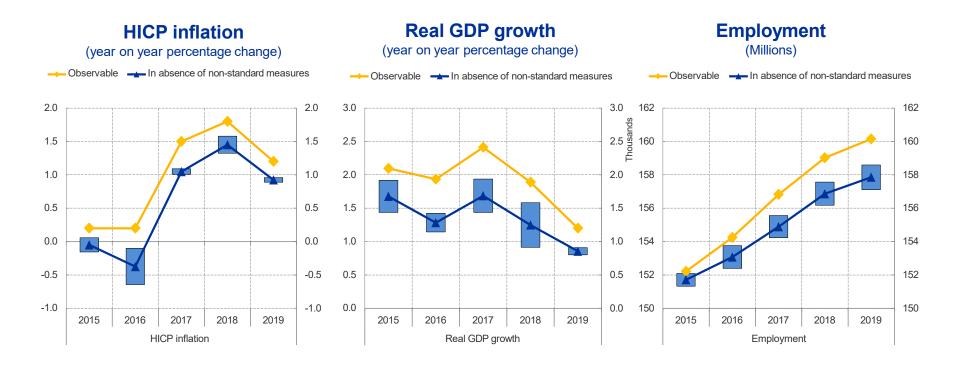
#### Labour market indicators

(Unemployment: percent; employment and total hours worked: index, 2008Q1=100)



#### Source: Eurostat, National accounts.

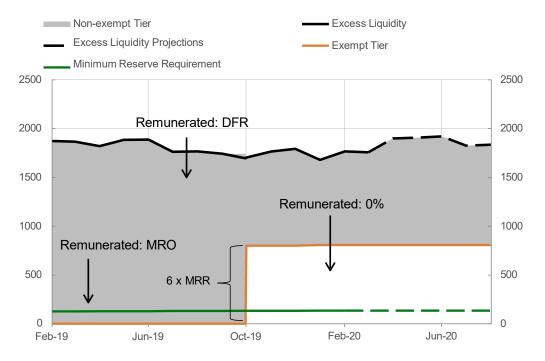
Latest observations: 2019Q3 for total hours worked and employment, 2019Q4 for unemployment rate.



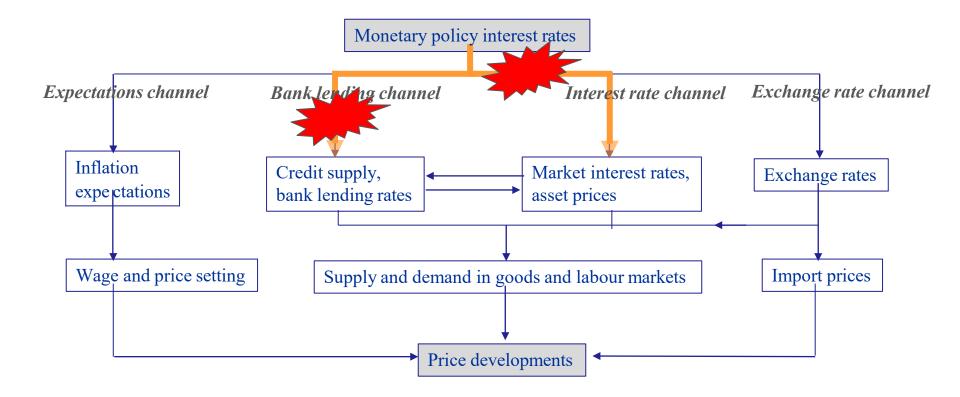
#### Sources ECB calculations.

Notes: The boxplot refers to a range of assessments, comprising the Eurosystem staff assessment included in the (B)MPE projection baseline and the assessment documented in Rostagno et al. (2019). The Eurosystem staff assessment has been carrying out on the basis of various modelling frameworks, comprising the suite of SAPI models and the Eurosystem projection-based tools. SAPI models span from fully structural models to time-series models.

## Excess liquidity and the two-tier system for reserve remuneration (EUR billion)



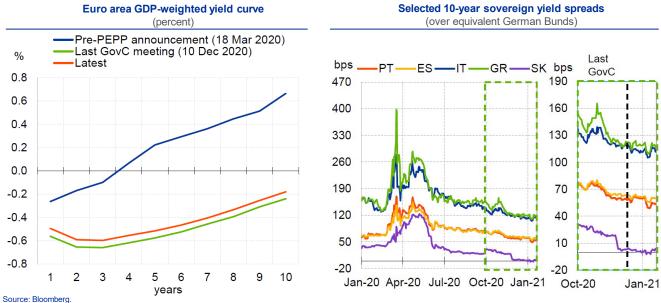
Sources: ECB. Notes: MRR assumed to stay constant after January 2020. The size of the exempt tier is MRR\*6. Latest observations: 31 January 2020.



## **Did the ECB measures help?**

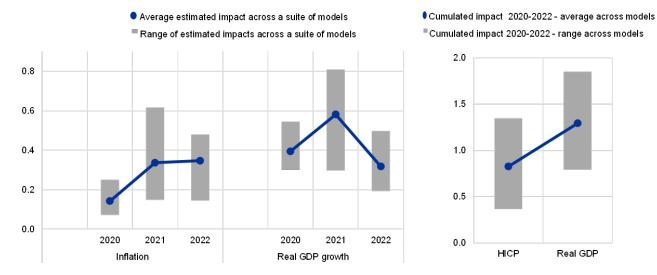


## **Impact of ECB measures (I)**



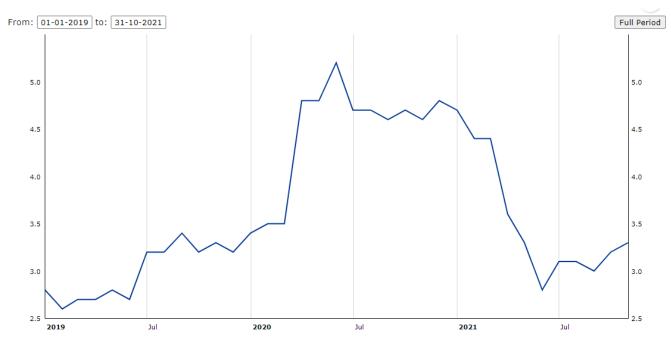
Last observation: 18 January 2021.

## **Impact of ECB measures (II)**



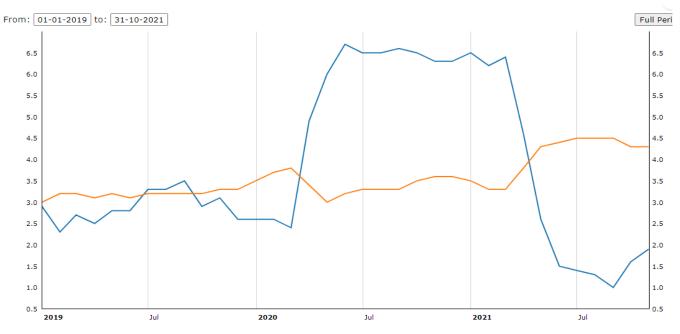
Source: ECB calculations. Notes: The estimated impact via a suite of models refers to the average across a set of models used by the Eurosystem, see Rostagno, M., et al. (2019), "A tale of two decades: the ECB's monetary policy at 20", ECB Working Paper No 2346

## Impact of ECB measures (III): Loans to private sector



Source: ECB Statistical Datawarehouse

## Impact of ECB measures (IV): Loans to households and companies



Non-Financial corporations (S.11)

Households and non-profit institutions serving households (S.14 and S.15)

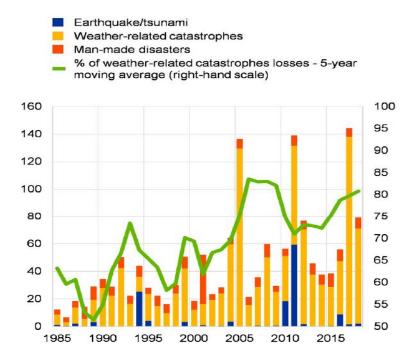
Source: ECB Statistical Datawarehouse

# **Central banks and climate change**

- Greenhouse gas emissions are continuing to rise and without a change in direction, global warming could exceed 4° C by 2100 (IPCC). But many countries are taking actions to curb emissions (or plan to do so) as reflected in the Paris Agreement to combat climate change.
- This may lead to economic and financial disruptions. Climate change creates economic and financial risks (sometimes called physical risks). Yet the steps taken to reduce these risks by cutting emissions may also carry risks (sometimes called transition risks) - and opportunities - through disruptive technical change.
- This leads to many potential areas of interest in climate change for a central bank relating to aspects such as financial stability, banking supervision, economic analysis and monetary policy.
- And the impact of policy and technological responses to climate change may come via the real economy (growth, potential output) and financial conditions, which need to be assessed with a view to arriving at an informed assessment of the medium-term inflation outlook and financial stability risks.

### Global insured catastrophe losses 1985-2018

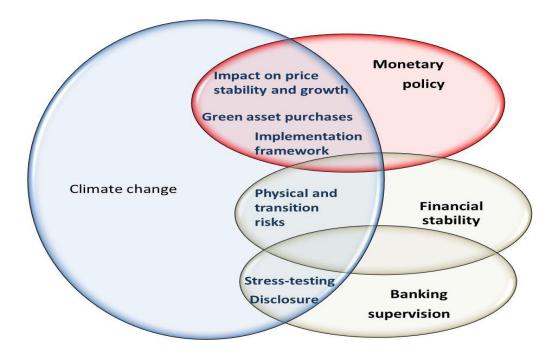
(left scale: USD billions; right scale: percentages)



Sources: ECB Financial Stability Review May 2019, Special Feature on Climate Change and Financial Stability (underlying sources Swiss Re Institute, Munich Re NatCatService and ECB calculations).

### Climate change will impact on the conduct of monetary policy

- Prime responsibility to address climate change lies with governments...
- ... but reflections on whether and how central banks could also play a role have intensified
- Several recent studies have discussed the role that monetary policy can play to support the transition towards a green economy



Source: ECB.

# Reacting to climate change risk

- Protecting the balance sheet against sudden repricing
- Removing carbon biases that are currently embedded in the operational frameworks

# Role to sensitise the public

- Informing and educating the public
- Waking up the financial system to the mispricing of climate risk
- Stranded assets

Proactively supporting the transition to a low carbon economy

- Greening monetary policy operations (Schoenmaker 2019, Monnin 2018)
- Green QE (de Grauwe 2019)
- Green TLTROs

### What are central banks doing? – The NGFS

NGFS





### NGFS members' jurisdictions cover:



**31%** of the global population

Source: United Nations, 2017.

**4** 

GSIIs

45% of global greenhouse gas emissions

Source: Global Carbon Budget, 2017.

Supervision of **2/3** of the global systemically important banks and insurers

Source: Financial Stability Board, 2018.

of the global GDP Source: World Bank, 2017.

GSIBs

www.ecb.europa.eu

### What are central banks doing? – The NGFS

WS1:Supervision of climate and environmental risks

Exchange best practices on integrating climate risk in micro-prudential frameworks WS2:Analysing the macro financial impact of climate change

Develop an analytical framework for assessing climate-related risks under different climate scenarios

### WS3: Scaling up green finance

Take stock of initiatives to scale up green financing; work on green taxonomies, green bonds labeling and prevention of greenwashing.

First comprehensive report published on 17 April 2019

- 1. Integrating climate-related risks into financial stability monitoring and microsupervision
- 2. Integrating sustainability factors into own-portfolio management
- 3. Bridging the data gaps
- 4. Building awareness and intellectual capacity
- 5. Achieving robust and internationally consistent climate disclosure
- 6. Supporting the development of a taxonomy

# Is greening monetary policy appropriate?

| Objections                                                                                                                                                                                    | Counter-arguments by proponents                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monetary policy is supposed to be neutral and not distort the market mechanism.                                                                                                               | ECB has already departed from market neutrality. Asset purchases (e.g. CSPP) already have a "carbon bias".                                                                |
| Climate change mitigation is a policy with large distributional consequences, which can only be taken by politicians                                                                          | Also unconventional monetary policies always have large distributional consequences.                                                                                      |
| Too much power vested in institutions with a narrow definition of accountability and no democratic legitimacy.                                                                                | Central banks already exercised considerable powers despite a rather narrow accountability framework.                                                                     |
| Fiscal policy (carbon pricing) should be the prime tool to address CO2 externalities.                                                                                                         | Political gridlock impedes the implementation of a carbon tax, while central banks are less constrained.                                                                  |
| Tinbergen principle: conflicting objectives should be avoided.<br>One policy tool for each policy objective.                                                                                  | In a second-best world, central bank's action is preferable to no action at all.                                                                                          |
| Engaging in climate policy would drag central banks in<br>"political" territory, potentially paving the way for further steps<br>to support other political goals or undermining independence | Central banks have already stepped in political territory the<br>moment they started unconventional monetary policy. The<br>new CB's normal requires new responsibilities |

## **Roadmap to greening monetary policy**

## Action based on reliable data and best knowledge

- Include climate risks into our collateral framework
- Green our asset purchases

## Knowledge is the driving force

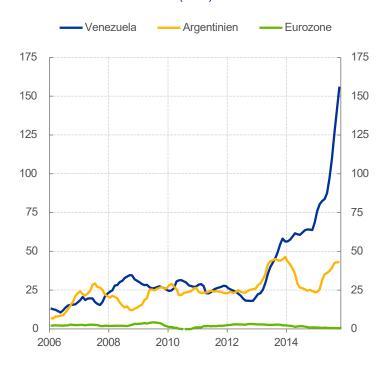
- Check our own exposure to climate risks
- Check firms' and banks' exposures to climate risks
- Make disclosure of climate risks a priority
- Review how credit ratings reflect climate risks

#### Paving the way with reliable data

1.

- Gather data needed for climate change risk analyses
- Adapt our models and make them fit for climate change

# **Miscellaneous**



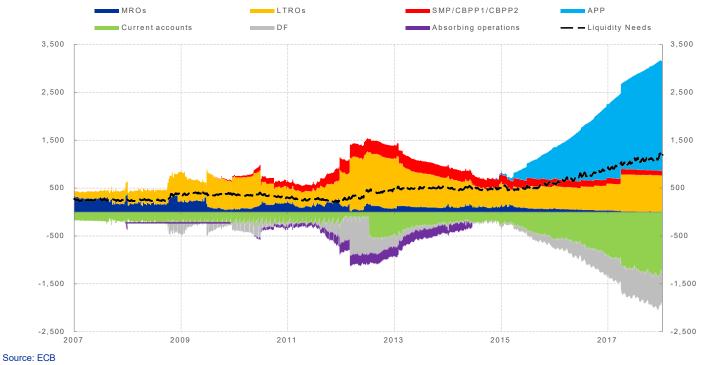
#### Inflation (in %)

### **Benefits of price stability**

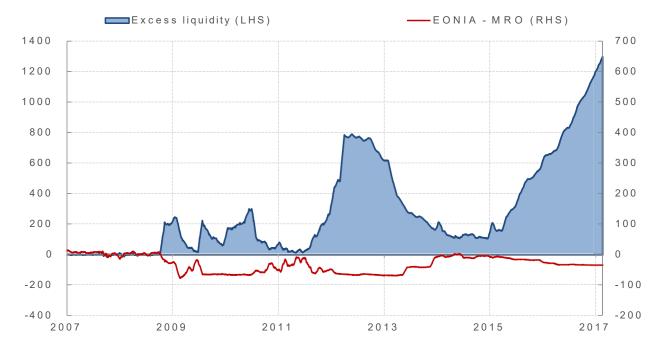
- Transparent prices
- Lower interest rates and inflation risk premia
- No need for unnecessary inflation insurance (efficient allocation of capital and resources)
- Low inflation tax
- No distortions in tax systems
- Supports financial stability

### Liquidity provision and absorption

### Eurosystem Balance Sheet (billion EUR)

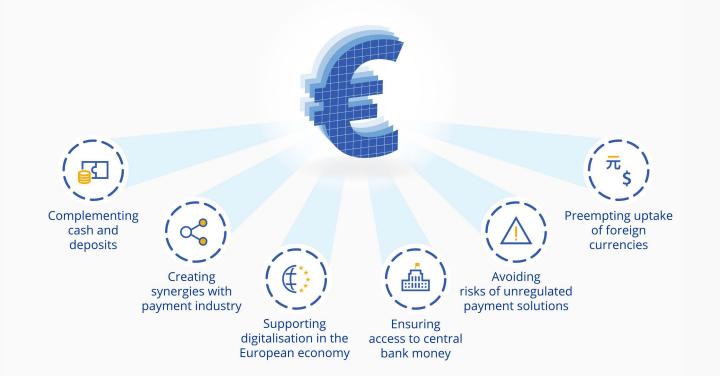


Latest observation: 8 January 2018.



Source: ECB. Notes: Excess liquidity and the EONIA-MRO spread are shown as 30-day moving averages. Latest observation: 16 February 2017.

# A digital euro



# What do we mean by "digital euro"?

Digital euro would be **central bank money** made available **to citizens and firms** in **digital form** for use in **payments** 



**Complementing**, not substituting, cash and wholesale central bank deposits

Synergies with industry

| $\bigcap$ |   |
|-----------|---|
|           | 9 |

Digital euro not necessary so far

"The euro belongs to Europeans and we are its guardian. We should be prepared to issue a **digital euro**, should the need arise."

Christine Lagarde

# When will it be ready?



- Investigation phase from October 2021
- Duration about two years
- Analyse how a digital euro could be designed and distributed
- Decision on whether or not to develop a digital euro after investigation phase