



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Real Estate Finance

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Universidad Carlos III  
Madrid



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# Overview

## 1. The ECB

- Organization
- Monetary Policy
- Financial Stability

## 2. Real Estate

- Residential property
- Commercial property

## 3. Financial Stability + Property Prices

*Any opinions expressed are only the presenter's own and should not be regarded as opinions of the European Central Bank or the Eurosystem.*



# 1.

## The ECB

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### Structure 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

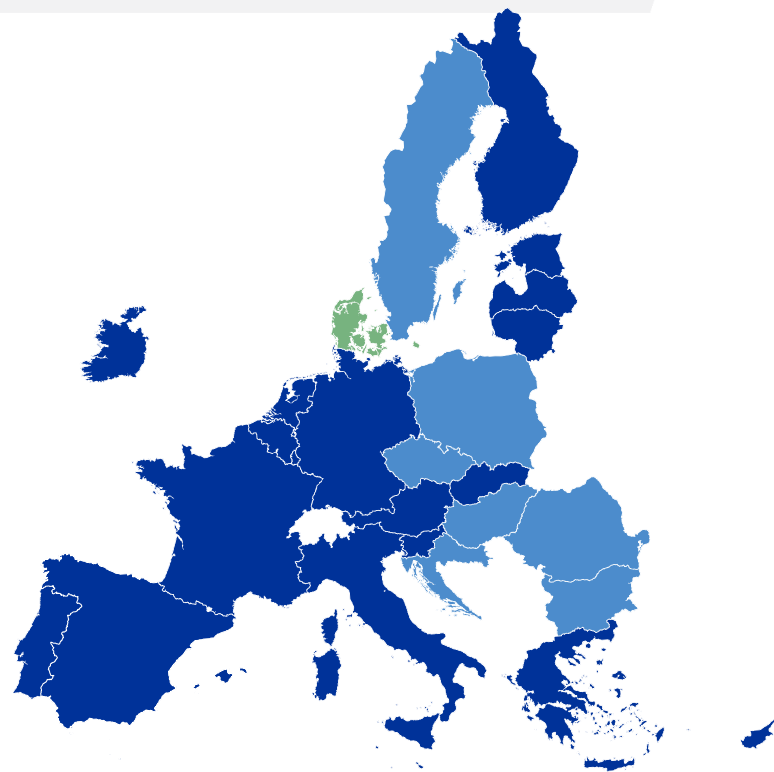
■ EU Member States with an exemption



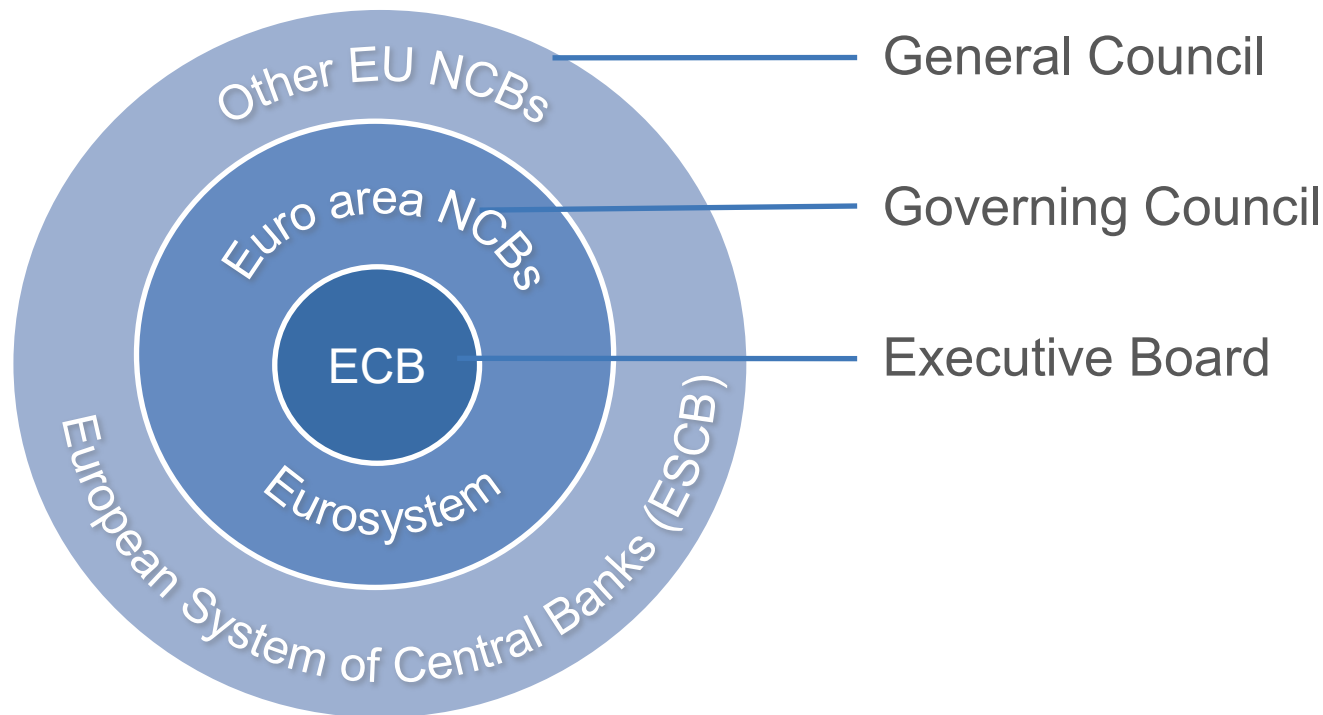
**Monetary policy** is centralised at supranational level



**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



**Christine Lagarde**  
President  
of the ECB

- Chief Services Officer
- DG-Secretariat
- DG-Communications
- ESRB Secretariat
- Directorate Internal Audit
- Counsel to the Executive Board



**Philip Lane**

- DG-Economics
- DG-Monetary Policy



**Isabel Schnabel**

- DG-Market Operations
- DG-Research
- DG-Statistics



**Luis de Guindos  
Jurado**  
Vice-President  
of the ECB

- Macroeprudential Policy and Financial Stability
- Directorate Risk Management



**Fabio Panetta**

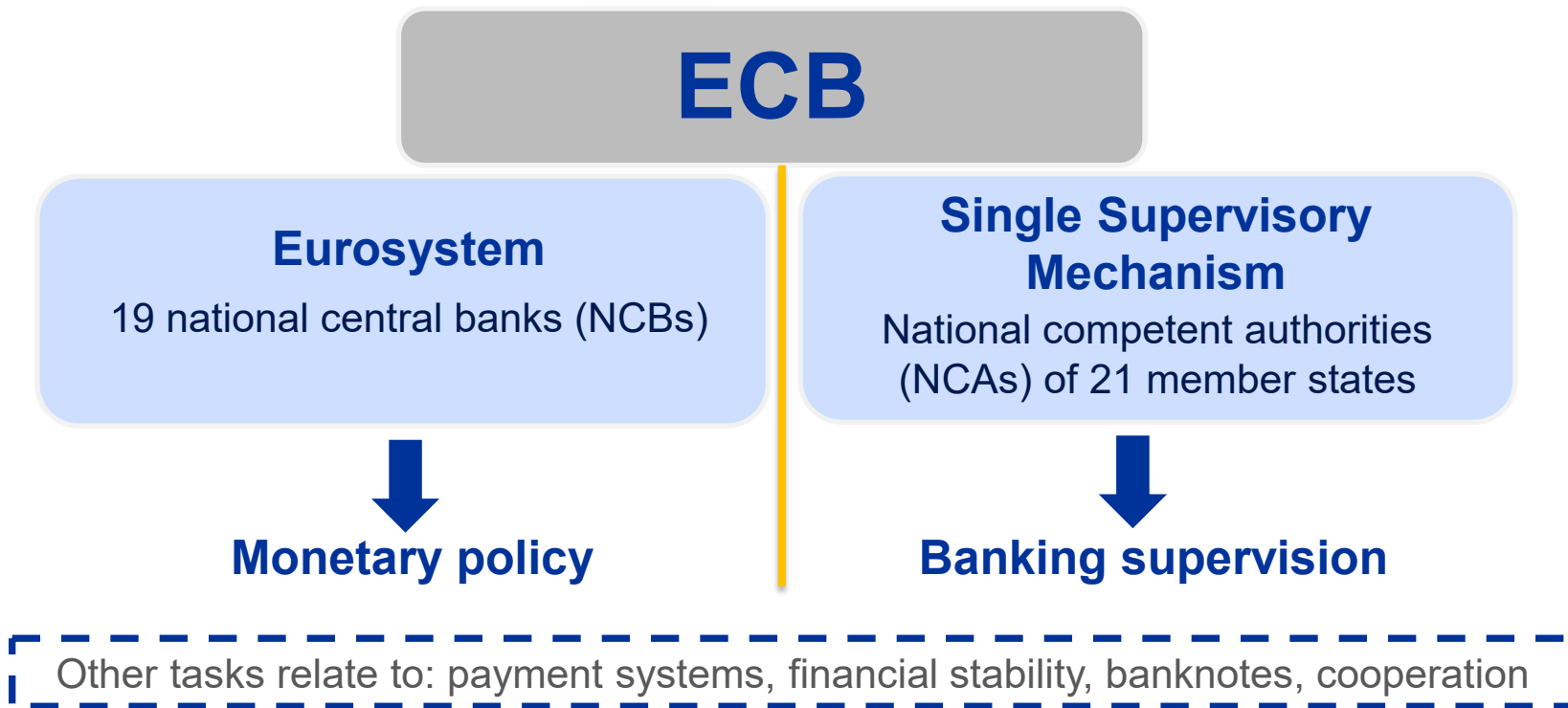
- DG-International and European Relations
- DG-Market Infrastructure and Payments
- Directorate Banknotes
- Division Oversight of Payment Systems



**Frank Elderson**

- DG-Legal Services
- SSM

# The ECB's monetary and supervisory functions are separated





# The ECB's strategy review in a nutshell:

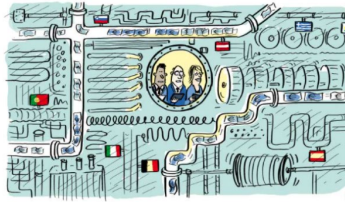
## Content of the review



1 Inflation measurement



2 Price stability objective



3 Analytical framework



4 Monetary policy and financial stability



5 Productivity, innovation and technological progress



6 Climate change



7 Monetary policy communication



8 Monetary policy instruments



9 Digitalisation



10 Globalisation



11 Inflation expectations



12 Shadow banking



13 Fiscal and monetary policy in a monetary union



# 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.**

Breaking News:

ECB's Strategy has  
been updated

See next slide

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



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LANGUAGE: EN

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## An overview of the ECB's monetary policy strategy

Publications 1 Introduction

### 1 Introduction

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.

## 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 ([Occasional Paper](#))  
→ broadening HICP coverage by including **Owner-Occupied Housing Price Index (OOHPI)**

### Stakeholders:

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

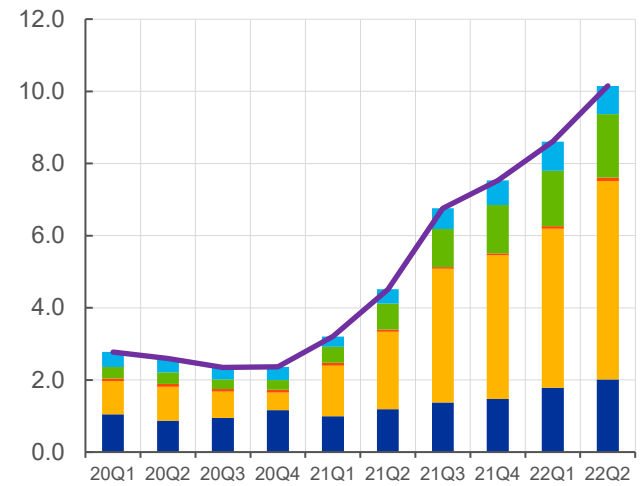
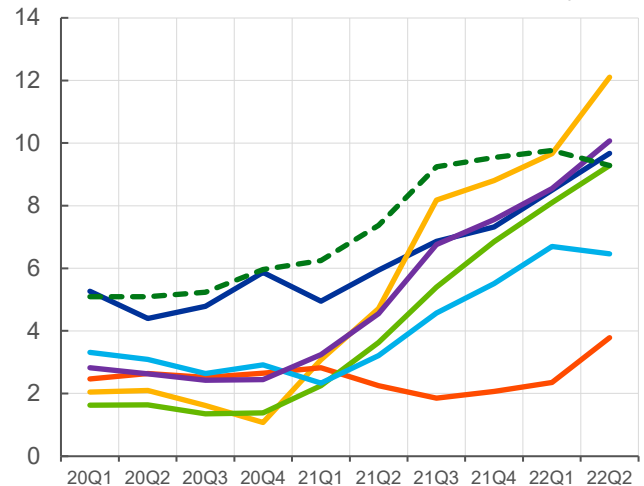
## Main messages on Owner-Occupied Housing

- **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 as considered by Governing Council:**
  - (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

# Residential property and owner-occupied housing prices

## Residential property prices and components of owner-occupied housing price index (OOHPI) (annual percentage change and pp contributions)

- Purchases of new dwellings (21%)
- Self-build dwellings and major renovations (44%)
- Insurance connected with dwellings (3%)
- Major repairs and maintenance (19%)
- Other services related to the acquisition of dwellings (13%)
- Owner-occupied housing price index (OOHPI)
- - - Residential property prices



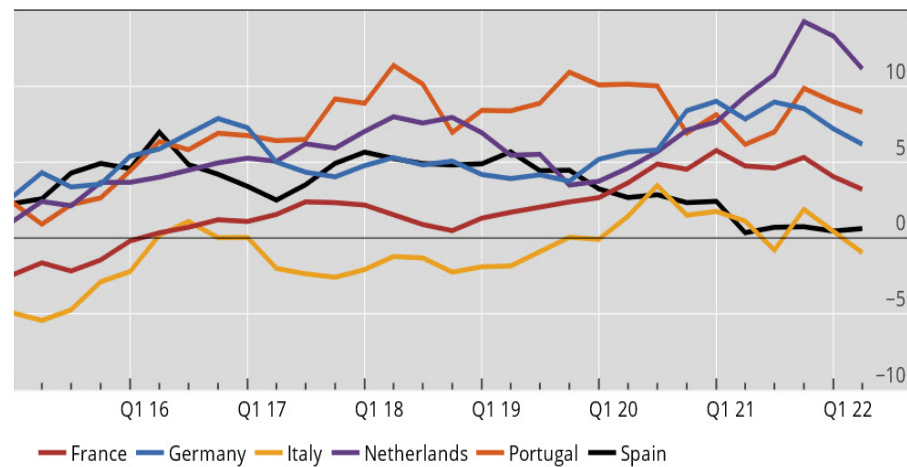
Sources: Eurostat and ECB staff calculations.  
Latest observations: 2022 Q2.

# Residential property prices

## Real residential property prices in selected euro area member states<sup>1</sup>

Year-on-year changes, in per cent

Graph 5



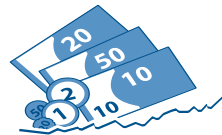
<sup>1</sup> Based on quarterly averages; CPI-deflated.

Source: BIS selected residential property price series.

© Bank for International Settlements



# Price stability supports income and employment



## How? By contributing to:

Recognizing changes in relative prices

Avoiding “inflation risk premium”

The productive use of resources

Reducing the distortionary impact of tax and social security systems

Maintaining social cohesion and stability

Financial stability

# Single Supervisory Mechanism (SSM)



ECB

Key pillar of the banking union. Ensures:

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

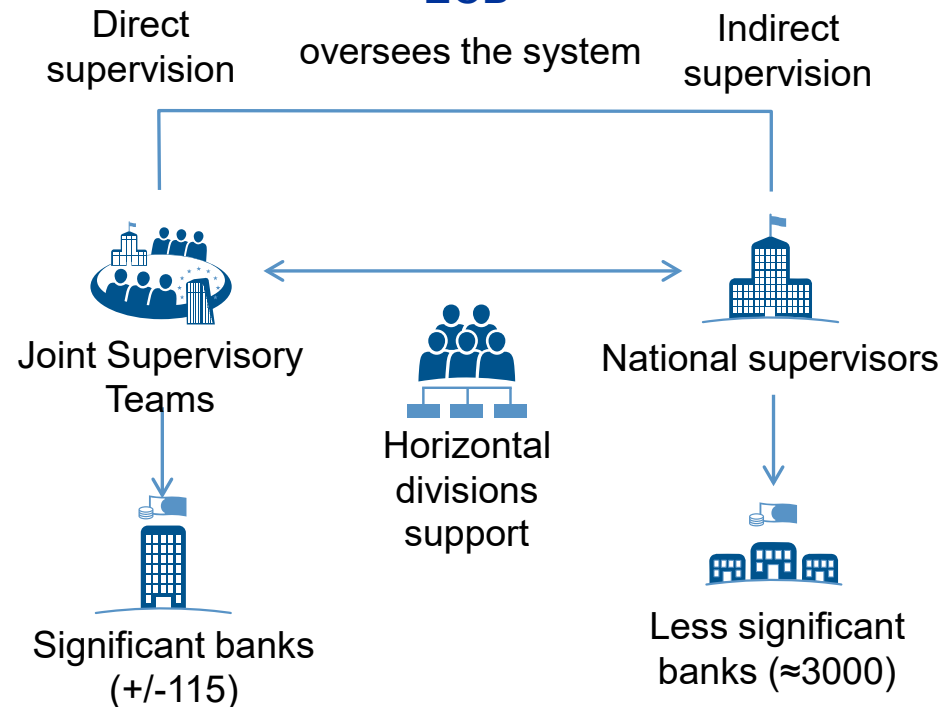
Based on common rulebook

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





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# Financial Stability

*“A condition in which the financial system – which comprises financial intermediaries, markets and market infrastructures – is capable of withstanding shocks and the unravelling of financial imbalances. This mitigates the likelihood of disruptions in the financial intermediation process that are severe enough to significantly impair the allocation of savings to profitable investment opportunities” (ECB, Financial Stability Review)*

## Systemic risk

*“Risk that financial instability becomes so widespread that it impairs the functioning of the financial system to the point where economic growth and welfare suffer materially” (ECB 2009)*

## Macro-prudential policy

*A policy that aims at mitigating systemic risks in order to promote financial stability*

# What is financial stability analysis?

- **Financial stability analysis** (or macro-prudential analysis) evaluates the health, soundness and vulnerabilities of a financial system
- **Focuses on the financial system as a whole** with particular attention to the costs of financial instability in terms of the real economy
- **Distinct from micro-prudential analysis and supervision**, which focuses on the financial condition of individual institutions, their risks and risk management

# Financial stability analysis process

## The role of the ECB and ESCB

- **Article 127 (5) of the Treaty on the Functioning of the European Union:**

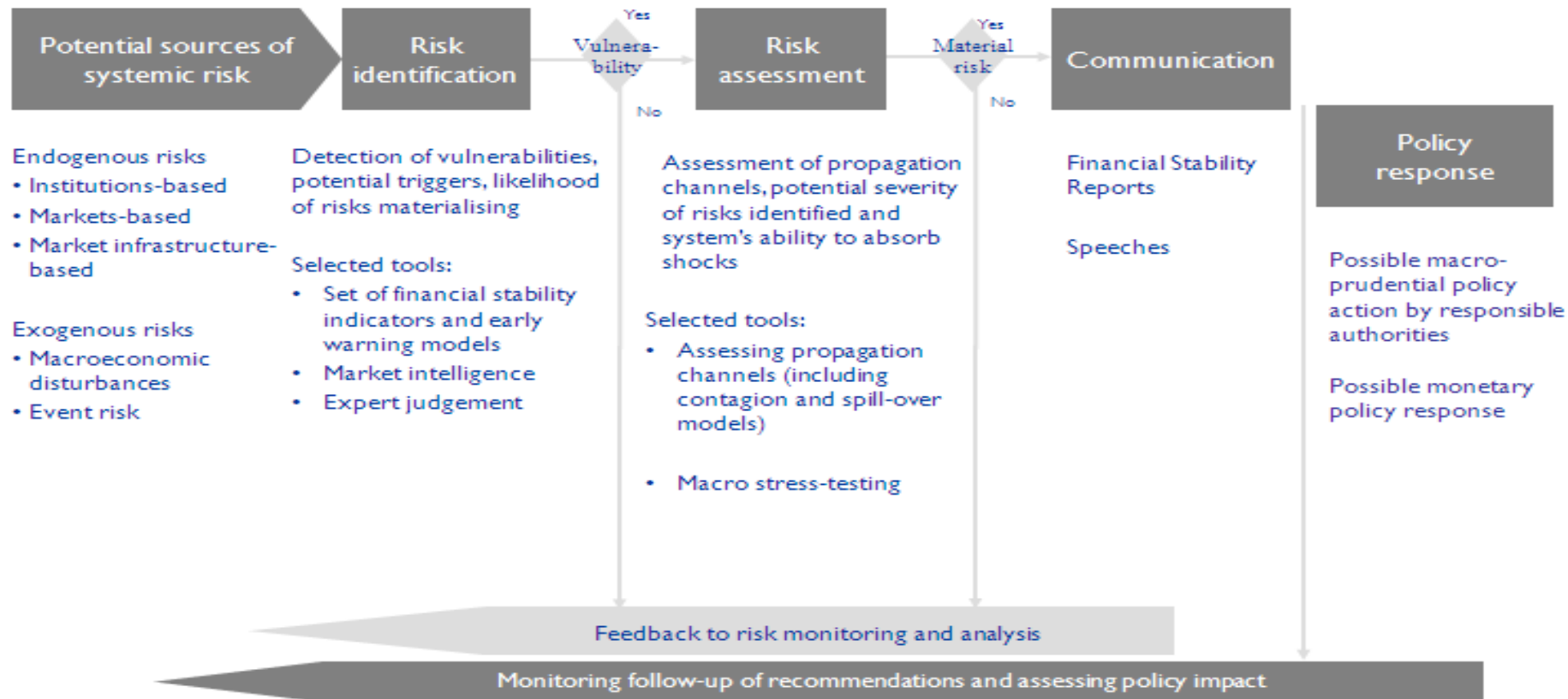
*“The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.”*

- **Article 25 (1) of the Statute of the ESCB:**

*“The ECB may offer advice and be consulted on the scope and implementation of Union legislation relating to the prudential supervision of credit institutions and to the stability of the financial system.”*

# Financial stability analysis process

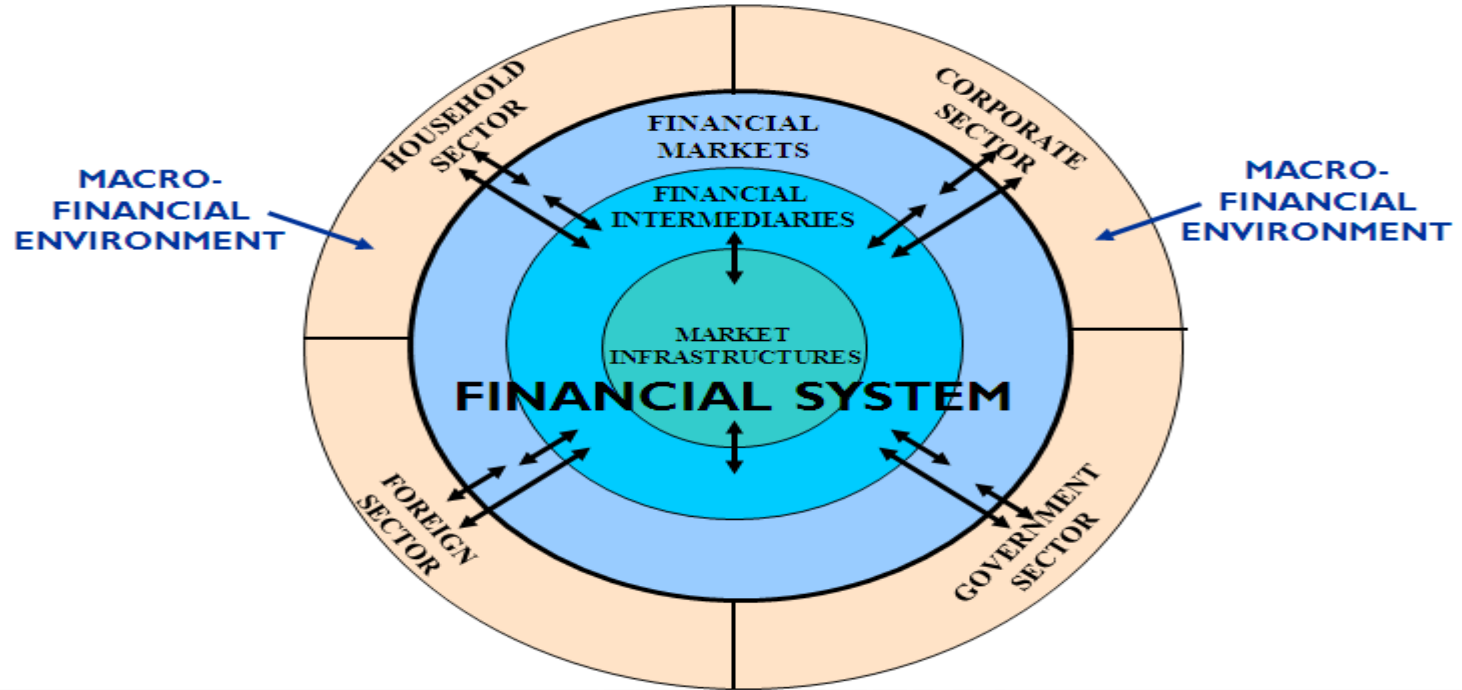
## Overview





# Financial stability analysis process

## Sectors covered in financial stability analysis

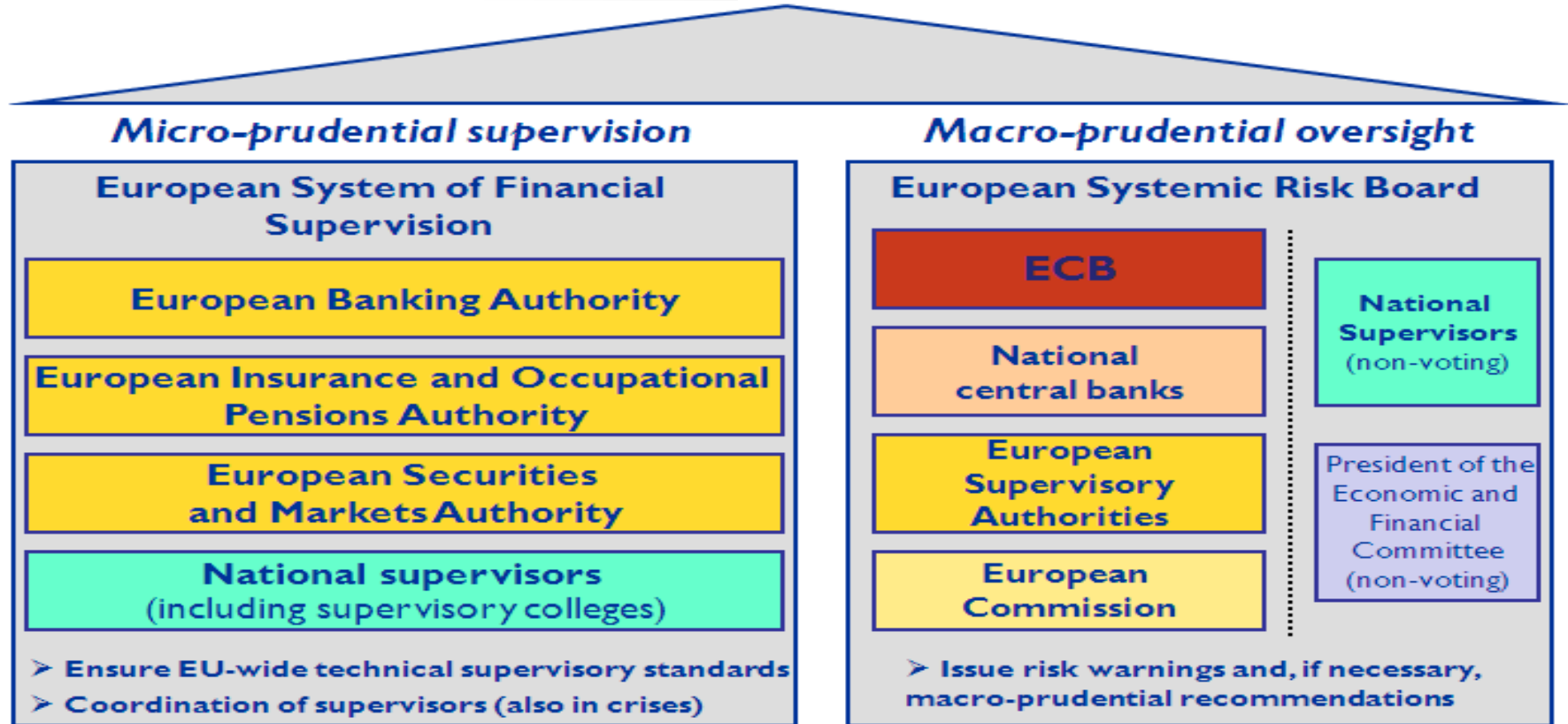


# Main milestones to current EU supervisory architecture

## The establishment of the ESRB and the ESFS

- **February 2009** – Report by de Larosière High Level group
- **September 2009** – Commission presents legislative proposals for the establishment of the ESRB and the ESFS
  - a new EU body, the **European Systemic Risk Board (ESRB)**, responsible for macro-prudential supervision at the EU level, supported by the ECB
  - the **European System of Financial Supervisors (ESFS)**, composed of national supervisors and three new European Supervisory Authorities for the banking, securities and insurance and occupational pensions sectors
- **October 2009** - the Council agrees compromise texts of the legislative proposals on the ESRB
- **22 September 2010** - the European Parliament gives the final seal of approval to the supervisory reform package
- **1 January 2011** - ESRB and ESFS formally established

# Main milestones to current EU supervisory architecture



# Two main advantages and goals of establishing the SSM

## 1. Address the so-called “financial trilemma”

- Impossibility of achieving financial stability, financial integration and maintaining national financial policies in a globalised financial market

## 2. Help to break the negative feedback loops between sovereigns and banks

- During the crisis - increasing debt levels of sovereigns that provided financial support to struggling banks (as well as losses for banks from exposures to sovereigns under stress)

- Break the correlation between the cost of funding of euro area banks and that of their respective sovereigns

# Main features of the single supervisory mechanism

## Single system of supervision

The ECB will take all decisions regarding the banks, banking groups and respective components, falling under the concept of “significant” (around 150 banks in the euro area)

- Banks with more than €30 billion in total assets
- Banks representing more than 20% of domestic GDP (unless <€5 billion in assets)
- 3 most significant banks in each country (unless justified by particular circumstances)
- Banks receiving direct assistance from the EFSF/ESM

## Close cooperation with non-euro area Member States

The ECB can conduct supervision in a non-euro area EU Member State, upon a request for close cooperation.

# The ESRB – Bringing together policy makers in Europe

- Created in 2010 in response to financial crisis
  - Mission: macroprudential oversight of the EU financial system.
  - Objective: prevention and mitigation of financial stability risks
- Membership reflects broad mission, incl. EU central banks, entity & market supervisors, ESAs, COM...

**Christine Lagarde,**  
President European Central  
Bank / ESRB Chair



**Stefan Ingves,**  
Governor of Sveriges Riksbank / First  
Vice-Chair of the European Systemic  
Risk Board (ESRB)



**Pablo Hernández de Cos,**  
Governor of the Bank of Spain /  
Advisory Technical Committee (ATC)  
Chair / Chairman of the Basel  
Committee on Banking Supervision

- Soft law tools through ‘Warnings’ and ‘Recommendations’ to authorities and Member States in the EU (incl. ECB) – ‘act or explain’

# Governance of the ESRB

- General Board (GB) as the decision making body
- Steering Committee (SC): to prepare discussions at the General Board
- Advisory Technical Committee (ATC)
- Advisory Scientific Committee (ASC)
- ESRB Regulation places the Secretariat at the ECB
  - ECB should provide sufficient analytical, human and financial resources
  - ESRB Secretariat as a think tank



# Assessing systemic risk in the EU

From the ESRB Regulation:

*The ESRB's task should be to monitor and assess systemic risk in normal times [...]*

ESRB not only focused on banks, but to cover all financial institutions and markets. Examples:

- Non-Bank Financial Intermediation Monitor
- ASC report on Exchange Traded Funds
- Recovery and resolution for the EU insurance sector: a macroprudential perspective
- The macroprudential use of margins and haircuts
- **Real Estate markets... → Recommendations**



# 2.

## Real Estate

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Residential property

Commercial property

# Residential property (1/4)

## ECB uses of house price statistics:

- Macroeconomic analysis and forecasting
- Exposure of the banking sector to housing market movements via mortgage loans
- Housing wealth + its effect on consumption
- Over- or under-valuations → “house price bubbles”?

# Residential property (2/4)

## ECB work on residential property price indicators:

- Coordinated approach of EU central banks
- Existing data sources + calculations, mainly from private sources = “non-official” statistics
- Work started in the year 2000
  - Collection, assessment and publication of data and metadata
  - In several cases: central banks contributed to improvements

# Residential property (3/4)



## Non harmonised statistical concepts in terms of

### “Pricing concept”

- Mainly transaction prices
- In other cases: appraisals, offer prices, etc.

**Treatment of different characteristics** (“quality adjustment”) like age, no. of bedrooms, plot size ...

### Coverage

- By regions: non-urban areas may be under-represented
- By dwelling type: in several cases only existing houses and flats

# Residential property (4/4)

## Statistical institutes' work on house price statistics:

- Pilot project led by Eurostat started in 2004
- **Step-by-step** approach:
  1. feasibility study
  2. development of harmonised price indices from existing data sources
- Publication of experimental results as of Dec. 2010
- **As of Jan. 2013: official house price indices**
- In some cases: statistical requirements not yet fully met



# Commercial property





# Commercial property - background

- ESCB looking at topic  $\approx$  8 years
- Start interim G20 publication ***“Financial crises and Information gaps”***
- ***ESRB recommendation 21 March 2019* on closing real estate data gaps**
- ECB uses:
  - Financial stability
  - Exposure to risk by finance providers
  - Macro-economic analysis (inflation, property sector, construction sector)

# Commercial property - background

- **Stocktaking exercise (May 2010)**
  - Generally data / indicators available, very heterogeneous; sources tend to be commercial (real estate companies; commercial banks; notaries), some official sources
  - Monthly/quarterly frequency with variable timelines
- **International Conference (May 2012) hosted by ECB**
  - Challenging topic; confirmed heterogeneity of sources
  - Methods need to be innovative
- **International Conference on Real Estate Statistics (February 2019)**
  - Real Estate has moved into the focus of policy makers, in particular with a view to macro-economic and macro-prudential policies. <https://www.real-estate-statistics.eu/>

# Commercial property - idiosyncratic

- Statistics on prices typically based on **actual transactions** (HICP, etc.)
- Not always possible in this field as **low liquidity** especially in times of market stress
- Valuations typically source of info, BUT
  - Differing international standards
  - Tendency to overshoot
  - Turning point identification concerns
- ECB solution: hybrid methodology where available transactions but supplemented by valuations

# Commercial property – development work

- Two strands of work at EU level
  - **ECB interim approach**
    - Uses International Property Databank (MSCI) data plus where available NCB preferred series (DK, DE, IT, PT and GR)
  - **Eurostat work on handbook and three taskforces (based on ESRB Recommendation)**
    - Taskforce Commercial Real Estate Indicators: Prices and Taskforce Commercial Real Estate Indicators: Short term statistics
    - Real Estate Working group;
    - Task Force on Vacancy Rates of Commercial Real Estate

# Commercial property – development work

- **ECB experimental indicator** – published as of 2014
- Enhancements planned
  - Allied indicators (vacancy rates, rents)
  - Re-examination of weighting approaches (simple GDP weights used at present)
  - Enhancement of interpolation methods
  - Spatial autocorrelation
  - Etc.
- **Real Estate opinion surveys** → data is useful in signalling market movements ahead of official data → click on the link [Published Research](#)

# Commercial property – summary

- **Important data** set for ESCB
- Need to be extremely **innovative**. Somewhat out of normal comfort zone in compilation
- Interim approach to fill data gap while Eurostat investigate long-term data-set
- **Trend indicator** with more enhancements both needed and required



# 3. Financial Stability + Property Prices

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# Residential property prices

- Residential real estate (RRE) is the main component of **euro area household wealth**. **Housing accounts for around 50% of asset** holdings and is largely financed through borrowing, with mortgages making up **85% of household liabilities**;
- **Tight linkage between RRE prices and the balance sheets of the euro area banking sector**. Mortgage loans account for **between 40% and 90% of total lending by euro area banks to households across EU countries**;
- ECB analysis finds that **housing market variables in the euro area have predictive power for future prolonged contractions**. More than two-thirds of the past 46 systemic banking crises were preceded by boom-bust patterns in house prices. And recessions coinciding with house price busts have been found to yield a cumulative loss in GDP that is around three times greater than in recessions without such busts.



# Residential property prices - summary

- **House prices have been a key indicator** in assessing the state of the euro area economy since the financial crisis
- Understanding the state and nature of the house price cycle is important from both a **macroeconomic** and **financial stability** point of view
- **Substantial corrections** in earlier house price imbalances have taken place in several euro area countries but **turning point analysis** suggests that the housing market upturn is in a relatively advanced phase compared with the average duration of such upturns
- Overall, the **state of the euro area housing market is relatively mature.**

# Residential property prices – a crisis ahead?

## Floored

Housing-risk indicators, selected countries

(Ranking out of 17 countries*, 1=most exposed)	Policy rates %-point increase Jan 1st 2021-Oct 18th 2022	Household debt as % of net disposable income 2021 <sup>†</sup>	House prices % increase 2019-Q2 2022
Canada (1)	3.00	186	41.7
Netherlands (2)	1.25	222	39.7
Australia (=3)	2.50	203	26.7
New Zealand (=3)	3.25	122	38.1
Norway (=3)	2.25	241	26.4
Sweden (6)	1.75	203	32.2
Luxembourg (=7)	1.25	187	34.7
United States (=7)	3.00	101	45.3
Portugal (9)	1.25	126	29.0
Britain (10)	2.15	148	23.6
Denmark (=11)	0.65	249	18.8
Finland (=11)	1.25	156	14.1
Germany (=11)	1.25	102	28.1
France (=14)	1.25	124	17.2
Ireland (=14)	1.25	119	21.8
Spain (16)	1.25	106	5.3
Italy (17)	1.25	91	9.7

\*Average of three indicators †Or latest

Sources: Knight Frank Research, Macrobond; OECD; Refinitiv Datastream



## The European mortgage market compared

Snapshots from selected countries as at September 2023

### UK

FT exposure rating: ▶▶▶▶▶▶▶▶



Fixed rates have become the norm but tend to expire after five, or even two, years

Average interest rate for existing mortgages: 3.06%

House price inflation since 2015: ↑ 18 per cent

Borrowing limits: Buyers are largely limited to borrowing 4.5 times their income

### Spain

FT exposure rating: ▶▶▶▶▶▶▶▶



Variable rates have dominated in the past, though nearly half of all new mortgages are fixed

Average interest rate for existing mortgages: 3.44%

House price inflation since 2015: ↑ 23 per cent

Borrowing limits: Monthly mortgage repayments tend not to exceed 30 per cent of a borrower's income

### Netherlands

FT exposure rating: ▶▶▶▶▶▶▶▶



Short-term, variable rate mortgages have become more popular

Average interest rate for existing mortgages: 2.49%

House price inflation since 2015: ↑ 47 per cent

Borrowing limits: Owners cannot borrow more than the value of their home

### Italy

FT exposure rating: ▶▶▶▶▶▶▶▶



Many prefer cash purchases

Average interest rate for existing mortgages: 3.04%

House price inflation since 2015: ↓ 9 per cent

Borrowing limits: Monthly payments tend to be capped at about 35 per cent of the borrower's income

### Germany

FT exposure rating: ▶▶▶▶▶▶▶▶



Fixed rate mortgages that last for at least 10 years are typical

Average interest rate for existing mortgages: 1.88%

House price inflation since 2015: ↑ 26 per cent

Borrowing limits: Few limits on loan to income ratios

### France

FT exposure rating: ▶▶▶▶▶▶▶▶



The majority of mortgages are fixed for decades

Average interest rate for existing mortgages: 1.55%

House price inflation since 2015: ↑ 15 per cent

Borrowing limits: Monthly payments can be no more than 35 per cent of the borrower's salary

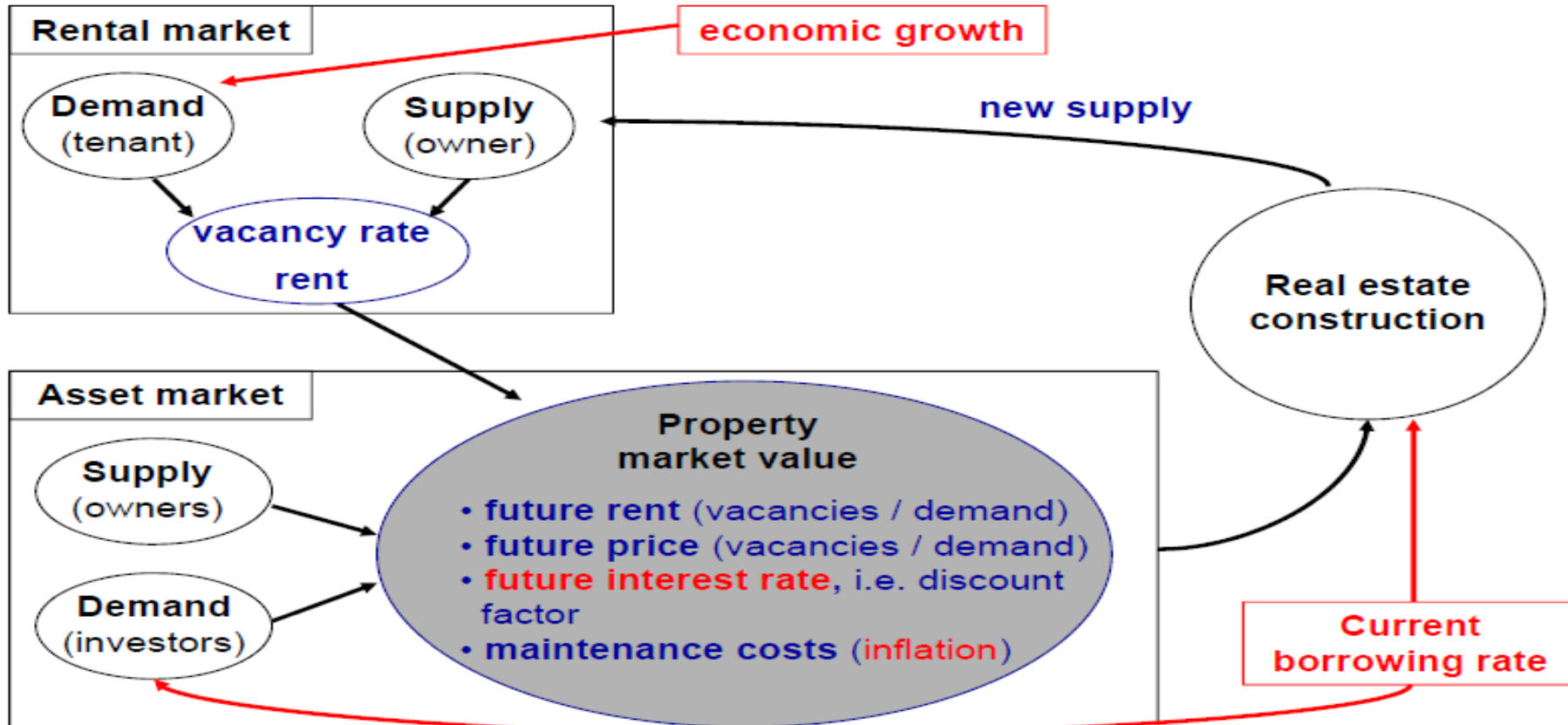
Source: FT

# Commercial property prices

- **Developments in the commercial real estate (CRE) sector are also relevant for the business cycle** and, even more so, for **financial stability**;
- CRE lending is **less significant in terms of volume than RRE lending in the euro area, but it still makes up between 20% and 50% of total bank lending to corporates**. And historically, losses on banks' CRE exposures during crises have often been higher than losses on their RRE exposures, despite those exposures being lower;
- **Data on rent indices and rent yields for CRE, for example, would help indicate whether a given price level reflects realised returns, or inflated expectations of future returns.** Details on vacancy rates and building permits would help in assessing property supply and demand. And transaction numbers and values could serve as an indicator of market liquidity, conveying information on potential market overheating or on vulnerability to fire sales should banks or investors have to quickly recover their positions.

# Importance of Commercial Property Prices

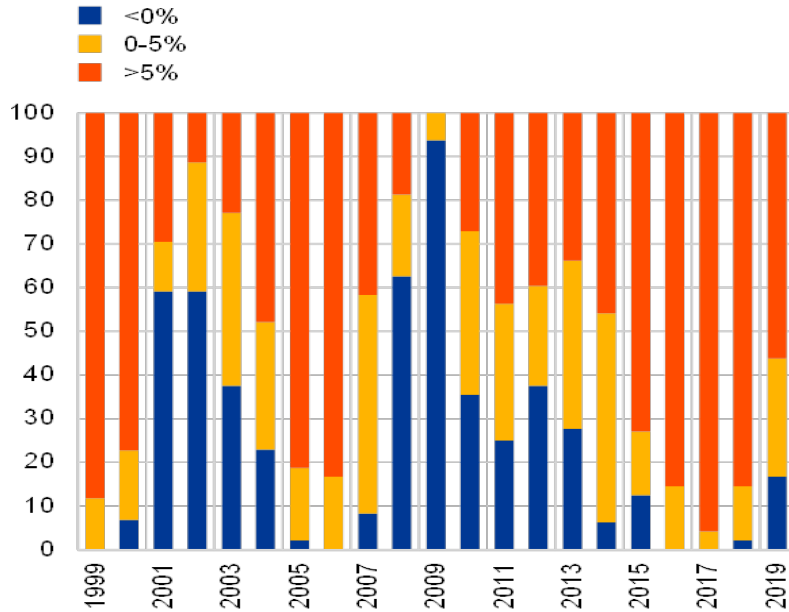
## Role in the macro economy



Prime CRE price dynamics were moderating in line with the signs of a maturing cycle, while the stock market reaction to the pandemic in the CRE sector was strong

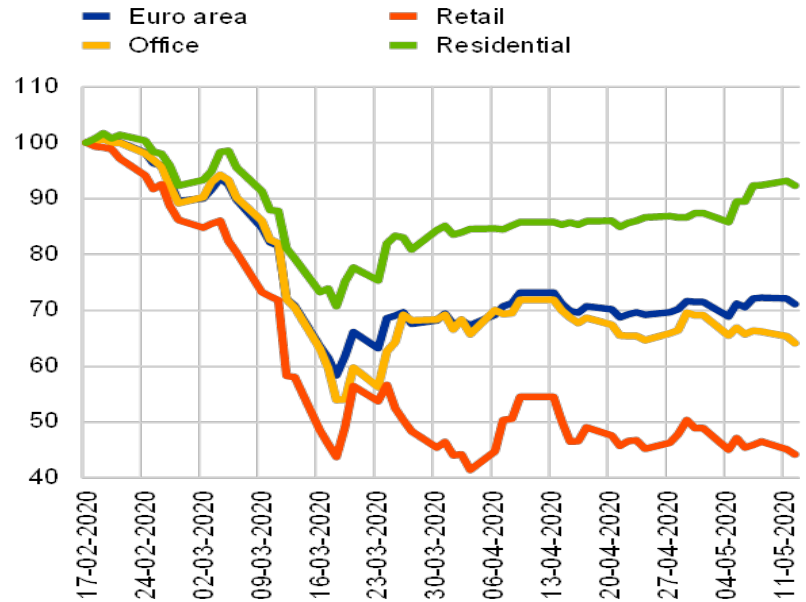
### Prime CRE price dynamics in the euro area

(percentages)



### Decline in the stock prices of CRE investment trusts during the coronavirus pandemic

(index: 17 Feb. 2020 = 100)



# Commercial property prices - summary

- **Commercial property** has a role for both Macroeconomic and Financial Stability roles of the ECB
- **Data hard to find** but ECB and Eurostat working on solutions
- The precipitating factor for the **Financial Crisis of 2007–2008** was the **bursting of the United States housing bubble and the subsequent subprime mortgage crisis**
- If another one comes from similar source then at least hope to have information to deal with it!



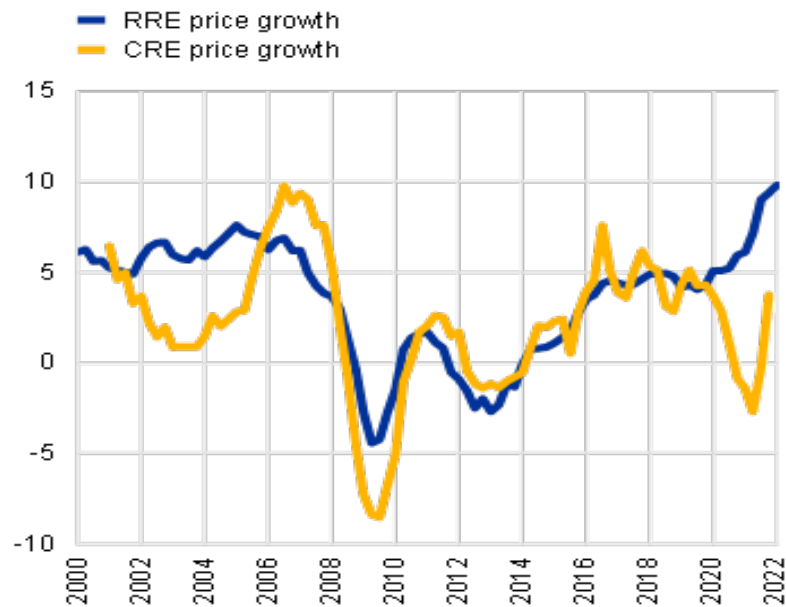
# Residential Real Estate and Commercial Real Estate – COVID impact

- **The risk of corrections in euro area residential and commercial real estate markets has increased in the wake of the pandemic** → Risks in residential real estate markets continued to build in 2019, amid more visible signs of house price overvaluation for the euro area as a whole;
- As **housing demand is set to slow along with the drop in economic activity and employment, the risk of house price corrections has increased**. Models assessing downward risks to house prices indicate that on average there is a 5% probability that house prices will decline by 15% or more over the next four quarters;
- A **correction of stretched valuations in commercial real estate markets is also increasingly probable, given pressures on corporates and weaker investor sentiment**. The prominent role of foreign investors and open-ended real estate investment funds might make commercial real estate markets more exposed to a disorderly adjustment.

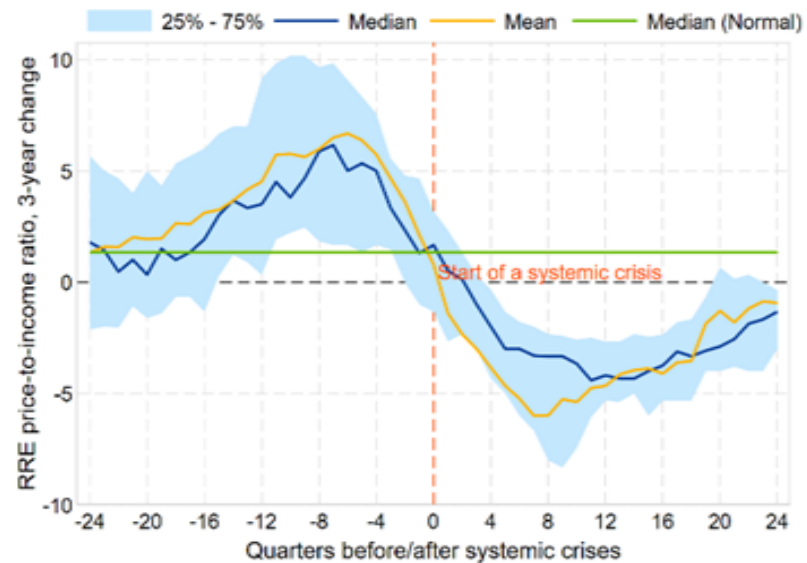


Developments in real estate markets have received heightened attention in recent years, given that real estate booms have often preceded financial crises in the past (1/3)

a) Annual growth of RRE and CRE prices



b) Three-year change in the RRE price-to-income ratio before and after financial crises



# Developments in real estate markets have received heightened attention in recent years, given that real estate booms have often preceded financial crises in the past (2/3)

ECB Data Portal, 29 September 2023, 12:31 CET

ECB Data Portal, 29 September 2023, 12:40 CET

Residential property prices, Euro area 19, Quarterly



Commercial property price indicator, Euro area 18, Quarterly



Source: ESCB

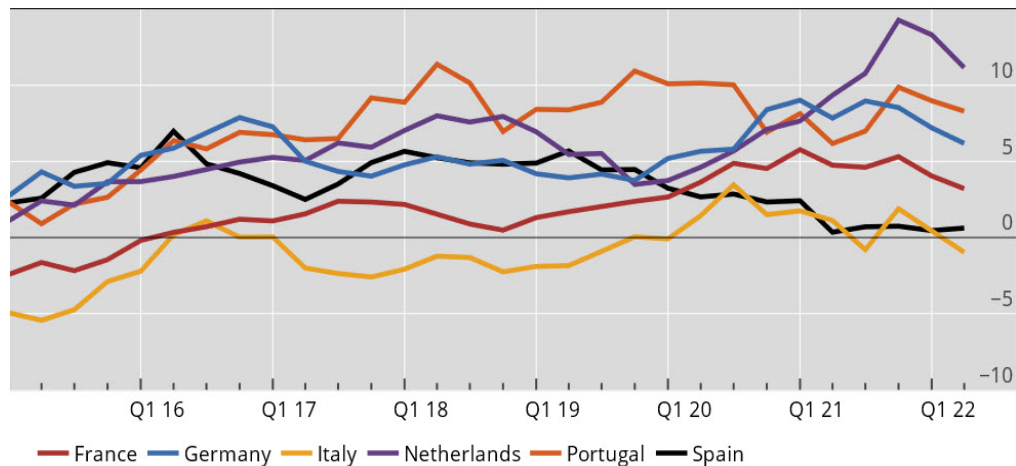
Source: ESCB

# Developments in real estate markets have received heightened attention in recent years, given that real estate booms have often preceded financial crises in the past (3/3)

Real residential property prices in selected euro area member states<sup>1</sup>

Year-on-year changes, in per cent

Graph 5



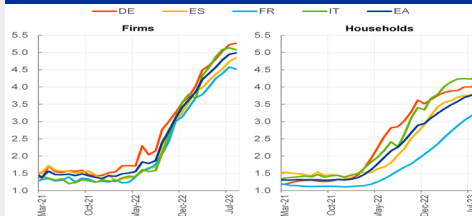
<sup>1</sup> Based on quarterly averages; CPI-deflated.

Source: BIS selected residential property price series.

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# And recent interest rates rises ....

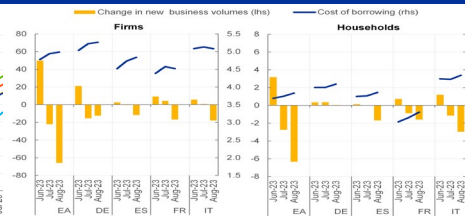
**Chart 1: Cost of borrowing for firms and households for house purchase (percentages per annum)**



Source: ECB.

Notes: The indicator for the total cost of borrowing for firms and for households for house purchase is calculated by aggregating short-term and long-term rates using a 24-month moving average of new business volumes.

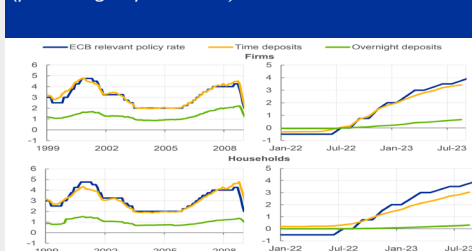
**Chart 2: Cost of borrowing and changes in new business volumes (lhs: EUR bn, rhs: percentages per annum)**



Source: ECB.

Notes: 'Change in new business volumes' is the difference in the monthly new lending given by banks.

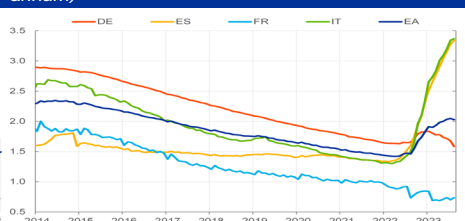
**Chart 3: Policy and deposit rates (percentages per annum)**



Sources: ECB and ECB calculations.

Notes: The ECB relevant policy rate is the MRO for the 1999 - 2008 panels and the DFR for the panels from 2022. Time deposits refer to deposits with agreed maturity of up to 2 years.

**Chart 4: Loan-deposit margins on outstanding amounts Aggregate NFCs and households (percentages per annum)**



Sources: ECB and ECB calculations.

Notes: Loan-deposit margins on outstanding amounts are calculated as difference between the lending rates and the composite cost of deposits on outstanding amounts. The indicator for lending rates is calculated as a weighted average between outstanding amount rates on loans to firms and loans to households for house purchase with their corresponding outstanding amount. The composite cost of MFI deposit funding has been computed as a weighted average between outstanding amount rates on overnight deposits, deposits with agreed maturity and deposits redeemable at notice with their corresponding outstanding amount.

# Questions





EUROPEAN CENTRAL BANK

EUROSYSTEM

# References

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***“Working Paper Series: Pockets of risk in European housing markets, May 2019***

Jane Kelly, Julia Le Blanc, Reamonn Lydon

<https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2277-4893901f33.en.pdf>

***On the importance of real estate statistics***

Speech by Peter Praet, Member of the Executive Board of the ECB, at the International Conference on Real Estate Statistics, Luxembourg, 21 February 2019

<https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190221-09c2b7ac1f.en.html>

***Trends in residential real estate lending standards and implications for financial stability, FSR ECB May 2020***

<https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr202005-1b75555f66.en.html#toc39>

***Real estate markets, financial stability and macroprudential policy, Macroprudential bulletin, October 2022***

Jan Hannes Lang, Markus Behn, Barbara Jarmulska and Marco Lo Duca

[https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202210\\_1-53d521bde7.en.html](https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202210_1-53d521bde7.en.html)



# Data sources (1/3)



- **Indicators of residential real estate**
  - [Residential real estate variables](#)
- 
- A first set of indicators looks at the domestic household sector's balance sheet and its mortgage liabilities, whereby some relevant variables are omitted because they are included in other domains (e.g. total household sector debt and household sector disposable income).
  - The second set of indicators covers time series that provide information on mortgage loans' key features, such as data on the interest rate cost of mortgage loans and their interest rate variability. In the future, these should hopefully be complemented with comprehensive and comparable data on mortgage loan maturities and LTV, DSTI or LTI ratios.
  - A third group of indicators focuses on time series providing information on house prices and house price valuation.
  - The fourth group of indicators relates to time series that provide information on primary and secondary market transactions, as well as indicators on the supply side of the residential real estate market.

# Data sources (2/3)



- Indicators of commercial property prices
  - [Commercial Real Estate variables](#)
- 
- Limited number of commercial real estate (CRE)-related variables, covering mainly available CRE price indicators and some available data on CRE-related exposures in the financial sector (even if these exposures may only be considered to be broad proxies of what would fall under a more precise definition of CRE).
  - For other indicators that were envisaged, no comprehensive and comparable data for various countries could yet be included, due to data gaps related to the features of the national CRE markets as well as - but to a lesser extent - the financial system's exposures.



# Data sources (3/3)

[ECB: Loans, deposits and interest rates](https://www.ecb.europa.eu/press/pr/2014/pr140814_en.htm)

<https://www.euro-area-statistics.org/bank-interest-rates-loans?cr=eur&lg=en>

<https://www.euro-area-statistics.org/bank-interest-rates-deposits?cr=eur&lg=en>

*A good source of data (both commercial and residential) is the BIS databank (it has some metadata too)*

<https://www.bis.org/statistics/pp.htm>

## HOUSING PRICE STATISTICS (EUROSTAT)

<https://ec.europa.eu/eurostat/web/housing-price-statistics>

This section provides information on the following statistics:

- **house price index** (HPI), which measures the changes in the transaction prices of residential properties, both newly built and existing, purchased by households
- **house sales** (HS), which covers the changes in the total number and value of housing transactions purchased by households
- **owner-occupied housing price index** (OOHPI), which measures the changes in the transaction prices of dwellings purchased for own-use and the cost of all goods and services that households purchase in their role as owners-occupiers of dwellings.