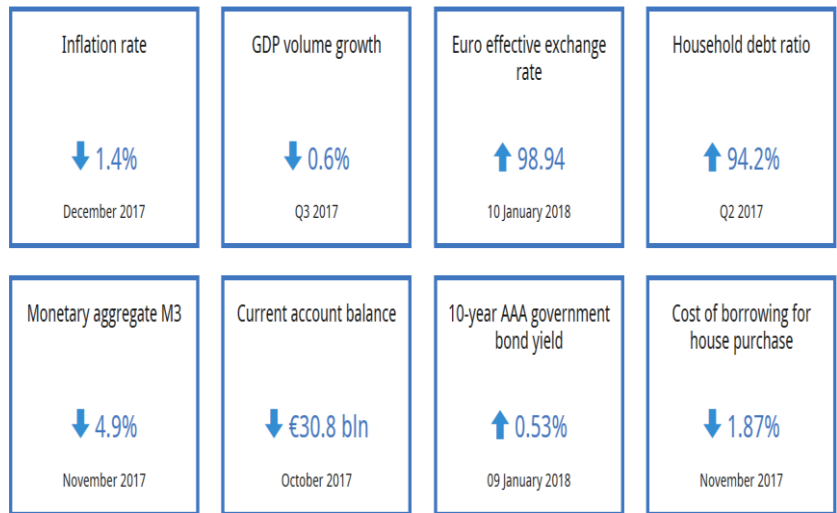


Aurel Schubert
Director General Statistics

Introduction to ESCB statistics

EMOS training course
31 January 2018

Latest key figures for the euro area - (click boxes to go to the section pages)



All view expressed are those of the speaker and not necessarily those of the ECB.

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The data needs for policy-making
- 3 The legal basis for ECB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products
- 7 The current new data projects of the ECB/ESCB
- 8 Accessibility of ESCB statistics

The ECB

3



Key ECB / Eurosystem / ESCB functions

Monetary policy

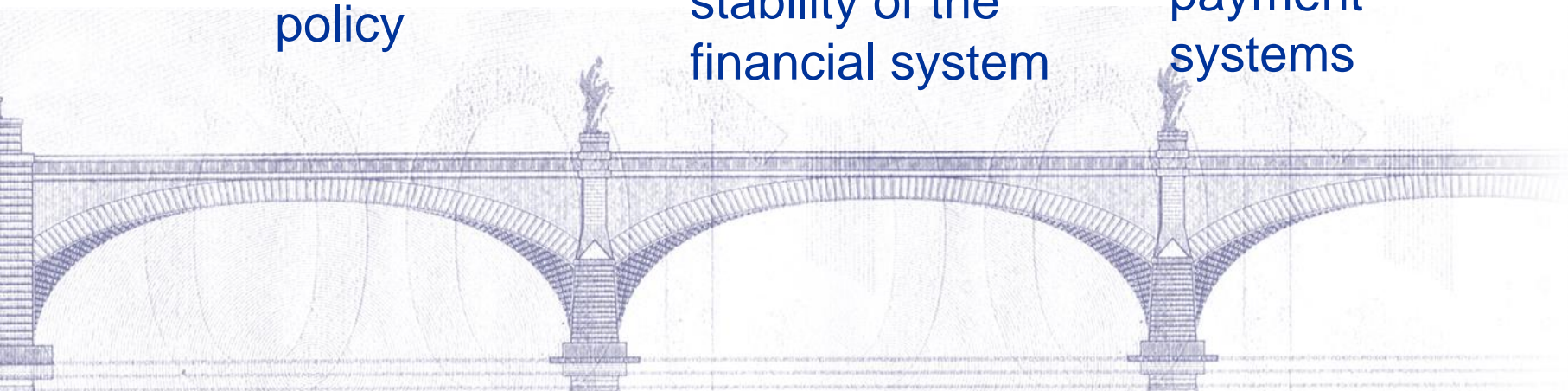
Define and implement monetary policy

Financial Stability / Banking Supervision

Banking supervision and contribute to stability of the financial system

Payment systems

Promote smooth operation of payment systems



Decision-making at the ECB

The **Governing Council** is the main decision-making body of the ECB.

It consists of the six members of the Executive Board, plus the governors of the national central banks of the 19 euro area countries.

The **Executive Board** consists of the President of the ECB, the Vice-President and four other members.

The **General Council** comprises the President of the ECB, the Vice-President and the governors of the national central banks (NCBs) of the 28 EU Member States.

The **Supervisory Board** comprises a Chair, a Vice-Chair, four ECB representatives and representatives of national supervisors. It is NOT a decision-making body.

Governing Council

- Adopts guidelines and decisions to ensure the tasks of the Eurosystem are performed
- Formulates monetary policy
 - Key ECB interest rates
 - Liquidity



Executive Board

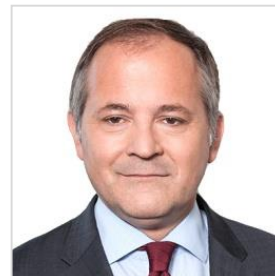
- Implements the monetary policy of the ECB
- Prepares meetings of the Governing Council
- Conducts the day-to-day business of the ECB



Mario Draghi
President of the ECB



Vítor Constâncio
Vice-President of the ECB



Benoît Cœuré



Sabine Lautenschläger



Yves Mersch



Peter Praet

Supervisory Board

- Plans and carries out the ECB's supervisory tasks
- Proposes complete draft decisions to the Governing Council

In addition to the five members shown here, the Supervisory Board includes representatives from all national supervisors.



Danièle Nouy
Chair



Sabine Lautenschläger
Vice-Chair



Ignazio Angeloni
ECB representative



Pentti Hakkarainen
ECB representative



Julie Dickson
ECB representative



Sirkka Härmäläinen
ECB representative

The NCBs as an integral part of the Eurosystem

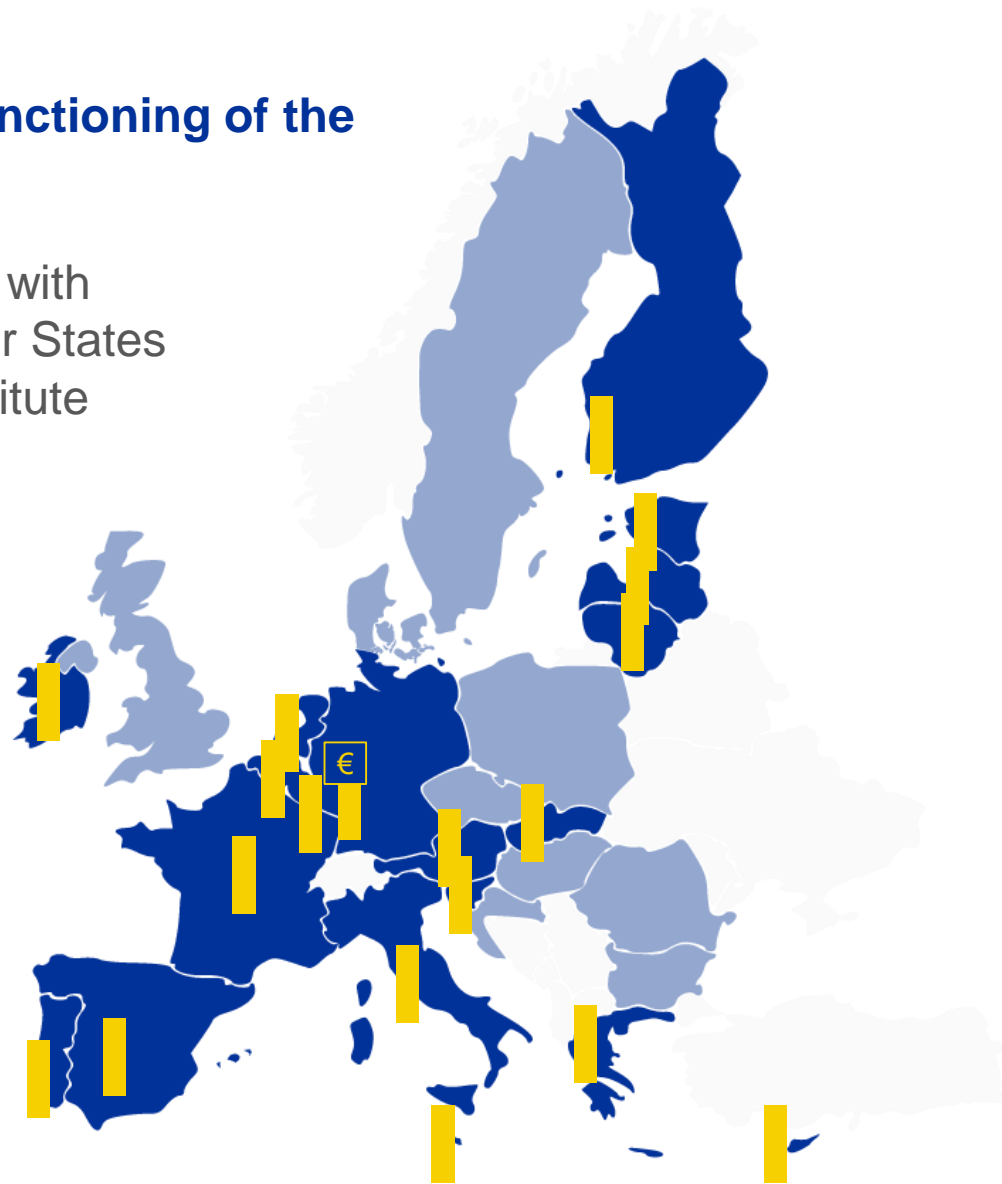
Article 282 of the Treaty on the Functioning of the European Union:

“The European Central Bank, together with the national central banks of the Member States whose currency is the euro, which constitute the Eurosystem, shall conduct the monetary policy of the Union.”

The Eurosystem

€ European Central Bank

National central banks



- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The data needs for policy-making
- 3 The legal basis for ECB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products
- 7 The current new data projects of the ECB/ESCB

The ECB's monetary policy strategy

Primary objective: price stability



Governing Council

takes monetary policy decisions
based on an overall assessment
of the risks to price stability

Economic analysis

Analysis of economic
dynamics and shocks



cross-checking



Monetary analysis

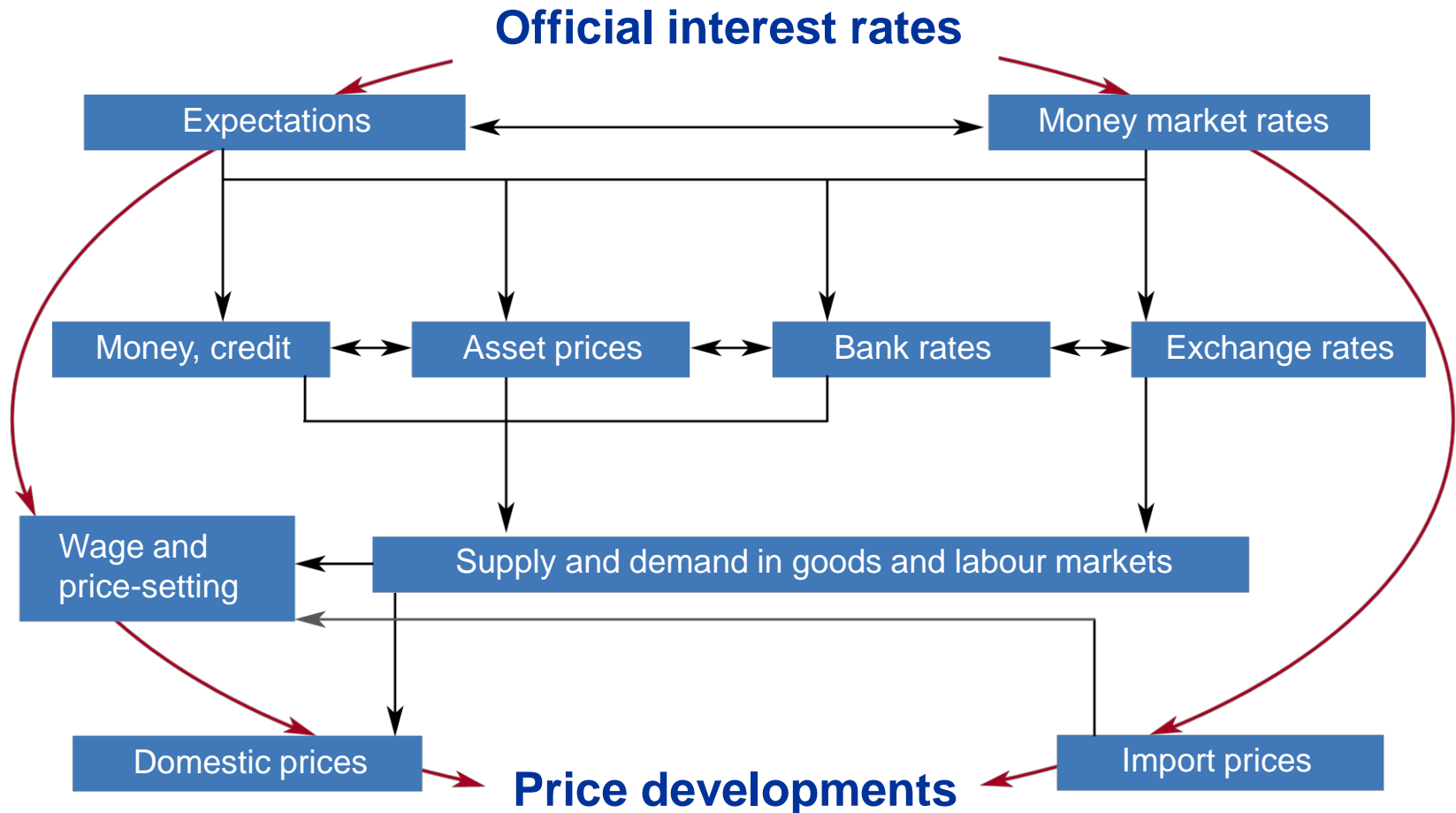
Analysis of
monetary trends



Full set of information

Transmission mechanism

How interest rates affect prices



New data demands resulting from the crisis

Phase A - post Lehman Brothers – Sept 2008

banks' rescue, government guarantees

Phase B – May 2010

Sovereign debt crisis and again banking crisis

Phase C - May 2012

Banking Union announced

2008 2009 2010 2011 2012 2013 2014 2015 2016

EU Financial Supervision
ESAs/ESRB - Nov 2010

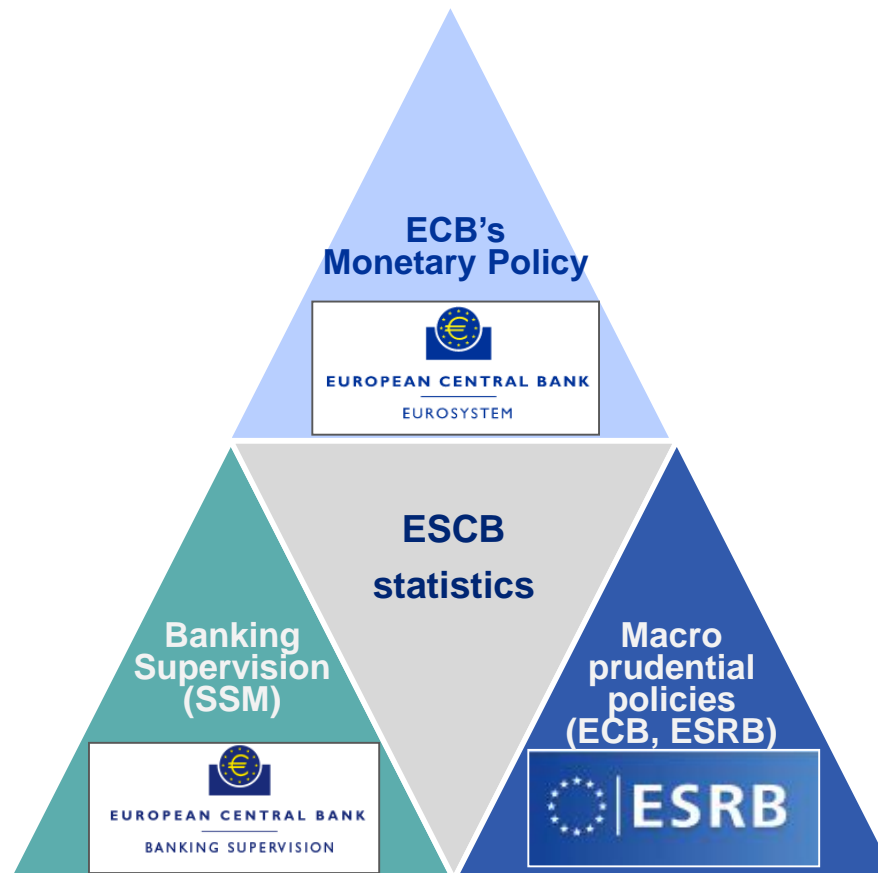
ECB's banking supervision – Nov 2014

Single Resolution Board – Jan 2015

Single Resolution Fund – Jan 2016

New data demands resulting from the crisis

- ECB's new responsibilities for macro- & micro-prudential policies
- Heterogeneity: relevance of country and sectoral imbalances
- Market fragmentation and complexity of financial instruments



Content

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The data needs for policy-making
- 3 The legal basis for ECB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products
- 7 The current new data projects of the ECB/ESCB

The legal basis for ECB statistics



ECB legal instruments concerning statistics

- ***Regulation*** – directly imposes obligations on reporting agents in euro area
- ***Guideline*** – imposes obligations on Eurosystem (including ECB)
- ***Recommendation*** – informs statistical authorities other than central banks in euro area of ECB requirements; not legally binding
- ***Decision*** – imposes obligations on addressees; can also be without addressees
- ***Notice*** – to inform/explain
- ***Opinion*** – expression of ECB view, usually in response to a consultation under Treaty/Statute

Also Memorandum of Understanding – its nature and status.

ECB is a big user and a big producer of statistics

■ European statistics by the ESCB

Monetary and
financial
statistics

External
statistics

Securities
statistics

Quarterly
euro area
accounts

Other
statistics

Other statistics
by the ESCB

Supervisory
data

- European statistics produced by Eurostat and the national statistical offices (e.g. GDP, HICP, labour market and short-term business statistics)
- Principal Global Indicators (BIS, ECB, Eurostat, IMF, OECD, WB)
- Commercial data providers and market sources

Content

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The “evidence” for policy-making
- 3 The legal basis for ESCB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products
- 7 The current new data projects and challenges
- 8 Accessibility of ESCB statistics

Harmonisation and cross-country comparability are essential

❑ A network of National Central Banks / National (Supervisory) Competent Authorities:

- Perform tasks in accordance with EU/ECB legal acts
- Responsibility for meeting the ECB's/SSM requirement
- Collect data from reporting agents, other national statistical authorities, other national sources

❑ ECB:

- Quality assurance, compilation and publication of euro area aggregates

❑ Shared tasks:

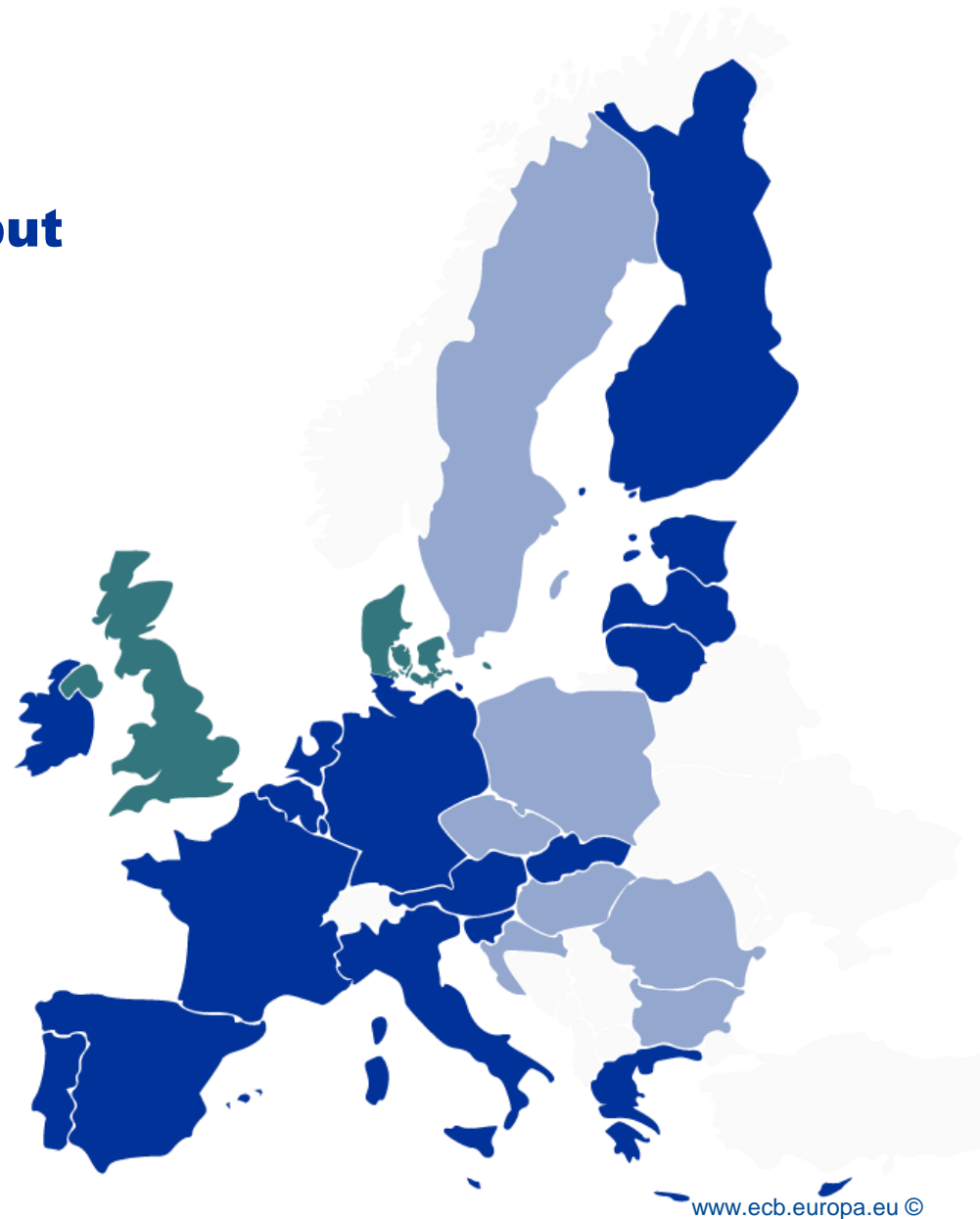
- Conceptual/development work, development of legal/technical infrastructure (ECB in lead)
- Participation in European/international statistical committees

Complying with international statistical standards

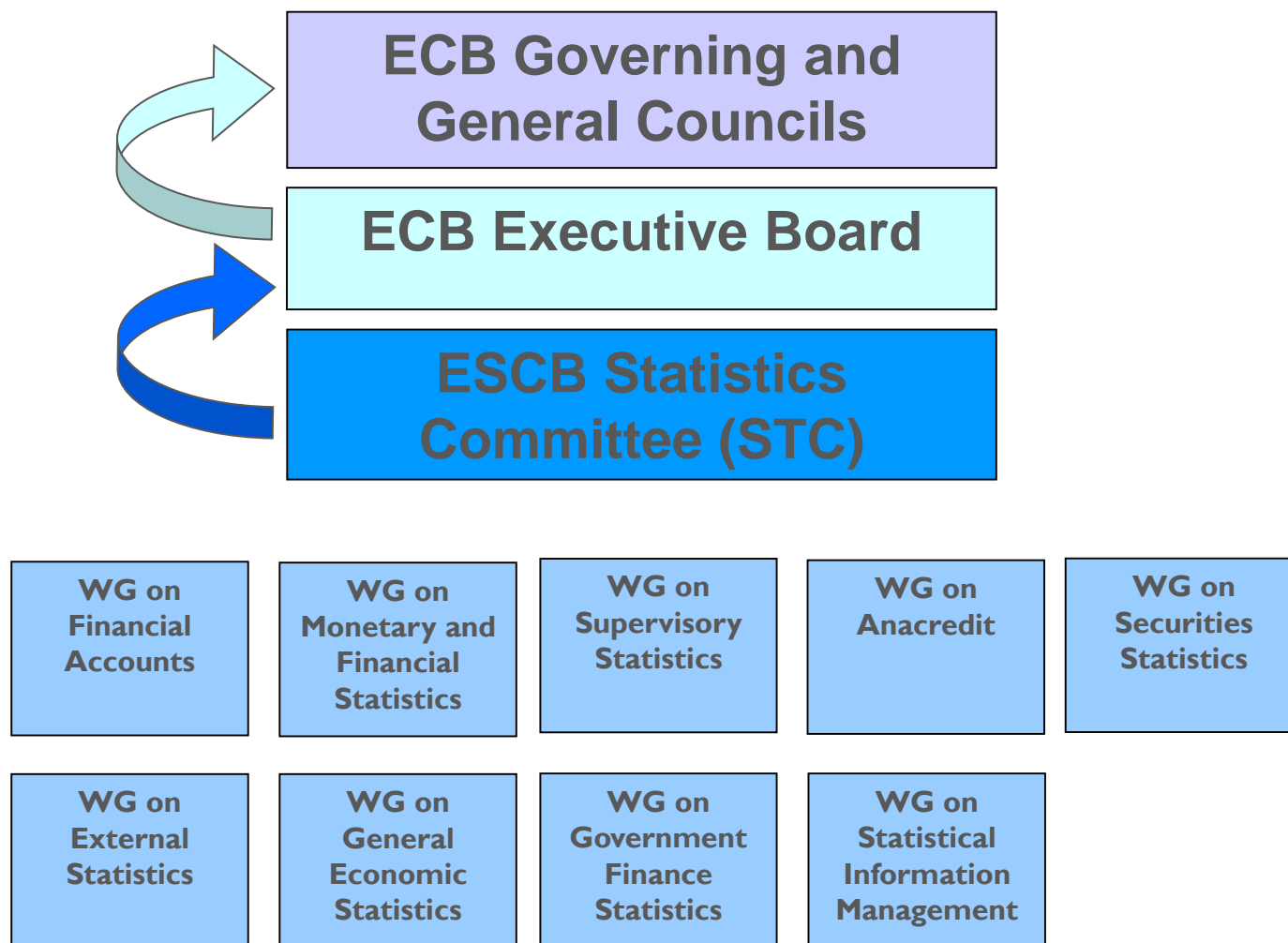
- **System of National Accounts (2008) and other Manuals**
 - **IMF Balance of Payments Manual, 6th edition (2013)**
 - **IMF Monetary and Financial Statistics Manual (MFSM 2000)**
 - **IMF Government Finance Statistics Manual (GFSM 2015)**
- **European System of Accounts (2010)**
- ... complemented by **legal definitions, compilation guides and manuals**, at international and European level

Some euro area aggregates are a simple sum of (harmonised) national data, but some are not.

Ex: • The euro area balance of payments excludes transactions between euro area countries, which are included in the national balances of payments



Decision-making bodies for ESCB statistics



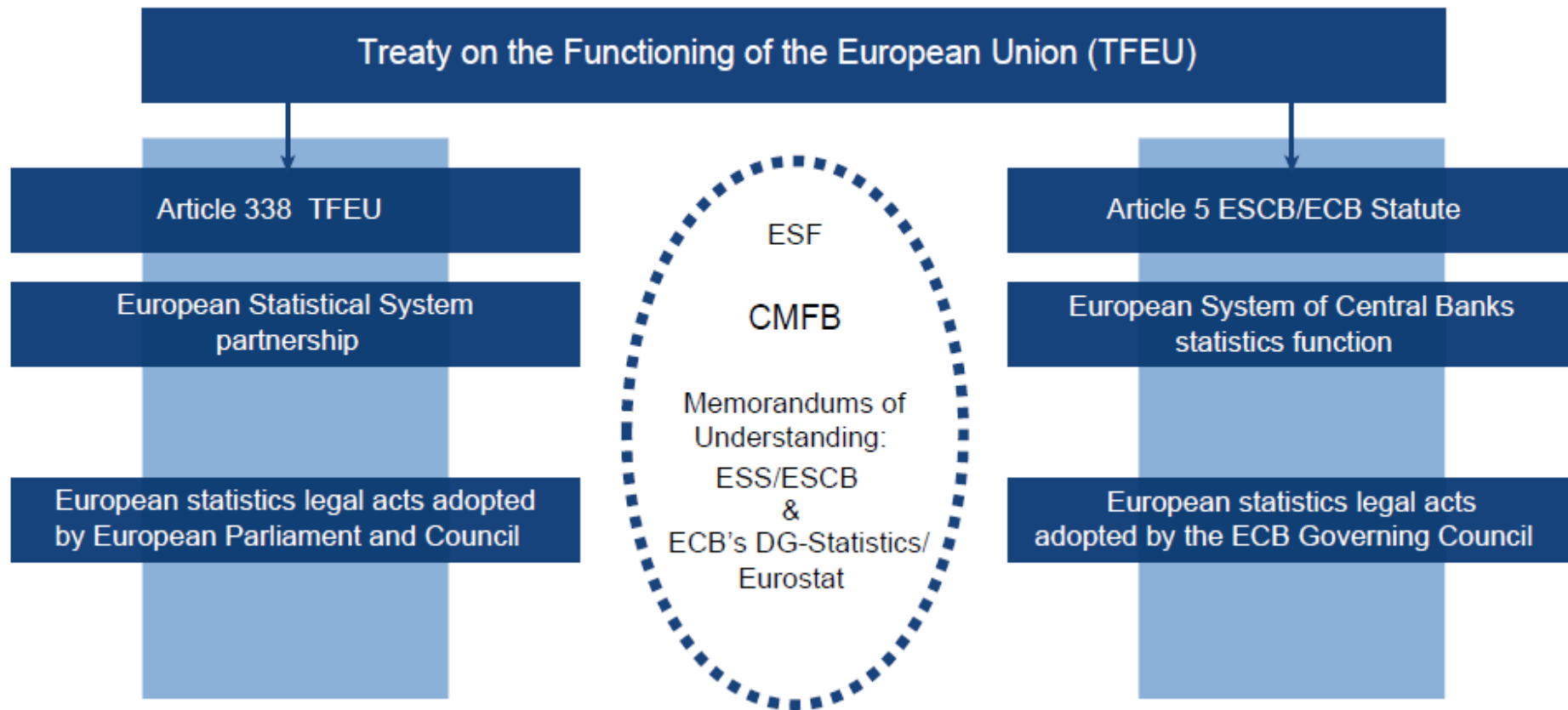
ESCB Statistics Committee (STC) and working groups are at the core of the production of ESCB statistics

Content

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The “evidence “ for policy-making
- 3 The legal basis for ESCB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS**
- 6 The main ESCB statistical products
- 7 The current new data projects and challenges
- 8 Accessibility of ESCB statistics

The cooperation of the ESCB with the ESS

Two pillars for European economic and financial statistics



Governance of European statistics (I)

Memorandum of Understanding sets out respective responsibilities

European Statistical System

Eurostat



European
Commission

eurostat



National Statistical Institutes

Prime responsibility

- **General economic statistics** (e.g. GDP, HICP, other price statistics, labour market, other short-term statistics, foreign trade)
- **Other statistics** (e.g. agriculture)

European System of Central Banks

ECB



National Central Banks

Prime responsibility

- **Monetary, financial institutions and financial markets statistics**
- **International reserves**
- **Effective exchange rates**
- **Quarterly financial accounts**

Shared responsibility

- **Balance of payments**
- **International investment position**
- **Non-financial sector accounts**

Examples of cross-cutting and transversal issues between ESS and ESCB:

- I. Quality of statistics underlying the **MIP scoreboard**
- II. Monitoring and promotion of the **Legal Entity Identifier (LEI)** and/or other common identifiers in statistical production
- III. **Globalisation-** Coordination of a consistent response to international initiatives

Content

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The “evidence “ for policy-making
- 3 The legal basis for ECB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products**
- 7 The current new data projects and challenges
- 8 Accessibility of ESCB statistics

Monetary, financial institutions and financial markets statistics

- Monetary aggregates and counterparts, minimum reserves
- Interest rates, securities issues
- Investment funds
- Insurance corporations
- Pension funds (in preparation)
- Financial Vehicle corporations
- Financial soundness indicators, financial integration indicators
- Consolidated Banking Data
- Financial market statistics - yield curves, PDFs etc.

Euro area balance of payments and international investment position - including international reserves

- Monthly balance of payments
- Quarterly breakdown by main partners
- International investment position (balance sheet) and link to balance of payments

The geographic breakdown of the euro area current and capital account, IIP and trade in goods is published in the ECB Economic Bulletin

Nominal and real effective exchange rates of the euro

Euro area accounts

- ✓ Complete description of **euro area economic and financial developments**: whole economy and by institutional sector (financial and non-financial corporations, private households and government, rest of the world)
- ✓ Integrates **monetary, financial and economic statistics**
- ✓ Consistent statistical basis for quarterly economic and monetary analysis, with **integrated non-financial accounts and financial accounts**
- ✓ Enables analysis of interrelations between key macro-economic policy indicators (e.g. household saving rate, indebtedness and changes in wealth; entrepreneurial income of non-financial corporations; government debt)

Supervisory statistics

They cover several aspects of banks directly supervised by ECB Banking Supervision , including:

- balance sheet composition
- profitability
- capital adequacy
- asset quality
- funding conditions

And are crucial to supervisors' understanding of a bank's risks and vulnerabilities and to monitoring their compliance with regulatory standards.

Aggregate data support the analysis of **macroprudential** developments and, when broken down by classification and by country, strengthen the transparency and accountability of ECB Banking Supervision.

- ✓ **Council Regulation 1096/2010: The ECB has to provide statistical support to the European Systemic Risk Board (ESRB)**
- ✓ **Main sources of data for the ESRB are:**
 - ✓ Data exchange with the **European Supervisory Authorities (EBA, ESMA, EIOPA)**
 - ✓ Statistical support from the **ECB/ESCB**
 - ✓ **Commercial data providers** and other datasets
 - ✓ **Ad-hoc surveys**
- ✓ **ECB, STC and its working groups involved actively in several workstreams**
- ✓ **Examples: identify main datasets for the ESRB; setting up the White Book; help shaping the data flows between the ESCB and the European System of Financial Supervisors**

Interlinkages

- Composite indicator of systemic stress (CISS)
- Average systemic risk contribution of individual institution to overall risk using CoVar (EU banking syst.)

Profitability & Solvency

- EU large banks: Leverage ratios

Liquidity & Funding

- Bank liabilities structure

Credit risk

- Households debt-to-gross disposable income
- Real estate comm. property, market size over GDP

Macro risk

- Domestic credit-to-GDP ratio
- Actual and forecasted GDP growth

Market risk

- Global risk aversion indicator
- Price/earning ratio

- 1 The functions of the ECB/Eurosystem/ESCB
- 2 The “evidence “ for policy-making
- 3 The legal basis for ECB statistics
- 4 The statistical production process for ESCB statistics
- 5 The cooperation of the ESCB with the ESS
- 6 The main ESCB statistical products
- 7 The current new data projects and challenges
- 8 Accessibility of ESCB statistics

Responding to challenges



Increasing demands

More detailed data

- Country data
- Micro-databases
- Distributional data

Facing constraints

- Reporting burden
- Confidentiality
- Compiler's resources

Operation

- ☐ **Centralised Securities Database (CSDB)**
- ☐ **Securities Holdings Statistics (SHS)**
- ☐ **Money Market Statistical Reporting (MMSR)**
- ☐ **Register of Institutions and Affiliates (RIAD)**
- ☐ **Individual banks' balance sheet data**
- ☐ **Individual banks' interest rate data**
- ☐ **Small and Medium Enterprises (SME) Access to Finance**
- ☐ **Eurosystem survey on household finance & consumption**

Development

- ☐ **Analytical granular credit and credit risk dataset (loan-by-loan)**
- ☐ **Securities Holding statistics for Large Banking Groups under ECB direct supervision (LBGs)**
- ☐ **Extension of Register of Institutions and Affiliates (RIAD) to include NFCs**
- ☐ **Eurosystem Bank Overnight Rate (EBOR)**

Money market statistical reporting (MMSR)



individual transactions relating to various segments of the money market

- **When?** started 1 April 2016
- **What?** daily operations on a transaction-by-transaction basis in **four market segments**: secured, unsecured, FX swaps and OIS. Some aggregates for unsecured market are already published.
- **Who?** 52 largest banks in the euro area
- **Why?** information on the **transmission mechanism** of monetary policy decisions;
provide information to market participants on **market functioning**
- **Legal basis?** ECB Regulation ECB/2014/48

Micro-data on a “security-by-security” basis

Centralised Securities Database
(CSDB)

-
Who issues what?

Securities Holdings Statistics
Database (SHSDB)

-
Who holds what?

Example:

Issuer A issues a **security B** which is held by **Holder C** at the **amount of X EUR**

Issuer reference data

Issuer identifier

Issuer name

Issuer sector

Issuer country

...

Instrument reference data

Instr. Identifier

Instrument type

Amount outstanding

Price

...

Holder reference data

Sector

Country

...

...

...

Holding data

Holding amount

Amount type

Valuation type

Consolidation flag

...

August 2016: Amended Regulation, Guideline and Recommendation

- **ECB legal acts:**
Regulation ECB/2016/22 amending Regulation ECB/2012/24;
Guideline ECB/2016/23 amending Guideline ECB/2013/7; and
Recommendation ECB/2016/24 on the data quality management.
- Collection of **additional accounting and credit risk attributes** from banking groups with a view to better analysing risks and exposures within the financial system and enhancing the ECB's analysis of the monetary policy transmission mechanism.
- **Extension the list of reporting banking groups** to cover all significant groups directly supervised by the ECB.

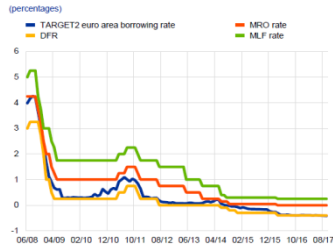
Analytical Credit Dataset (AnaCredit)



Multipurpose set of harmonised granular data on credit and credit risk

- **When?** to be implemented in a stepwise approach;
the first stage to be introduced in September 2018
- **What?** bank loans (and guarantees) to legal entities above €25,000
e.g. *non-financial corporations* (not households, at least in the first stage!)
- **Who?** all banks in the euro area
- **For whom?** central banking purposes e.g. monetary policy, research, risk management, macro-prudential supervision... and statistics
- **Legal basis?** ECB Regulation 2016/13

New unsecured overnight interest rate



The ECB decided to take action as benchmark rates have an important anchoring role for contracts in financial markets

- **When?**

Press release on 21 September 2017

Produced before 2020

- **What?**

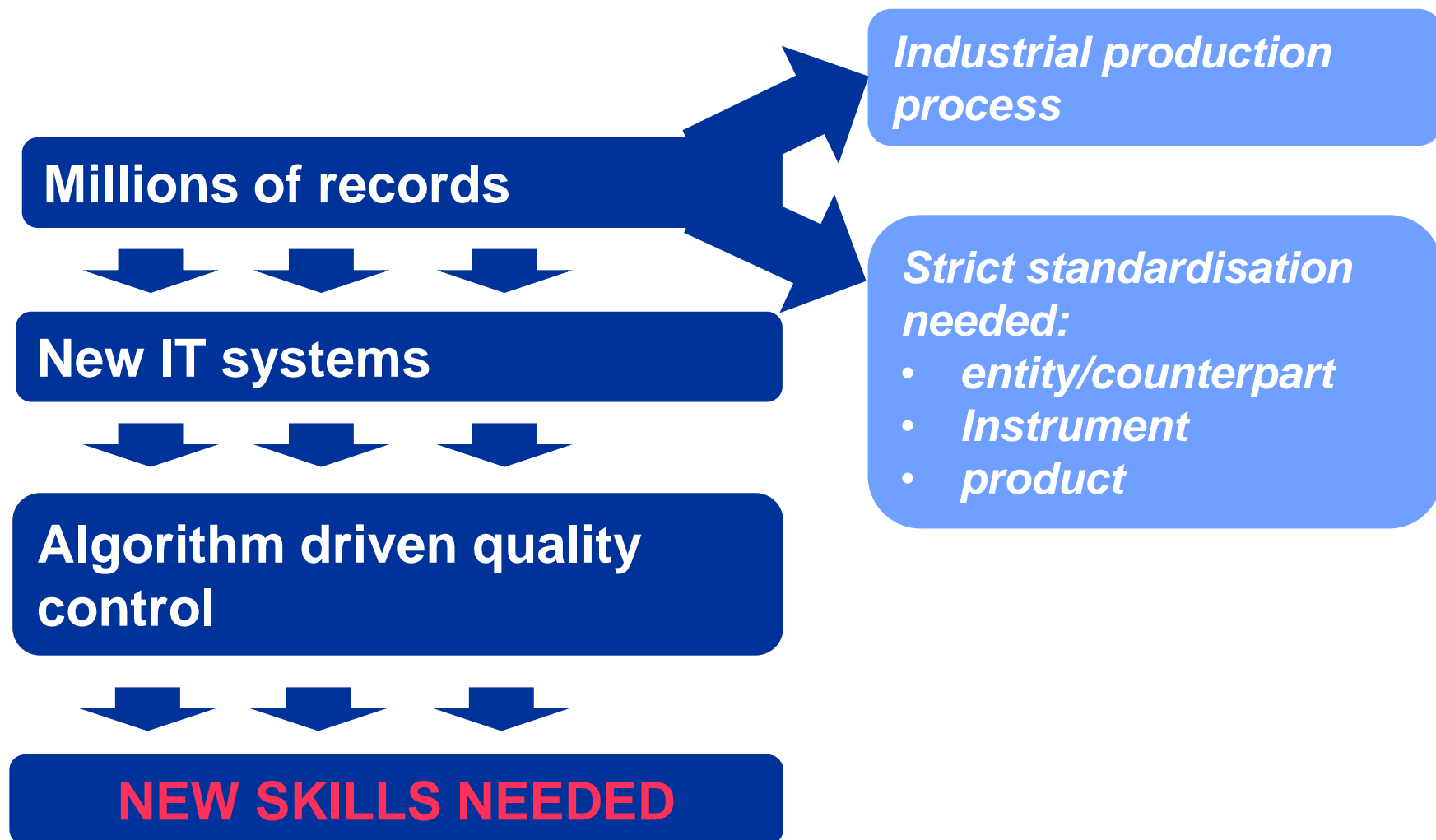
The interest rate would be based on MMSR data

The interest rate would complement existing benchmark rates produced by the private sector and serve as a backstop reference rate

- **How?**

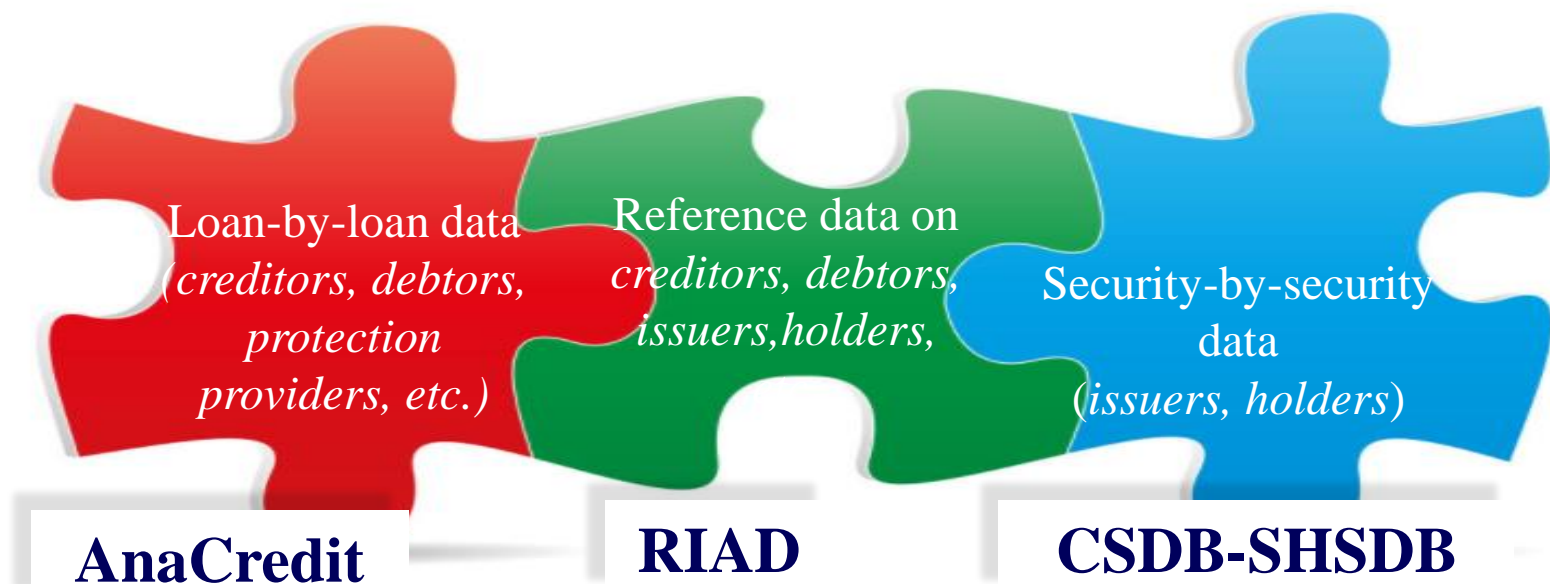
The high-level features of this new overnight interest rate will be communicated to market participants in the course of 2018 following a public consultation

Challenges of large granular data



Need to integrate - granular - data

- The increased availability of *granular data* at the ECB requires a ***holistic approach*** to data reporting
 - ***Consistency:*** same concepts and definitions across domains
 - ***Interoperability:*** possibility to combine granular information from different frameworks (e.g. securities, loans) to assess total exposures



The ECB provides its **statistics free of charge** as a public good



Statistical Data Warehouse

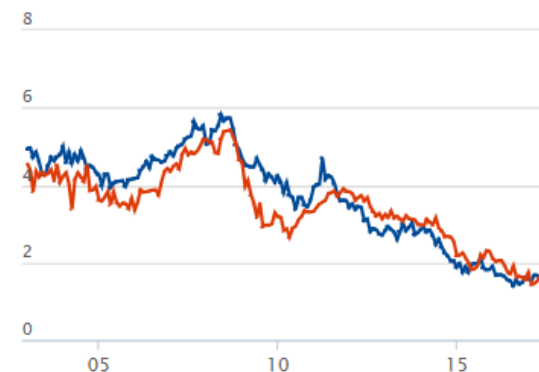


Latest key figures for the [euro area](#) - (click boxes to go to the section pages)

Inflation rate ↓ 1.4% December 2017	GDP volume growth ↓ 0.6% Q3 2017	Euro effective exchange rate ↑ 98.94 10 January 2018	Household debt ratio ↑ 94.2% Q2 2017
Monetary aggregate M3 ↓ 4.9% November 2017	Current account balance ↓ €30.8 bln October 2017	10-year AAA government bond yield ↑ 0.53% 09 January 2018	Cost of borrowing for house purchase ↓ 1.87% November 2017

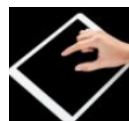


Large loans; x > 5Y



France

Germany



Tablet app
ECBstatsApp -
Android version
ECBstatsApp - iOS
version

Publications – Statistics Paper Series



No. 26
22 November 2017

Quality enhancements in Government Finance Statistics since the introduction of the euro - Econometric evidence

[Maurer, Henri, Keweloh, Sascha](#)

+ Abstract

 ENGLISH

No. 25
9 November 2017

Supervisory and statistical granular data modelling at the Croatian National Bank

[Bašić, Ines](#)

+ Abstract

 ENGLISH

No. 24
7 August 2017

Spontaneous recognition: an unnecessary control on data access?

[Ritchie, Felix](#)

+ Abstract

 ENGLISH

No. 23
23 May 2017

Estimating non-financial assets by institutional sector for the euro area

[Hofmeister, Zlatina, der Helm, Ruben van](#)

Thank you for your attention!
Happy to answer questions!

aurel.schubert@ecb.europa.eu