



EUROPEAN CENTRAL BANK

EUROSYSTEM

ECB-RESTRICTED

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ESCB statistics and the main challenges ahead

ECB Central Banking Seminar
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All views expressed are those of the speaker and not necessarily those of the ECB.

Outline

1 Policy relevance of central bank statistics

2 Framework for European statistics

3 E(S)CB statistics and cooperation

4 Data developments

5 Challenges

6 Concluding remarks

1. Policy relevance of central bank statistics (1/2)

ESCB statistics...



1. Policy relevance of central bank statistics (2/2)

Statistical support to the **Single Supervisory Mechanism (SSM)**



EUROPEAN CENTRAL BANK
BANKING SUPERVISION

Statistical support to the **European Systemic Risk Board (ESRB)**



ESRB
European Systemic Risk Board
European System of Financial Supervision

ESCB contributes to **G-20 initiatives** to close global data gaps



ESCB statistics are also a **public good**



1 Increased policy relevance of central bank statistics

2 Framework for European statistics

3 E(S)CB statistics and cooperation

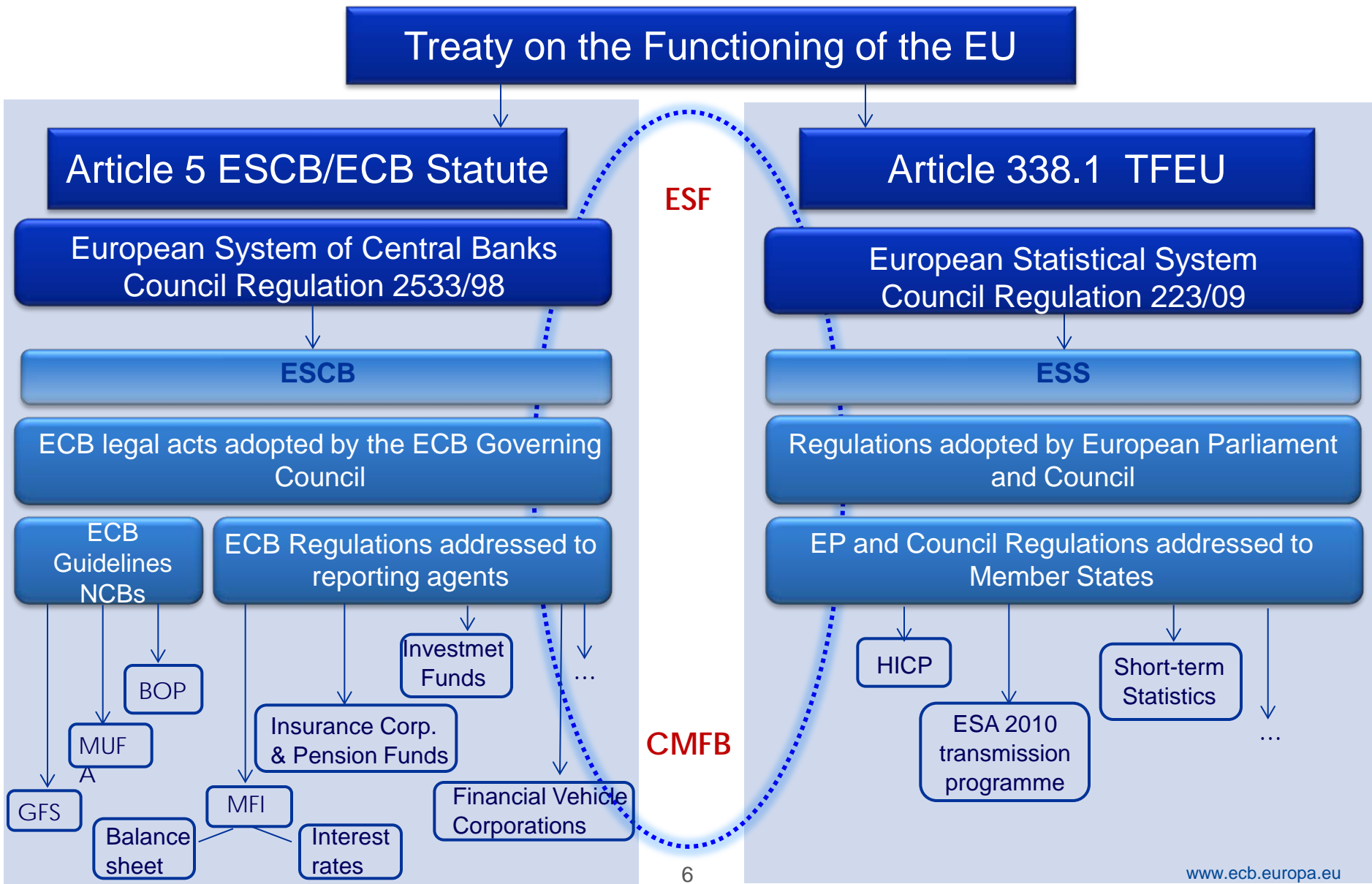
4 Data developments

5 Challenges

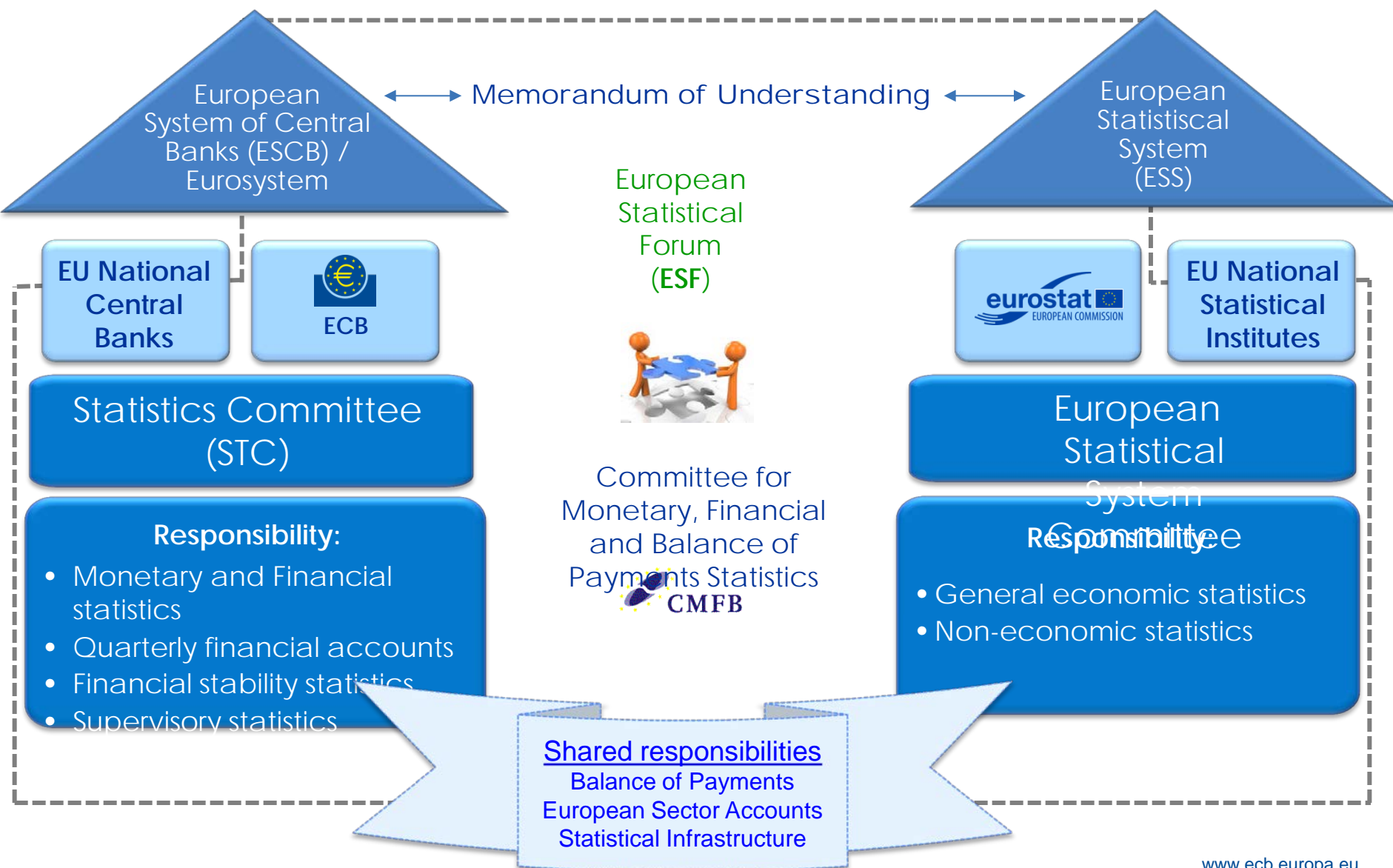
6 Concluding remarks

2. Framework for European statistics (1/4)

Two statistical systems cooperating under separate legal frameworks

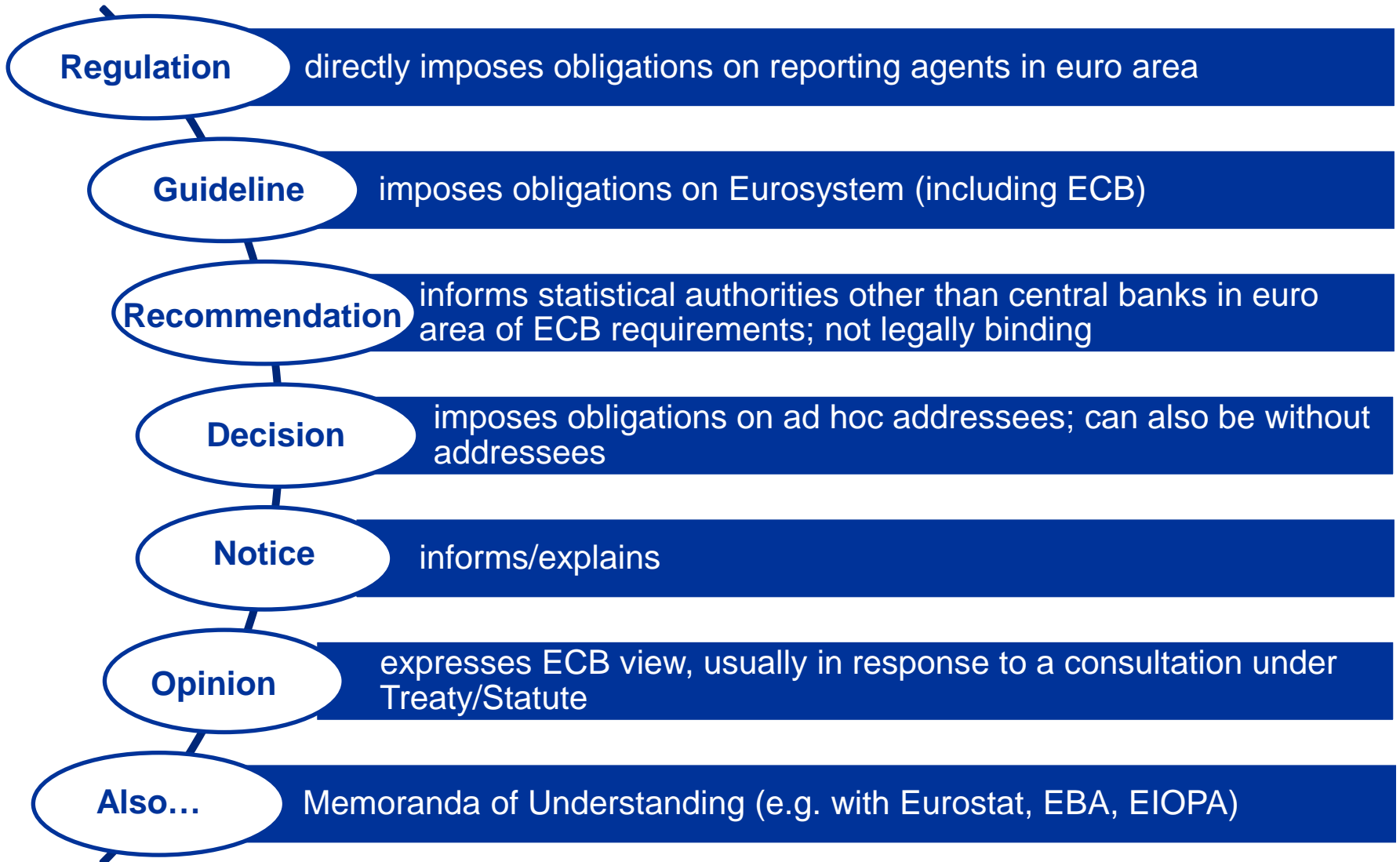


2. Framework for European statistics (2/4)



2. Framework for European statistics (3/4)

Legal Framework of ECB Statistics



2. Framework for European statistics (4/4)

Principles governing International Statistical Activities

UN Fundamental Principles of Official Statistics



IMF Data Quality Assessment Framework



Statistics Quality Framework



ECB Statistics Quality Framework



Code of Practice

Quality reports

Institutional environment:

- Principle 1: Professional independence
- Principle 2 : Mandate for data collection
- Principle 3: Adequacy of resources
- Principle 4: Commitment to quality
- Principle 5: Statistical confidentiality
- Principle 6: Impartiality and objectivity

Statistical processes

- Principle 7: Sound methodology
- Principle 8: Appropriate statistical procedures
- Principle 9: Minimisation of the reporting burden
- Principle 10: Cost-effectiveness

Merits and Costs Procedure

High output quality

- Principle 11: Relevance
- Principle 12: Accuracy and reliability (including stability)
- Principle 13: Timeliness (including punctuality)
- Principle 14: Consistency and comparability
- Principle 15: Accessibility and clarity

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3. E(S)CB statistics and cooperation (1/3)

E(S)CB is a big producer and a big user of statistics

- own produced statistics



- 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

3. E(S)CB statistics and cooperation (2/3)

International cooperation

- **The ECB** cooperates closely with **Eurostat**, the three **European Supervisory Authorities** – EBA, EIOPA and ESMA – the **national authorities** and **reporting agents** and with other international institutions, such as BIS, IMF, OECD, UN, ...
- **The ECB DG-S and Commission/Eurostat** are members of the Inter-Agency Group on Economic and Financial Statistics (IAG)

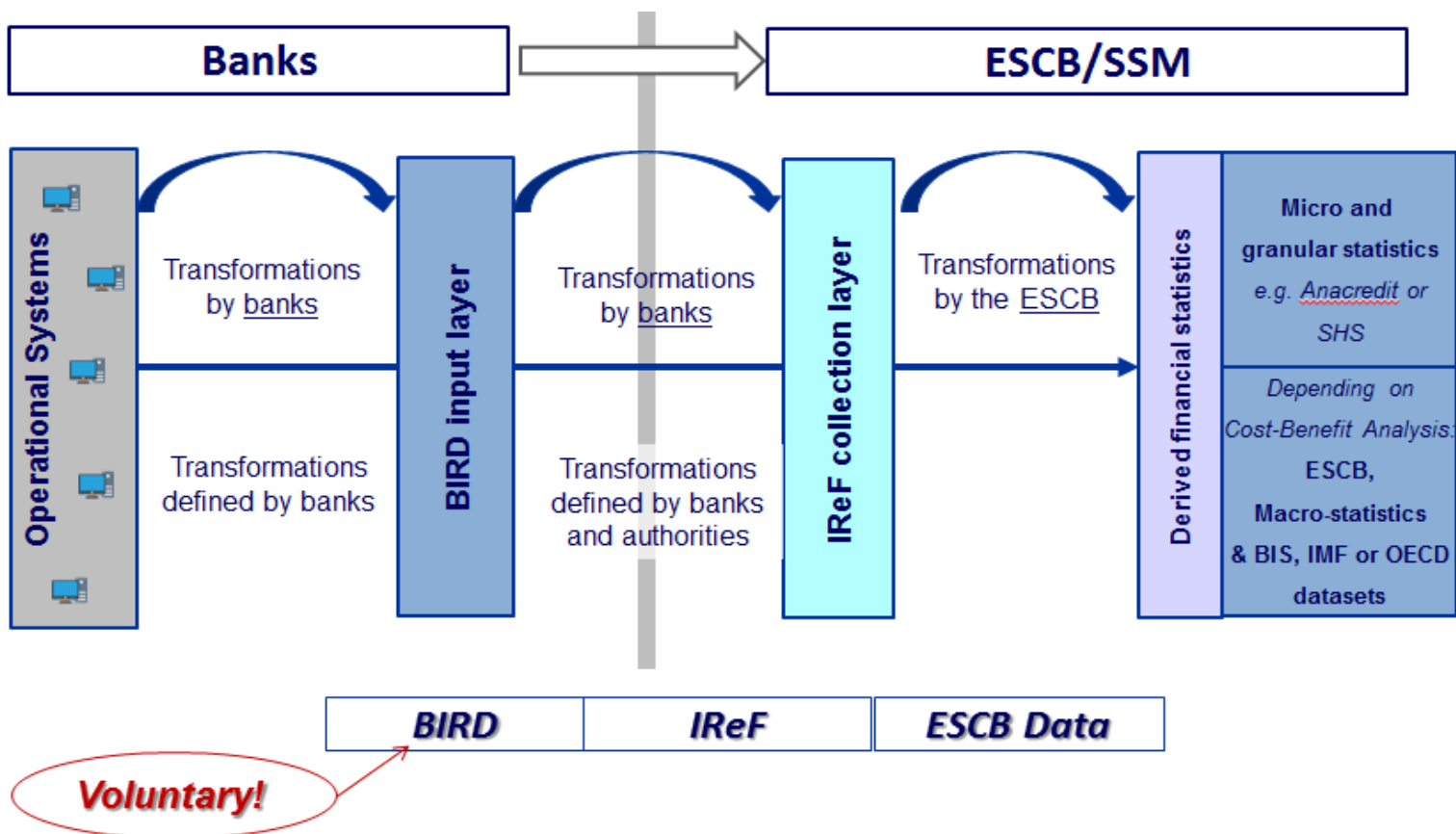


- **Dialogue with the banking industry** and **participation in** high level **international forums** to promote ESCB leadership on statistical and supervisory standards.

3. E(S)CB statistics and cooperation (3/3)

ESCB strategy to keep supporting policy making while minimising the reporting burden for banks

- Engaging in a regular **dialogue with the banking industry** ([link](#))
- Standardising and integrating existing frameworks for **banks' reporting** across **domains** and across **countries**



1 Increased policy relevance of central bank statistics

2 Framework for European statistics

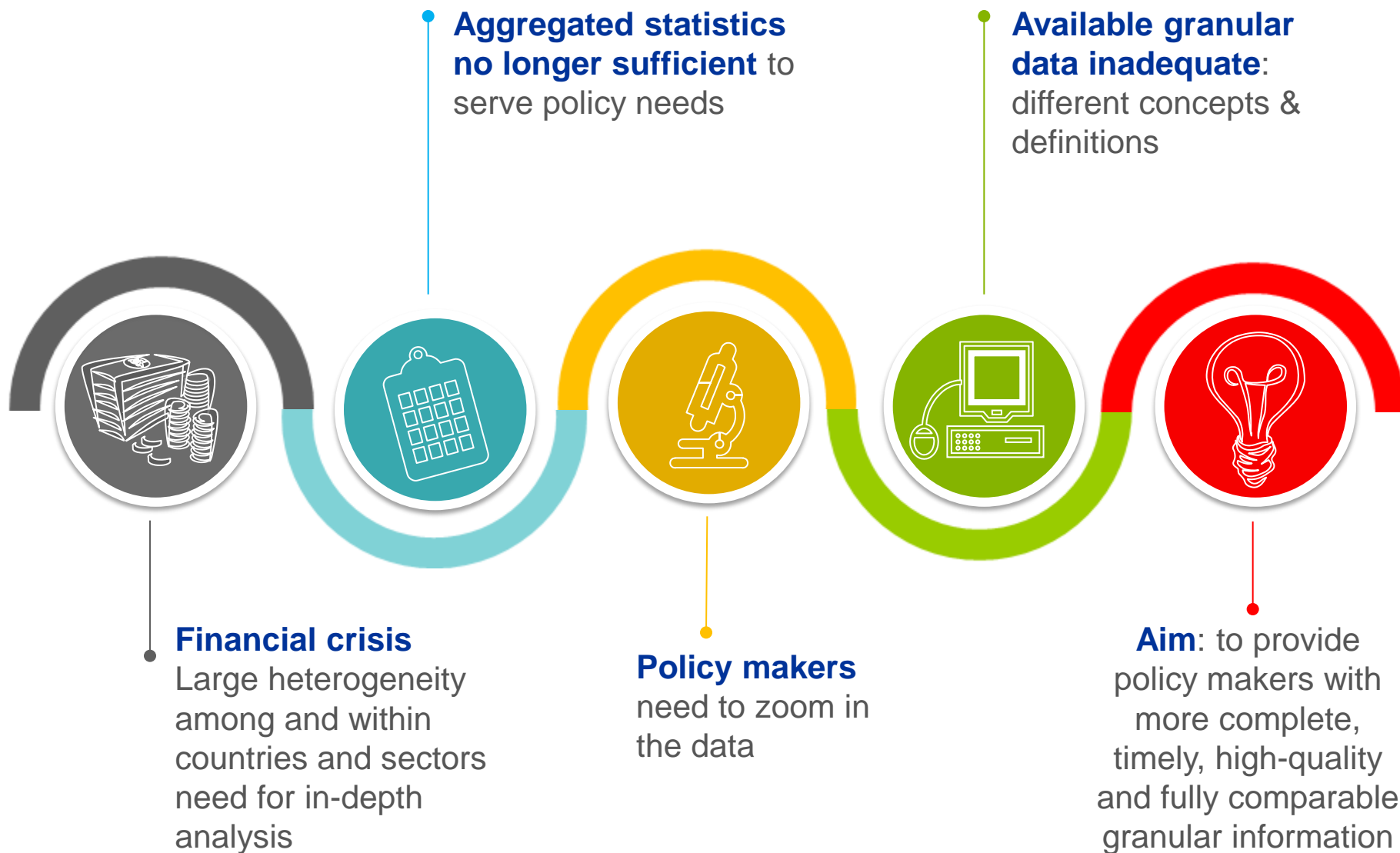
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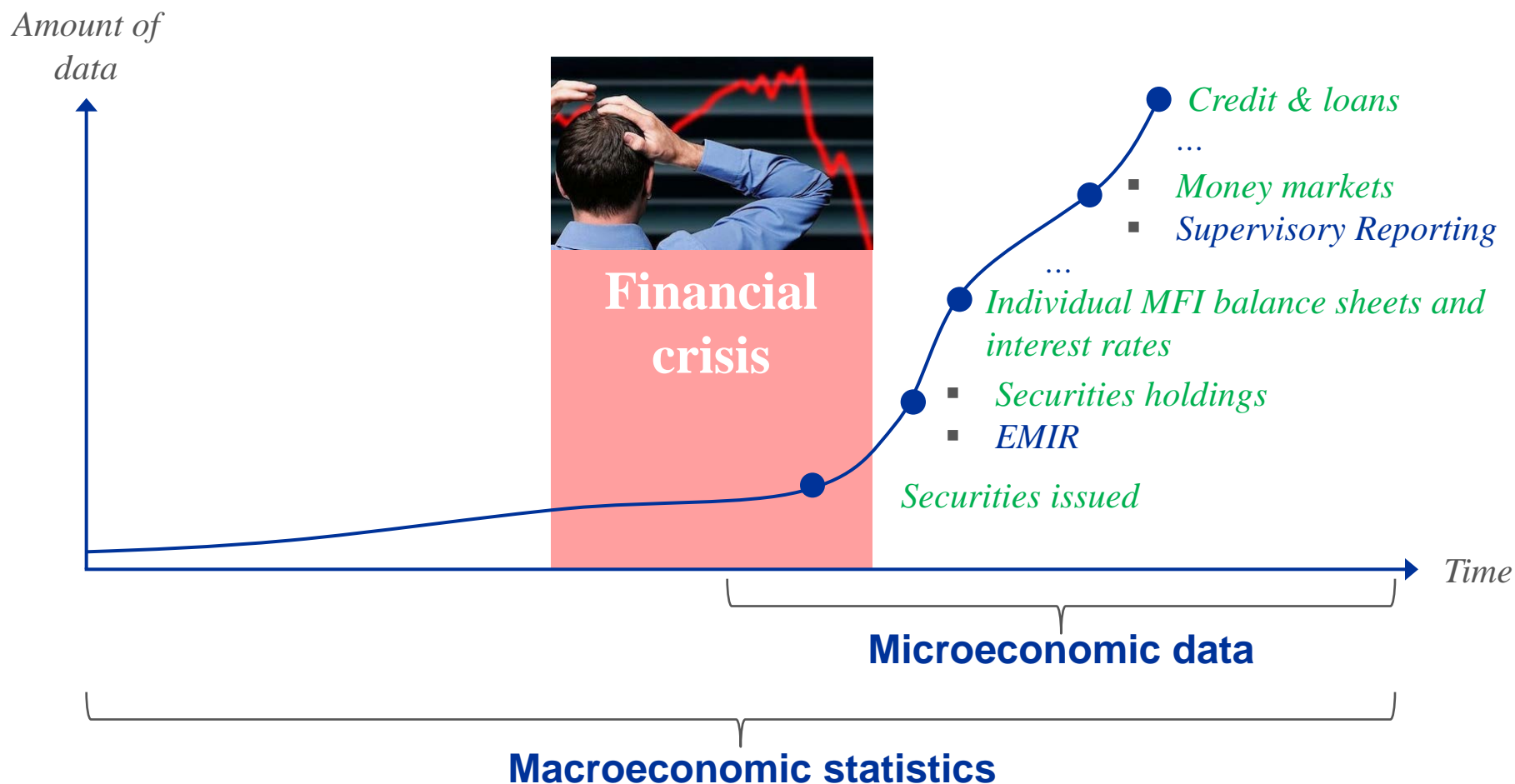
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4. Data developments (1/6)

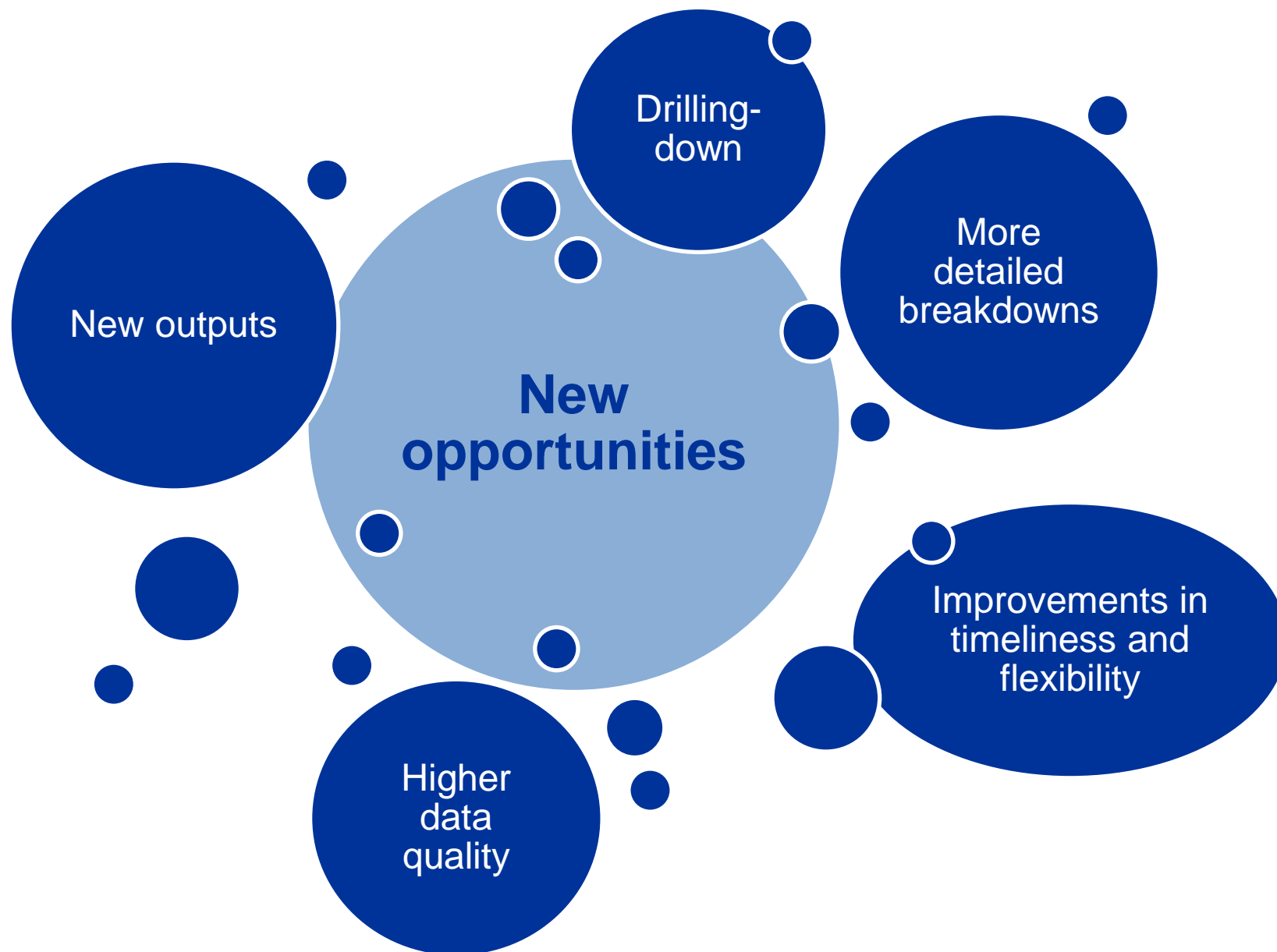


4. Data developments (2/6)

Exponentially increasing volume of data



4. Data developments (3/6)



4. Data developments: RIAD, AnaCredit, CSDB&SHSDB (4/6)

An example:



Multipurpose set of harmonised granular data on credit and credit risk covering exposures of euro area credit institutions vis-à-vis non-financial corporations and other legal entities

CSDB: central multi-source database covering reference information on individual securities and ratings

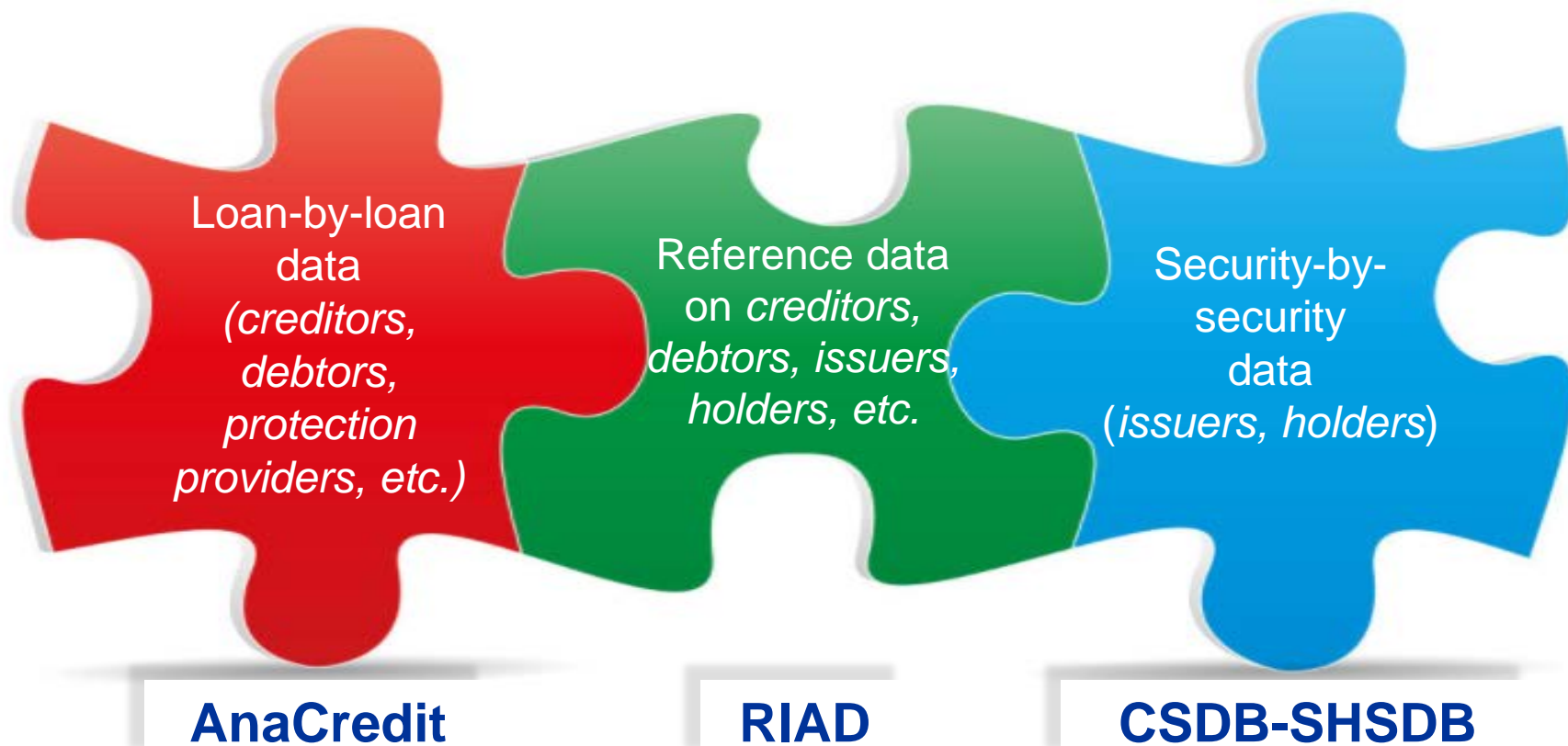
SHSDB: central database covering information on holdings of securities at granular level by country/sector and banking groups

RIAD: ESCB shared dataset of reference data on individual entities and the relationship between them.

- **it facilitates the integration of the CSDB, the SHSDB and AnaCredit and other datasets**
- **a very important source of information for the users → e.g. it enables the ESCB to derive, inter alia, consolidated banking exposures and borrowers' indebtedness on a consolidated basis**

4. Data developments: interoperability of micro-datasets (5/6)

An example:



4. Data developments: interoperability of micro-datasets (6/6)

An example:

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

...

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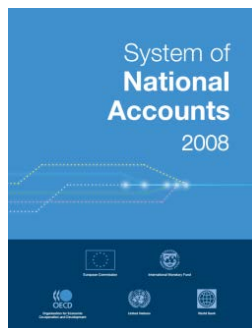
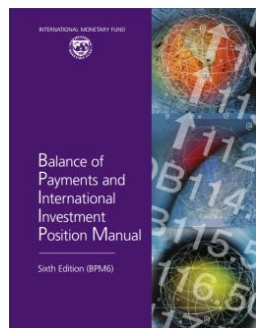
5. Key challenges for ESCB statistics (1/4)

- Keep **statistics fit for purpose** in view of changing economic and financial environment and increasing complexity
- Continue to produce **high-quality statistics** as an ESCB **team effort** in close cooperation of relevant parties, managing the increase of granular information
- Balance between **merits** of new statistics and **costs** of reporting and production
- Deal with **high-volumes** of structured and unstructured data ensuring
 - *Consistency* of concepts and definitions across domains (e.g. granular securities and loans data) and *reconciliation* with existing data sources and bridging conceptual differences (e.g. BSI and AnaCredit)
 - *Interoperability*: possibility to combine granular information from different frameworks (e.g. securities, loans to assess total exposures) → use of reference and metadata, identifiers and registers
 - Overall *efficiency* in data management
- Ensure that **data confidentiality** is maintained, **with** appropriate level of data access and sharing

5. Key challenges for ESCB statistics (2/4)

Standardisation

ECB has an **active and influential role** on on-going developments



Links between **international statistical standards** (SNA, IMF BOPM, etc.) and **ISO data standards** (LEI, UTI, UPI, ISIN, CFI, etc.) need to be assessed and strengthened



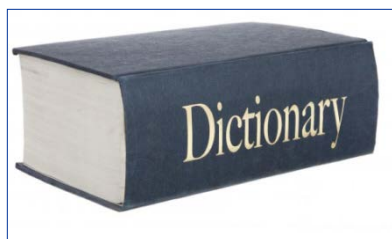
International cooperation and effort needed

5. Key challenges for ESCB statistics (3/4)

Integration

Increasing need for **integrated and inter-linked statistical frameworks** with higher complexity of technical and methodological issues

Three key elements:



Banks' Integrated Reporting Dictionary (BIRD)

- Common language with the industry
- Logical description of data at the banks and transformation rules to produce existing reports



ECB Single Data Dictionary (SDD)

- Common language within the ECB
- Methodological and semantic integration of existing European reporting frameworks



Integrated Reporting Framework (IReF)

- “One report” replacing the multiple, overlapping reports
- Focus on ESCB statistical requirements

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6. Concluding remarks

To conclude...

1

Challenges to meet **users needs** are always present in a dynamic world

2

Advancements in technology provide an opportunity to be more agile in responding to data needs

3

Standardisation efforts, European and international **cooperation** are crucial to make it work

Thanks you for your attention



Questions?

Annex

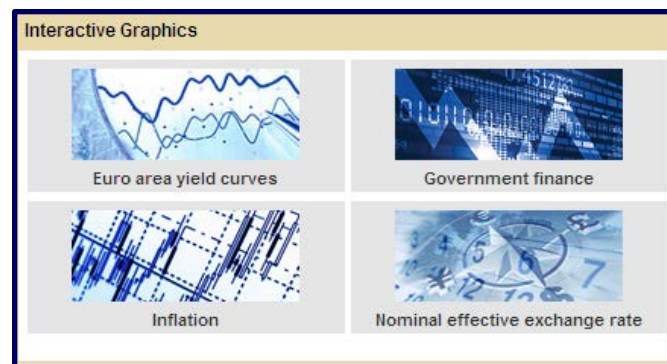
Annex I - ECB`s statistical datasets

- Monetary developments in the euro area ([ECB website](#))
- Euro area securities issues statistics ([ECB website](#))
- Euro area balance of payments ([ECB website](#))
- Euro area economic and financial developments by institutional sector ([ECB website](#))
- Euro area investment fund statistics ([ECB website](#))
- Euro area insurance corporation and pension fund statistics ([ECB website](#))
- Euro area insurance corporation statistics ([ECB website](#))
- Euro area financial vehicle corporation statistics ([ECB website](#))
- Euro area bank interest rate statistics ([ECB website](#))
- Euro money market statistics ([ECB website](#))
- Payment instruments and systems ([ECB website](#))

Annex II - Communication

How to access ECB statistics?

- ECB website
 - Press releases
 - Interactive graphics
 - Publications



- Statistical Data Warehouse: <http://sdw.ecb.europa.eu>



- “Our statistics” website: <https://www.euro-area-statistics.org/>

- New ECB statistical tablet app

