# EUROPEAN
## DATAWAREHOUSE

EUROPEAN
DATAWAREHOUSE

# PORTUGUESE SECURITISATION EVENT

## 17 NOVEMBER 2025

# AGENDA

## WELCOME & INTRODUCTION
MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

## PORTUGAL: CREDIT OUTLOOK
JAVIER ROUILLET, MORNINGSTAR DBRS

## LATEST DEVELOPMENTS IN EDW PRODUCTS AND DATA QUALITY
MANUEL LOPES, EUROPEAN DATAWAREHOUSE

## FIRESIDE CHAT: SECURITISATION REGULATION REVIEW
MODERATOR: MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE
GONÇALO MARTINS, PLMJ
PEDRO CASSIANO SANTOS, VIEIRA DE ALMEIDA

## DEALDOX AND PRIVATE AREA SOLUTIONS
MARTIN KUHN, EUROPEAN DATAWAREHOUSE

## PANEL: LATEST DEVELOPMENTS IN PORTUGAL'S ABS MARKET
MODERATOR: MARTIN KUHN, EUROPEAN DATAWAREHOUSE
INÊS PONTE, BANCO SANTANDER
CARLOS CASTRO, MOODY'S

## SUSTAINABLE FINANCE: GAS AND ENGAGE FOR ESG
MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

## CLOSING REMARKS
MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

# AT TODAY'S EVENT

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**GONÇALO MARTINS**
PLMJ

**INÊS PONTE**
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**JAVIER ROUILLET**
MORNINGSTAR DBRS

# WELCOME & INTRODUCTION

## MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

# ECB – LATEST PUBLISHED OPINION

ECB-PUBLIC

EUROPEAN CENTRAL BANK

EUROSYSTEM

EN

# OPINION OF THE EUROPEAN CENTRAL BANK

**of 11 November 2025**

**on (a) a proposal for a regulation amending Regulation (EU) 2017/2402 laying down a general framework for securitisations and creating specific framework for simple, transparent and standardised securitisation, (b) a proposal for a regulation amending Regulation (EU) 575/2013 on prudential requirements for credit institutions as regards requirements for securitisation exposures, and (c) a draft proposal for a delegated regulation amending Delegated Regulation (EU) 2015/61 as regards the eligibility conditions for securitisations in the liquidity buffer of credit institutions**

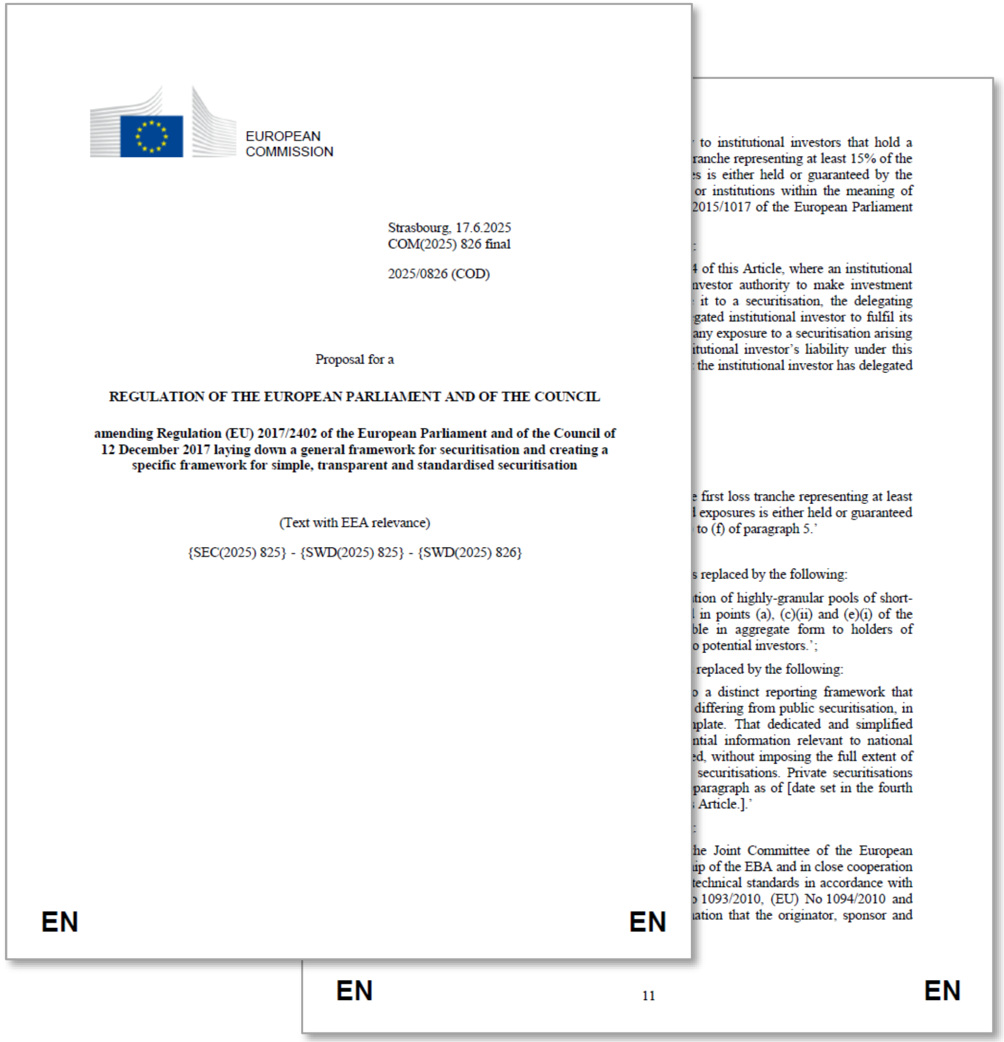
**(CON/2025/35)**

# EU COMMISSION PROPOSAL – NEXT STEPS

# EU COMMISSION LEGISLATIVE PROPOSAL

## HIGHLIGHTS ON DISCLOSURE

- On 17 June 2025, the EU Commission published its long-awaited proposal to review the EU's securitisation framework. It proposed:
    - New wider definition of ‘public’ securitisation (article 2)
        - A prospectus must be drawn up for that securitisation
        - The notes are traded at a trading venue in the EU
        - The terms are non-negotiable among parties
- Aggregated disclosure for highly granular portfolios
- Streamlined reporting templates for public securitisations (at least 35% reduction in data fields)
- Simplified reporting template for private securitisations
- Mandatory reporting to a repository for all securitisations (public and private)


EUROPEAN COMMISSION

Strasbourg, 17.6.2025
COM(2025) 826 final

2025/0826 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation

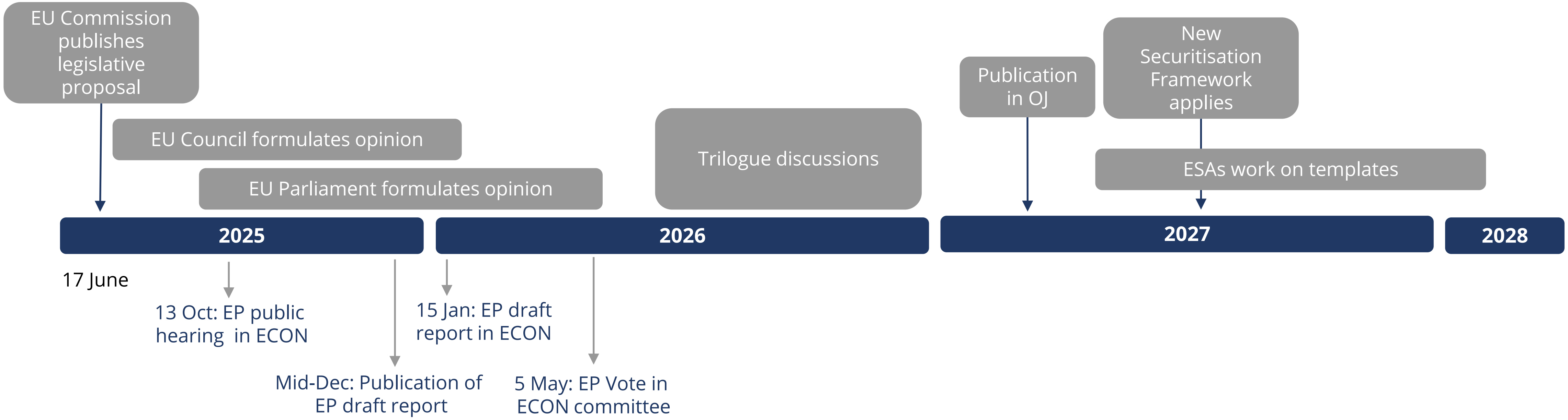
(Text with EEA relevance)

{SEC(2025) 825} - {SWD(2025) 825} - {SWD(2025) 826}

EN EN

# TENTATIVE TIMELINE FOR NEW SECURITISATION FRAMEWORK

## ASSUMED ADOPTION FROM 2027



# ABS REPORTING REQUIREMENTS ACROSS JURISDICTIONS

| LLD disclosures required? | EU + EEA | | UK | | USA | Australia |
|---|---|---|---|---|---|---|
| | ESMA | Eurosystem | FCA | BoE | | |
| **1. RMBS** | Yes | Yes | Yes | Yes | Yes, for securitisations in which the initial bona fide offer occurs on or after November 23, 2016 | Yes |
| **2. CMBS** | Yes | Yes | Yes | Yes | Yes, for securitisations in which the initial bona fide offer occurs on or after November 23, 2016 | Yes |
| **3. Covered Bonds** | No | No | Yes, for regulated covered bonds | Yes | Yes, for SEC registered covered bonds | No |
| **4. Corporate (SMEs)** | Yes | Yes | Yes | Yes | No | No |
| **5. Auto** | Yes | Yes | Yes | Yes | Yes, for securitisations in which the initial bona fide offer occurs on or after November 23, 2016 | No |
| **6. Consumer** | Yes | Yes | Yes | Yes | No | No |
| **7. Credit cards** | Yes | Yes | Yes | No | No | No |
| **8. Leasing** | Yes | Yes | Yes | Yes | Yes, for securitisations in which the initial bona fide offer occurs on or after November 23, 2016 | No |
| **9. NPEs (NPLs)** | Yes | Yes | Yes | Yes | No | No |
| **10. Esoteric*** | Yes | Yes | Yes | Yes | No | No |

* The esoteric template is used aplicable to underlying exposures that do not fall within any of the categories set out in points (a) to (g) of Commission Delegated Regulation (EU) 2020/1224; and the respective UK Securitisation Regulations 2024.

# EDW POSITION PAPER

- Following the publication of the EU Commission proposal on the revision of the securitisation framework the EDW management, the members of the Supervisory Board and the shareholder representatives jointly drafted a position paper on the EU Commission's proposal.
- The position paper was published on 23 September 2025.
- Complete paper is available on our website (insights - blogs)

# EUROPEAN DATAWAREHOUSE – GLOBAL FOOTPRINT

# EUROPEAN DATAWAREHOUSE ATTRACTS ISSUERS & INVESTORS FROM FOUR CONTINENTS

- European DataWarehouse (EDW) was **founded in 2012 to service securitisation issuers in the Euro area** or those seeking funding under the Eurosystem collateral framework.
- To continue servicing its UK clients post-Brexit EDW **established its subsidiary European DataWarehouse Ltd. in London/UK in 2018.**
- **In 2021 EDW was registered by ESMA and the FCA** to serve as Europe's securitisation repository in the EU as well as the UK.
- In **2023 issuers from Asia and Australia began using EDW** to provide the relevant documentation for EU/UK investors.
- In 2025 EDW opened a **branch office in Bangalore**, India to better address the increasing needs for IT support and technical solutions.
- In 2025 EDW welcomed its first US issuer, which chose to store relevant documentation for EU investors exclusively on the EDW platform.

# THE WORLD'S LARGEST ISSUER CHOOSES EUROPEAN DATAWAREHOUSE

- In Q2 2025 the Federal National Mortgage Association (FNMA or "**Fannie Mae**") decided to use **European DataWarehouse** to provide EU institutional investors with the resources on the Multifamily Connecticut Avenue Securities ("MCAS") to support their compliance with the EU Securitisation Regulation.
- Please reach out to the Fannie Mae Investor Help Line at +1-800-232-6643 or via the Capital Markets Contact Form ([https://capitalmarkets.fanniemae.com/form/main-contact-form](https://capitalmarkets.fanniemae.com/form/main-contact-form)) to be granted access.


Fannie Mae   Mortgage-Backed Securities   Credit Risk Transfer

Home / Credit Risk Transfer / Multifamily Credit Risk Transfer / Multifamily Connecticut Avenue Securities

## Resources for EU Investors (MCAS)

### Resources for EU Institutional Investors

This information is intended to provide institutional investors located in the European Union ("EU Institutional Investors") with resources to support their compliance with the EU Securitization Regulation (Regulation (EU) 2017/2402, effective January 1, 2019), referred to herein as the "Securitization Regulation"). Fannie Mae publishes monthly loan-level and deal-level data in European Securities and Markets Authority (ESMA) template formats, which are available on the European DataWarehouse site. Please reach out to the Fannie Mae Investor Help Line at 1-800-232-6643 or by e-mail to be granted access. Additionally, although Fannie Mae is not directly subject to the Securitization Regulation, this page also provides information regarding the obligations imposed on "originators".

# AUSTRALIAN ISSUER LIBERTY USES EUROPEAN DATAWAREHOUSE

**LIBERTY SERIES 2023-1 SME**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2023-1 SME
A$1,000,000,000
MORTGAGE BACKED SECURITIES

**LIBERTY SERIES 2023-4**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2023-4
A$1,250,000,000
MORTGAGE BACKED SECURITIES

**LIBERTY SERIES 2024-1 AUTO**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2024-1 Auto
A$850,000,000
ASSET BACKED SECURITIES

**LIBERTY SERIES 2024-1 SME**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2024-1 SME
A$900,000,000
MORTGAGE BACKED SECURITIES

**LIBERTY SERIES 2024-2**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2024-2
A$1,250,000,000
MORTGAGE BACKED SECURITIES

**LIBERTY SERIES 2025-1**
Liberty
LIBERTY FUNDING PTY LTD
in respect of the Liberty Series 2025-1
A$1,500,000,000
MORTGAGE BACKED SECURITIES

- Liberty Financial Pty Ltd. ("**Liberty**") is one of the top 5 non-bank lenders in Australia offering home, car, business, commercial, and personal loans.
- Liberty is a repeat issuer of securitisations (e.g. 7 new deals in 2022/2023 and 7 new deals in 2023/2024) and has chosen **European DataWarehouse** to provide EU & UK investors with the relevant documentation to comply with the Securitisation Regulation (EU)2017/2402 and UK Securitisation Framework.
- To be granted **access to the information** please contact Liberty Investor Enquiries at +61 3 8635 8888 or via email to alltreasury@liberty.com.au

# PORTUGAL: CREDIT OUTLOOK

## JAVIER ROUILLET, MORNINGSTAR DBRS

# Portugal Sovereign Outlook

## Lisbon

**Javier Rouillet**
Senior Vice President
Global Sovereign Ratings

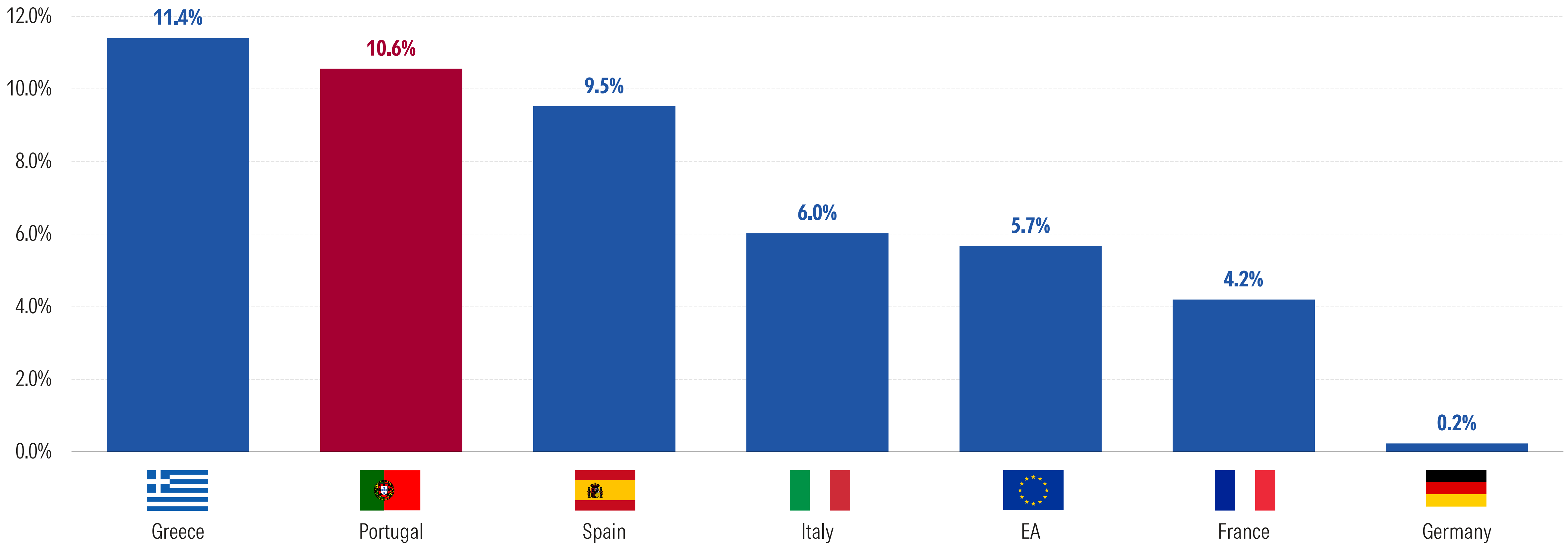
17 November 2025

# Agenda

1. Portugal—a Top EU Economic Performer
2. Growth Drivers
3. Risks and Structural Challenges

# Portuguese Economy Among Europe's Top Performers in Recent Years

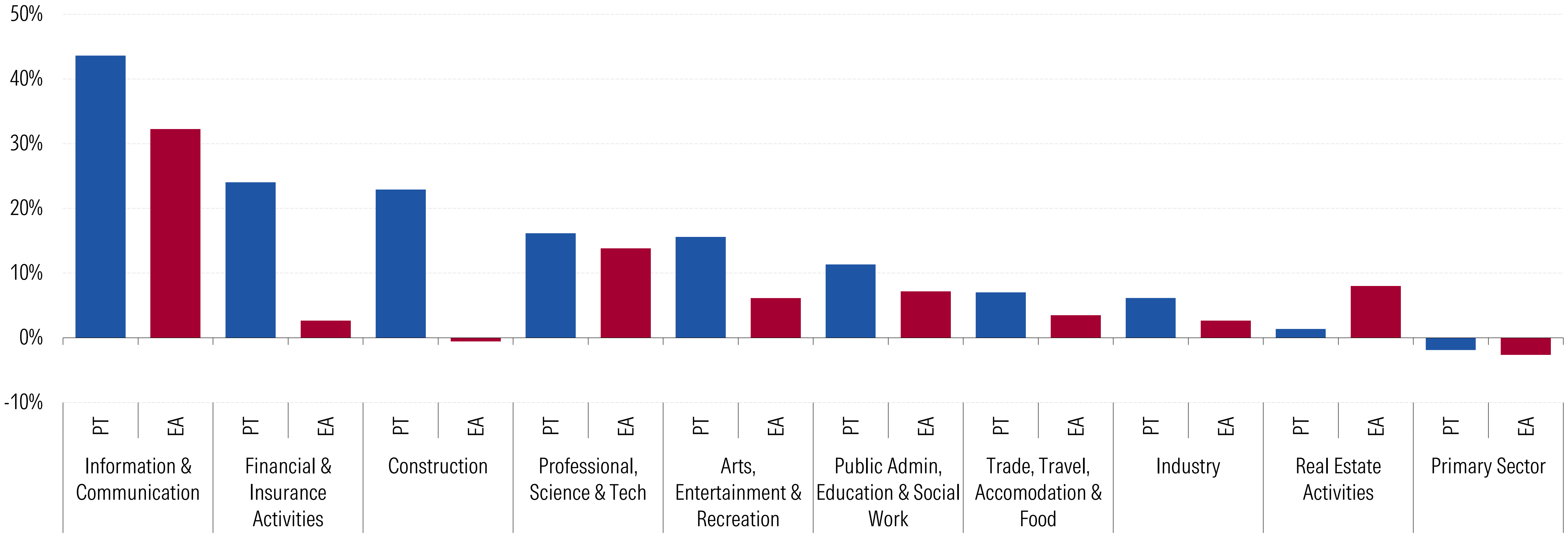
## **Portugal Cumulative Real GDP Growth** (2019 to 2025F)




Sources: IMF WEO, European Commission (DG ECFIN), Macrobond, Morningstar DBRS.

# Supply Side: Growth in Higher Value-Added Sectors

**Real Gross Value Added by Sector** (Growth From Q4 2019 to Q2 2025, Seasonally and Working Day Adjusted)

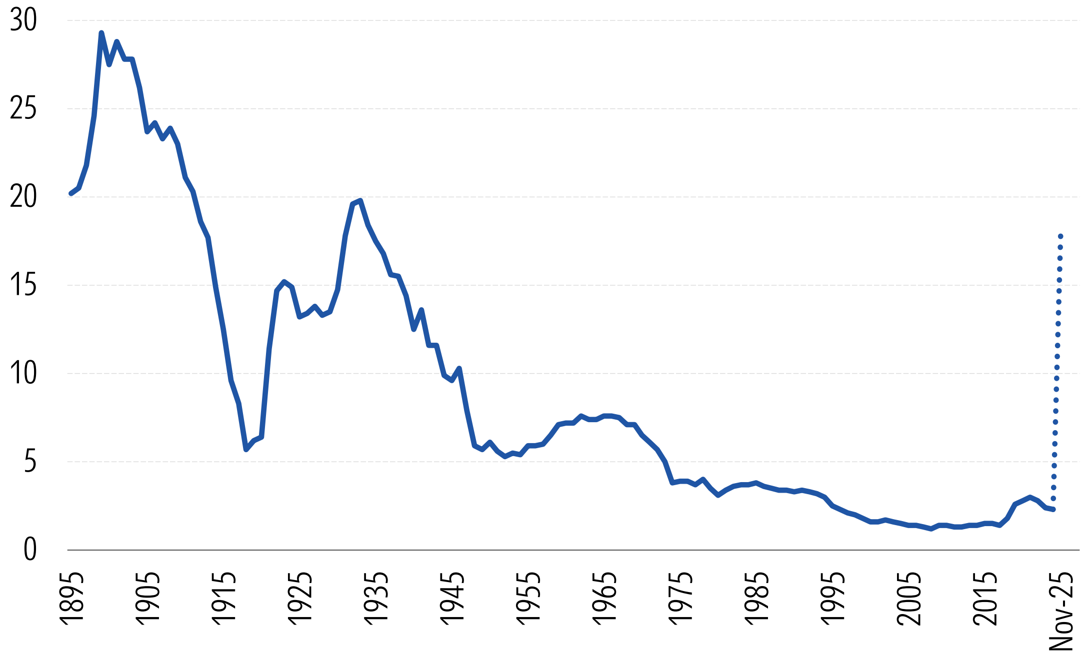




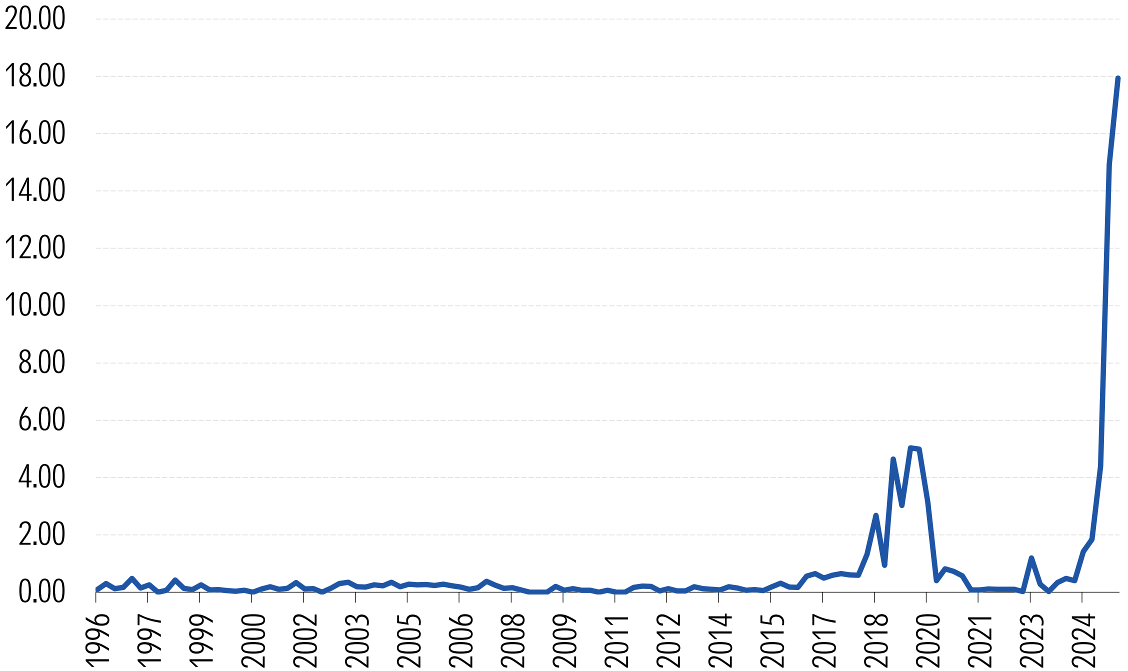

Sources: Eurostat, Macrobond, Morningstar DBRS. Note: PT – Portugal, EA- Euro Area.

# U.S. Tariffs Shock Raised Global Uncertainty

## US: Annual Effective Tariff Rate (%)



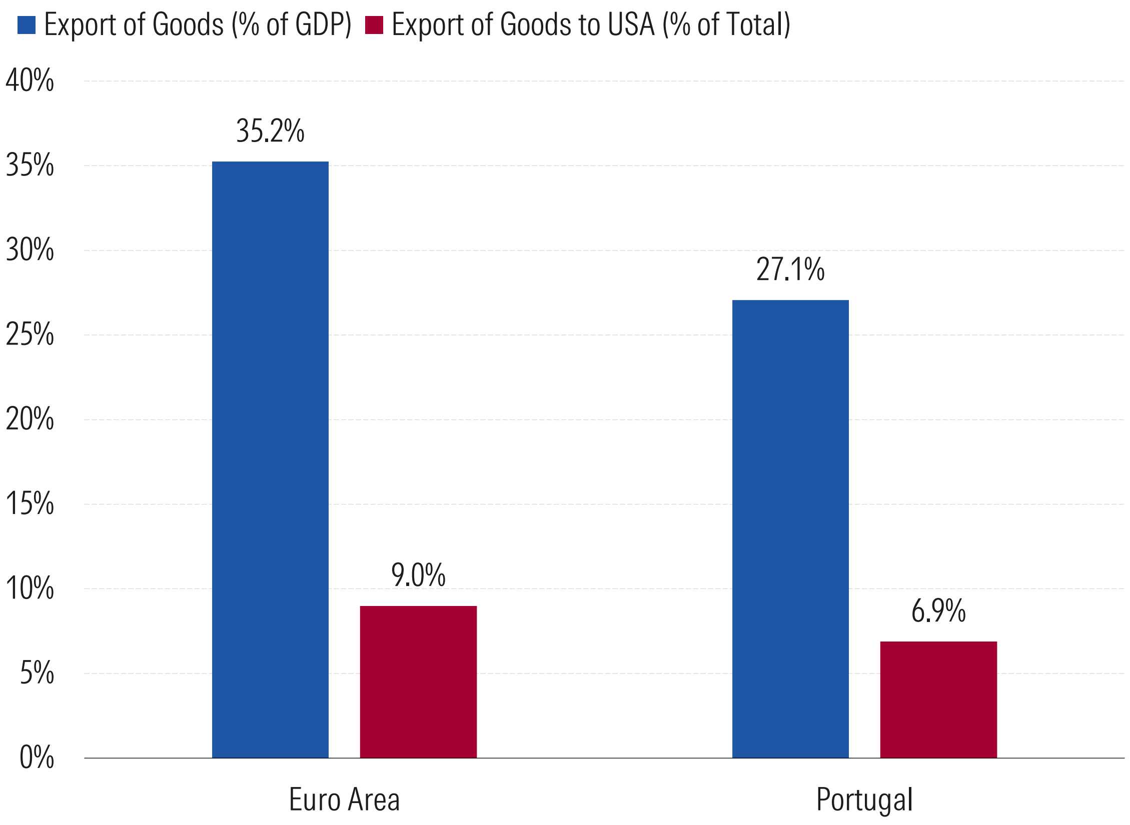

## World Trade Uncertainty Index



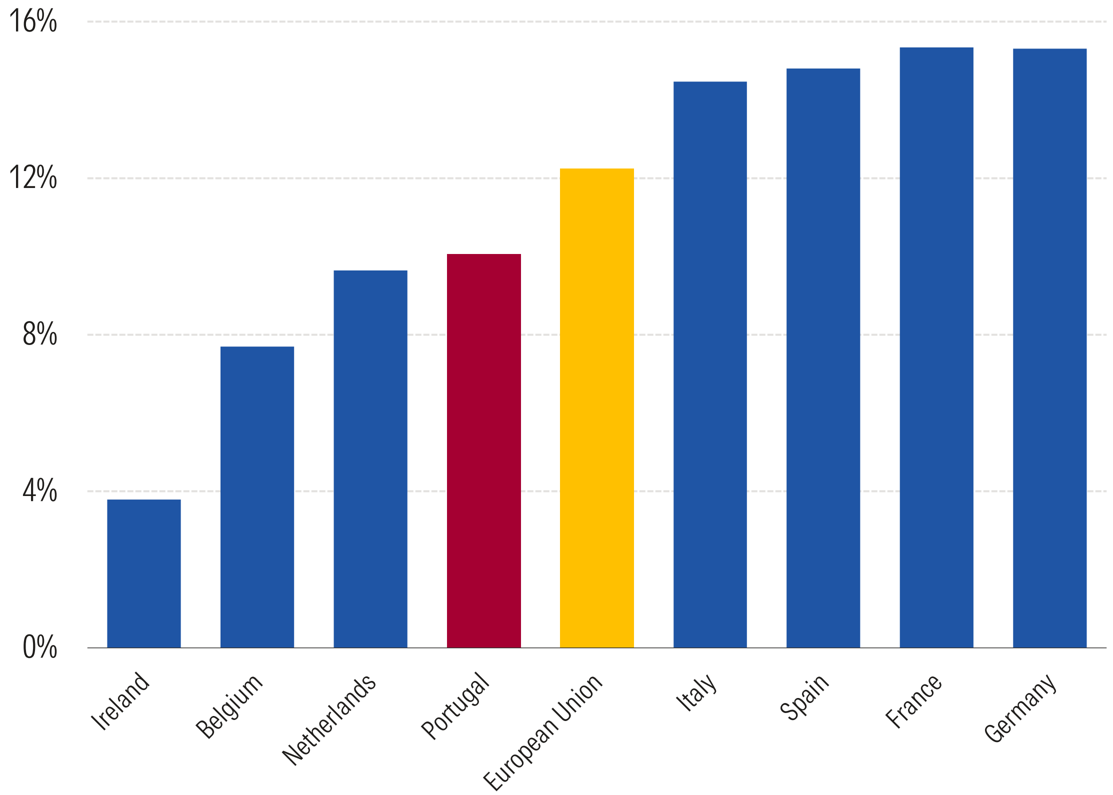

Sources: U.S. International Trade Commission, Office of Analysis and Research Service; Yale Budget Lab; Macrobond; Morningstar DBRS.

# Portugal is Less Exposed to U.S. Tariffs than the European Average

## Portugal Less Exposed to Goods Exports




## U.S. Effective Tariff Rate (as of Aug. 7, 2025)

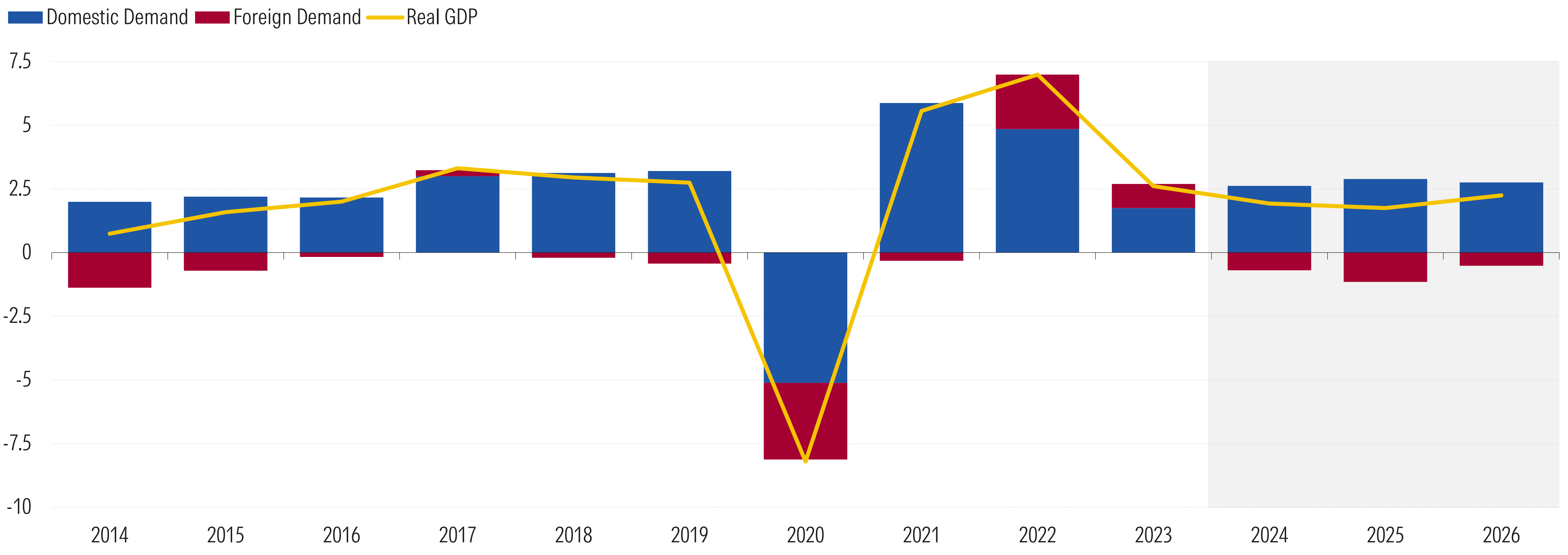





Sources: IMF, Center for Global Development, Macrobond, Morningstar DBRS.

# Portuguese Economy: Contributions to Growth

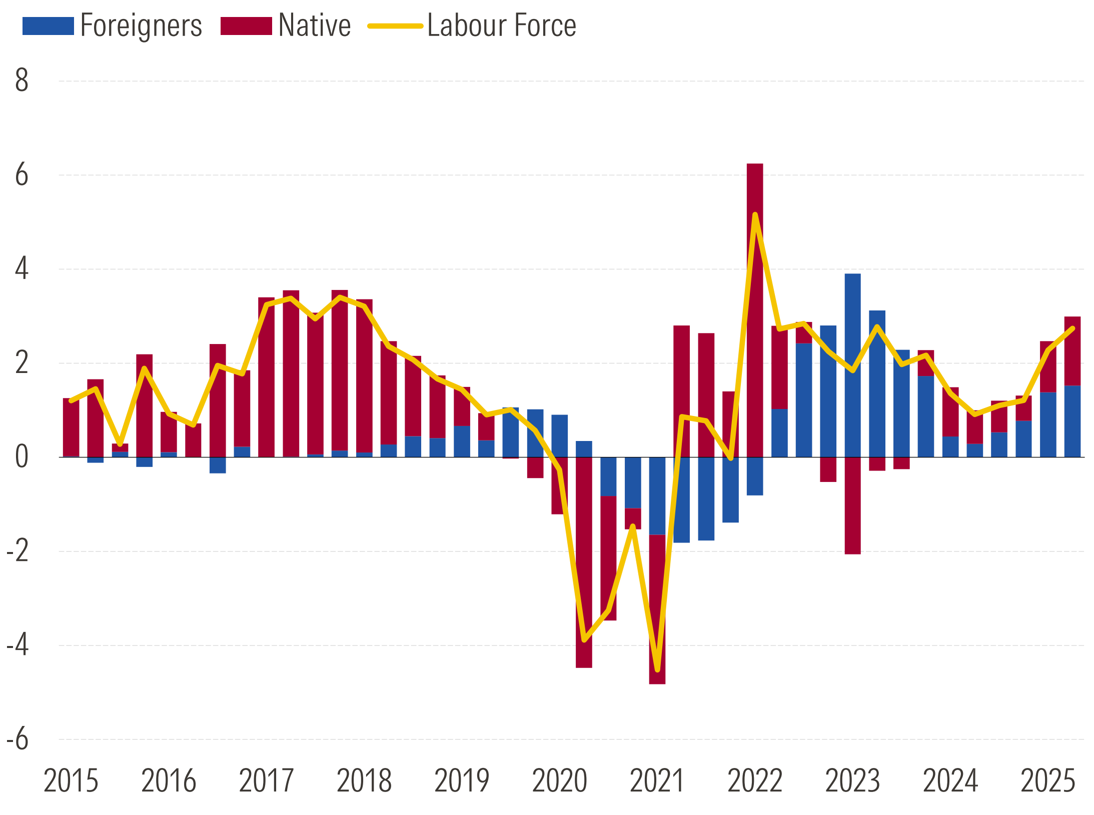
## Portugal Real GDP Growth Contributions



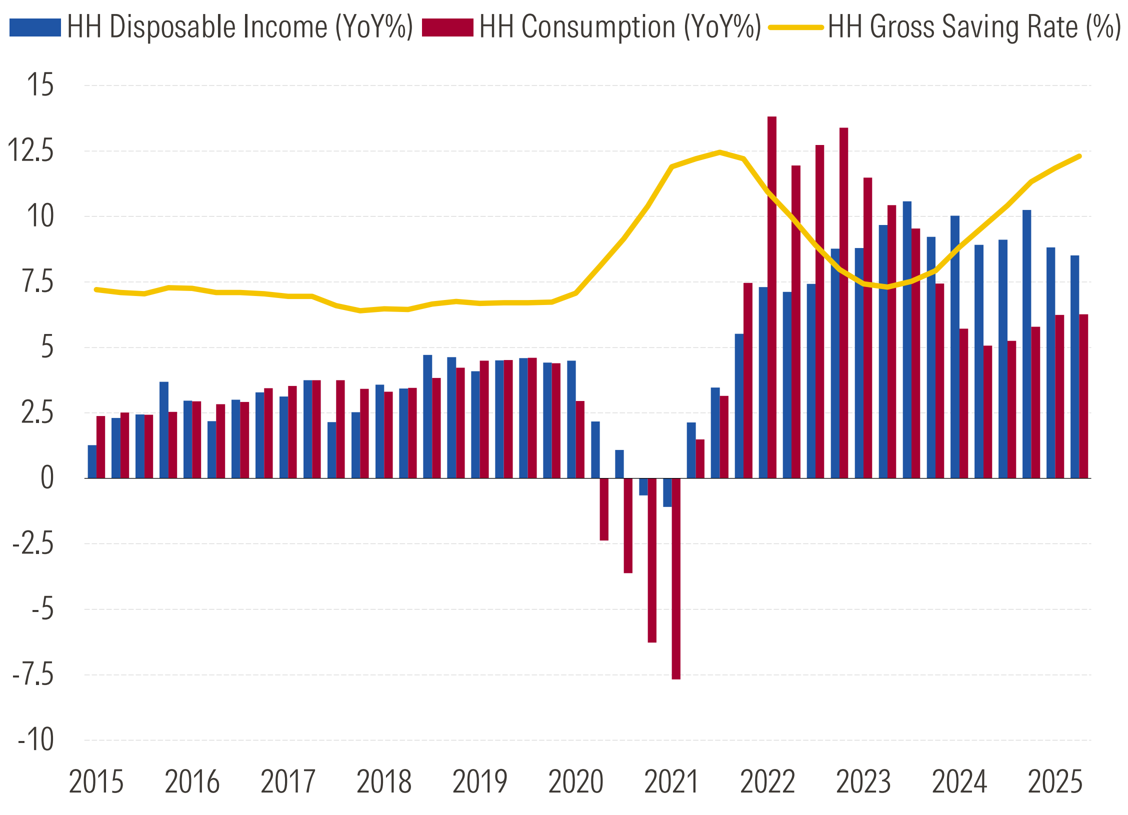

Sources: European Commission (DG ECFIN), Macrobond, Morningstar DBRS.

# Households Purchasing Power Remains Supportive of Growth

## **Contribution to Employment Growth** (YOY %)




## **Households Income, Consumption, and Savings**

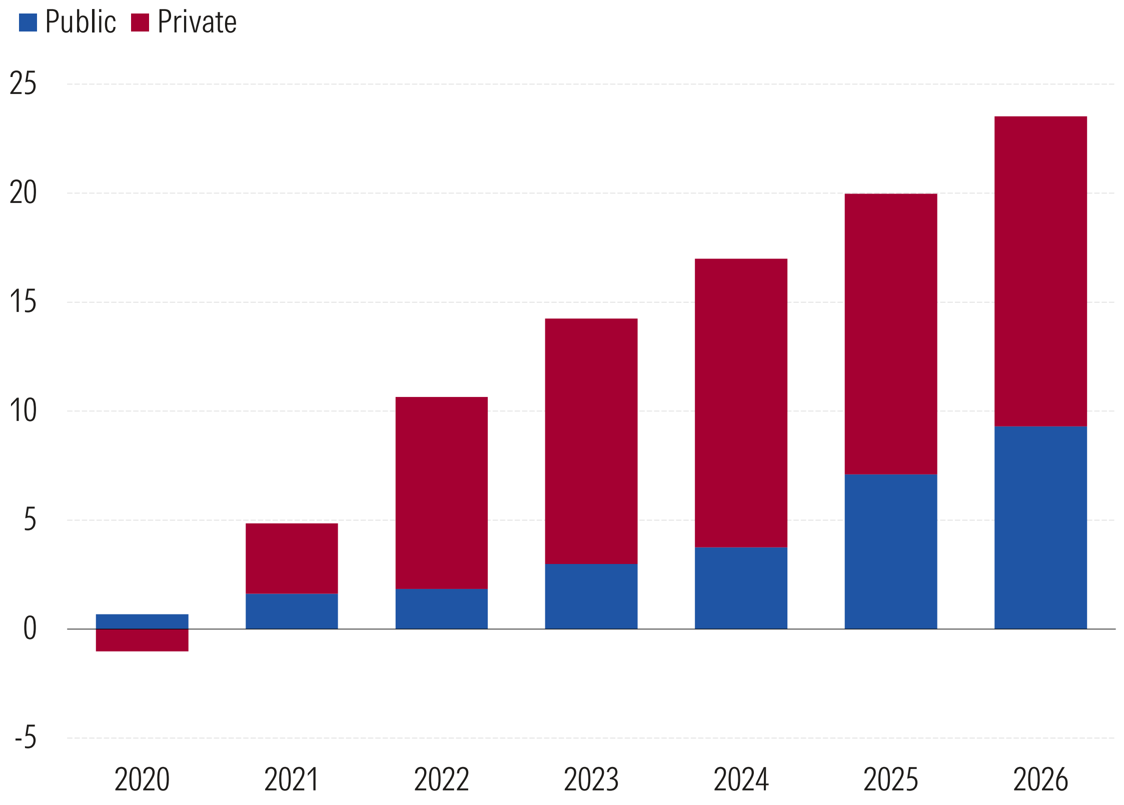




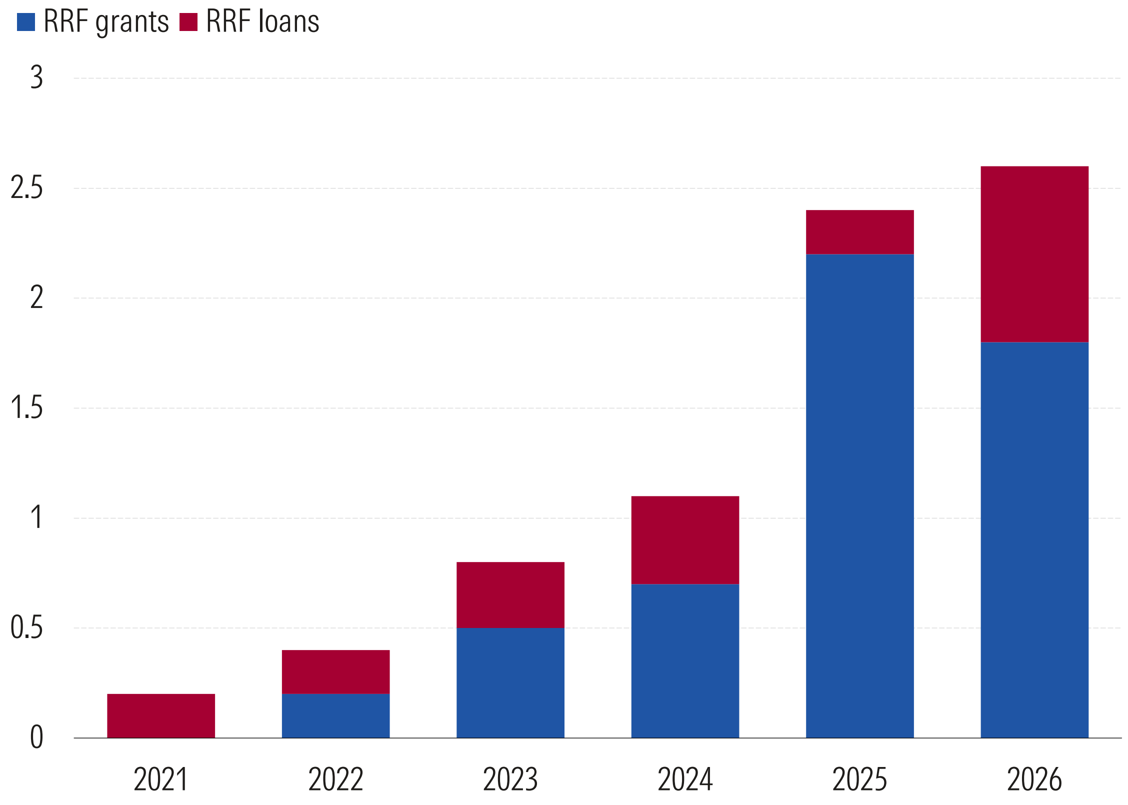

Sources: Eurostat, INE, Macrobond, Morningstar DBRS.

# RRF Funds Spurring Real Investments

## **Portugal's Investment Cumulative Growth Since 2019** (EUR billion)




## **Portugal's Planned Recovery and Resilience Facility Funds** (% of GDP)

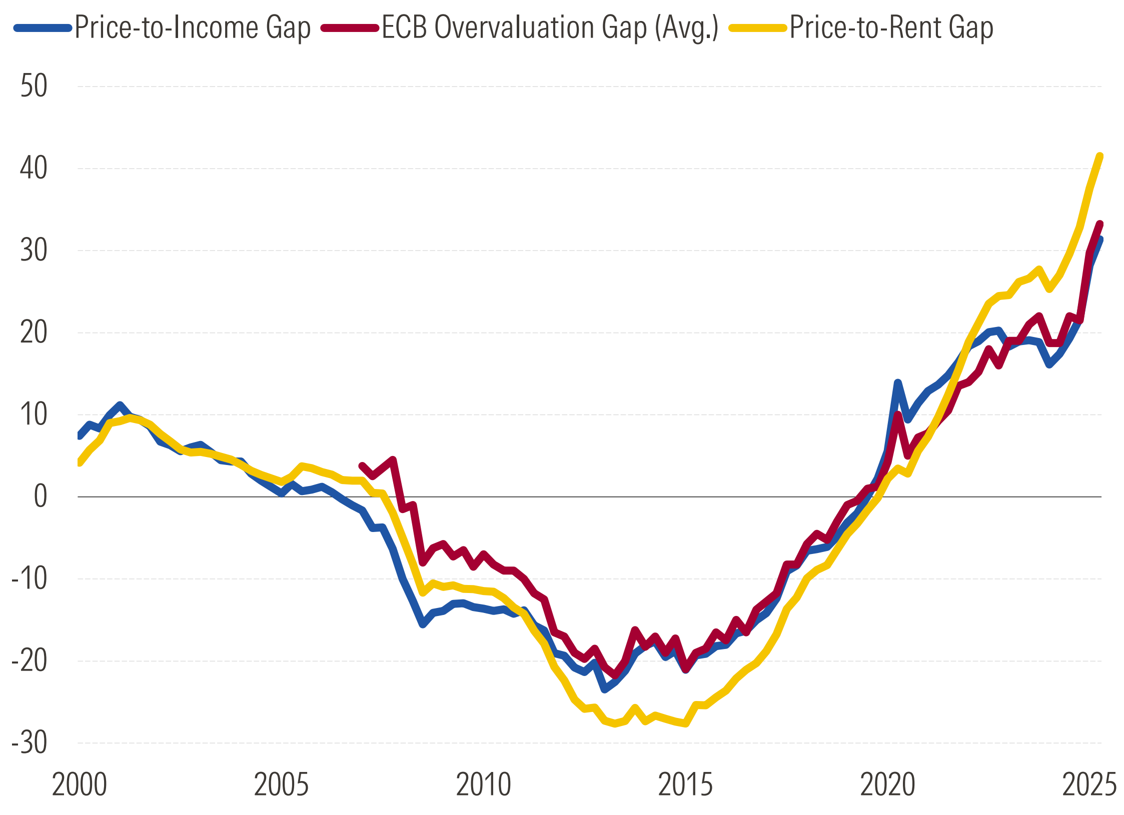




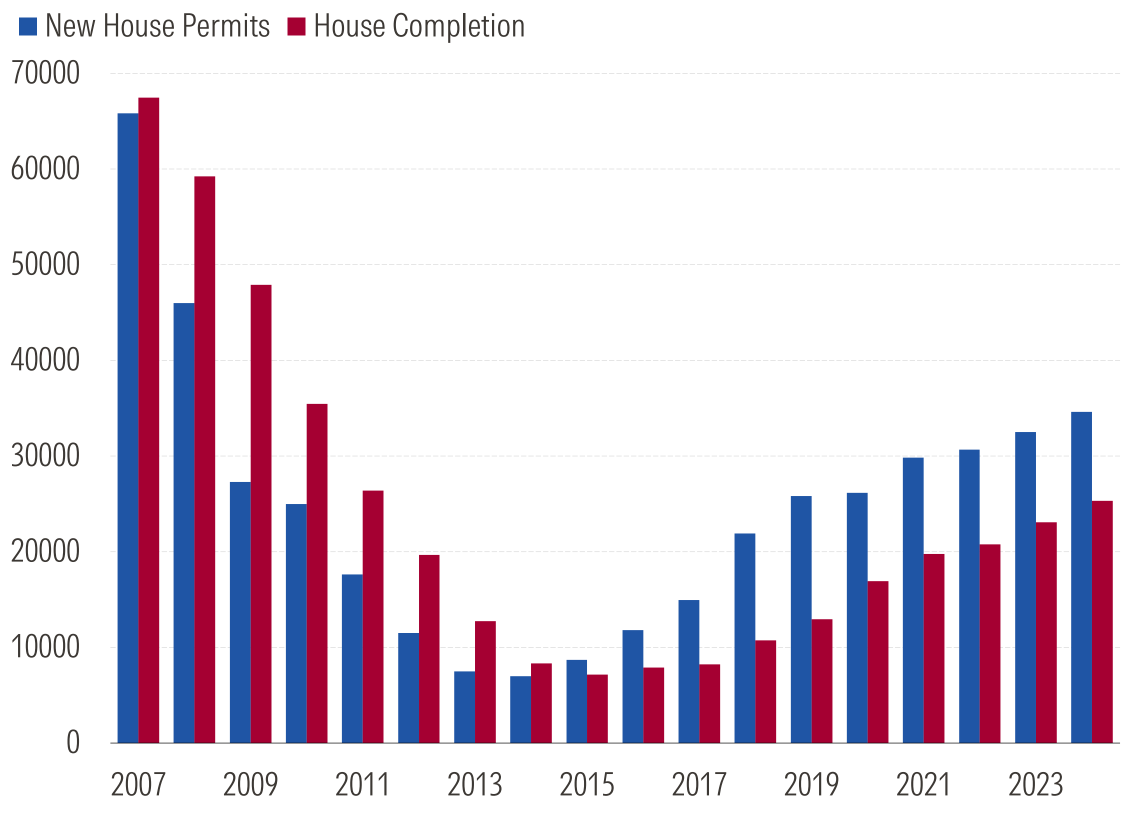

Sources: European Commission (DG ECFIN), Portugal Draft Budgetary Plan 2026, Macrobond, Morningstar DBRS.

# Structural Challenge: Housing Market

## Estimates of Overvaluation of Property Prices (%)




## Portugal Housing Supply

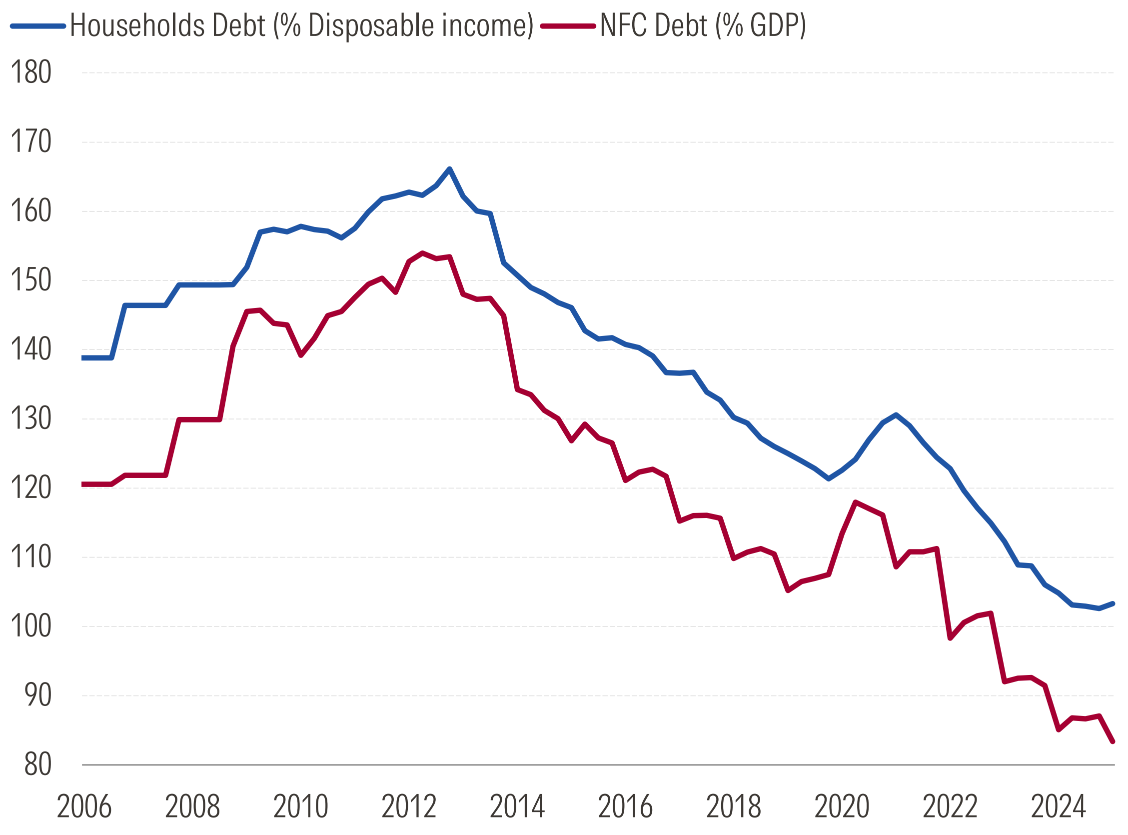




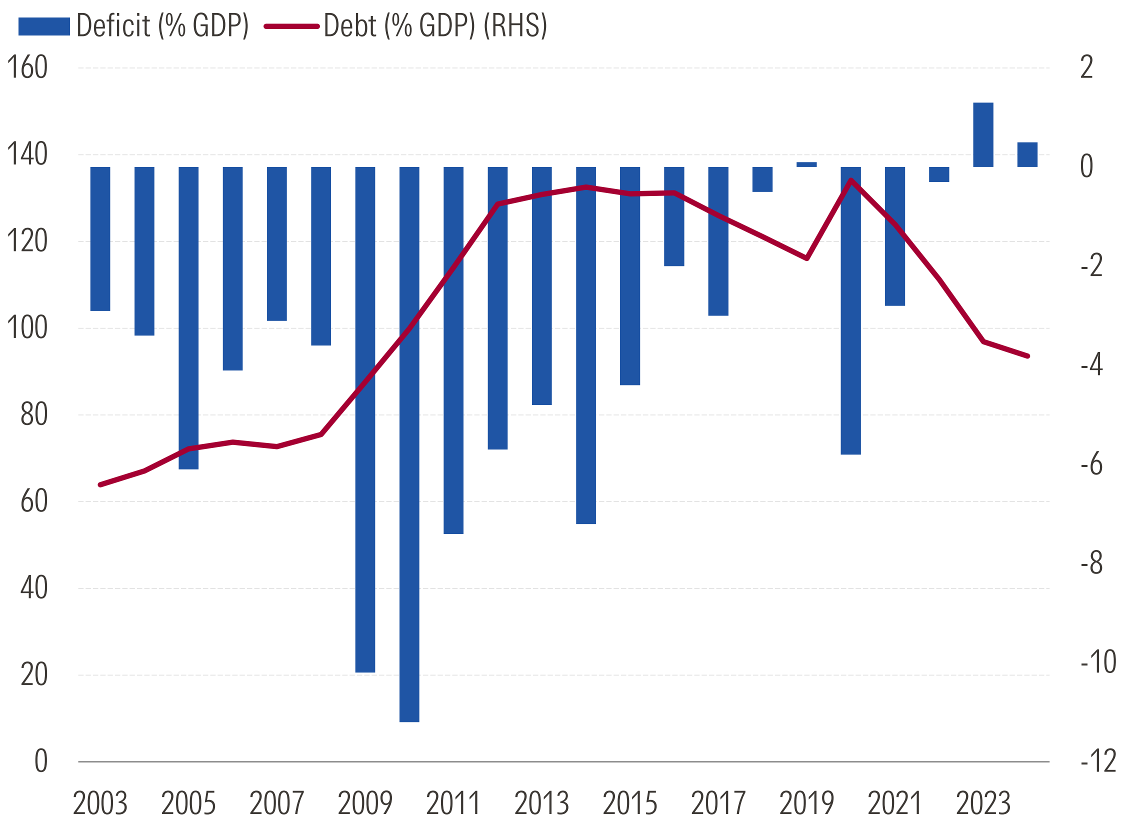

Sources: OECD, ECB, INE, Macrobond, Morningstar DBRS.

# No Macro Imbalances: Private and Public Sector Deleveraging

## Portugal Private Debt (%)




## Portugal Public Debt and Deficits






Sources: IMF, INE, Macrobond, Morningstar DBRS.

# Portugal Economy Poised to Continue Outperforming the EU

## More Balanced European Growth Over the Forecast Period

| GDP Growth Rates | 2024 | 2025E | 2026F | 2027F | 2028F |
|---|---|---|---|---|---|
| Portugal | 1.9% | 1.9% | 2.1% | 1.5% | 1.7% |
| Spain | 3.4% | 2.9% | 2.0% | 1.7% | 1.6% |
| EU | 0.9% | 1.2% | 1.1% | 1.4% | 1.3% |
| Italy | 0.7% | 0.5% | 0.8% | 0.6% | 0.7% |
| France | 1.1% | 0.7% | 0.9% | 1.2% | 1.3% |
| Germany | -0.5% | 0.2% | 0.9% | 1.5% | 1.2% |

## Portugal Medium-Term Growth Drivers and Risks to the Outlook

### Drivers of Growth

- Expanding households purchasing power
- Easing financial conditions
- Step-up in EU funds execution
- Fiscal policy measures

### Risks to the Outlook

- Evolution of trade and geopolitical tensions
- Europe's defence and infrastructure push



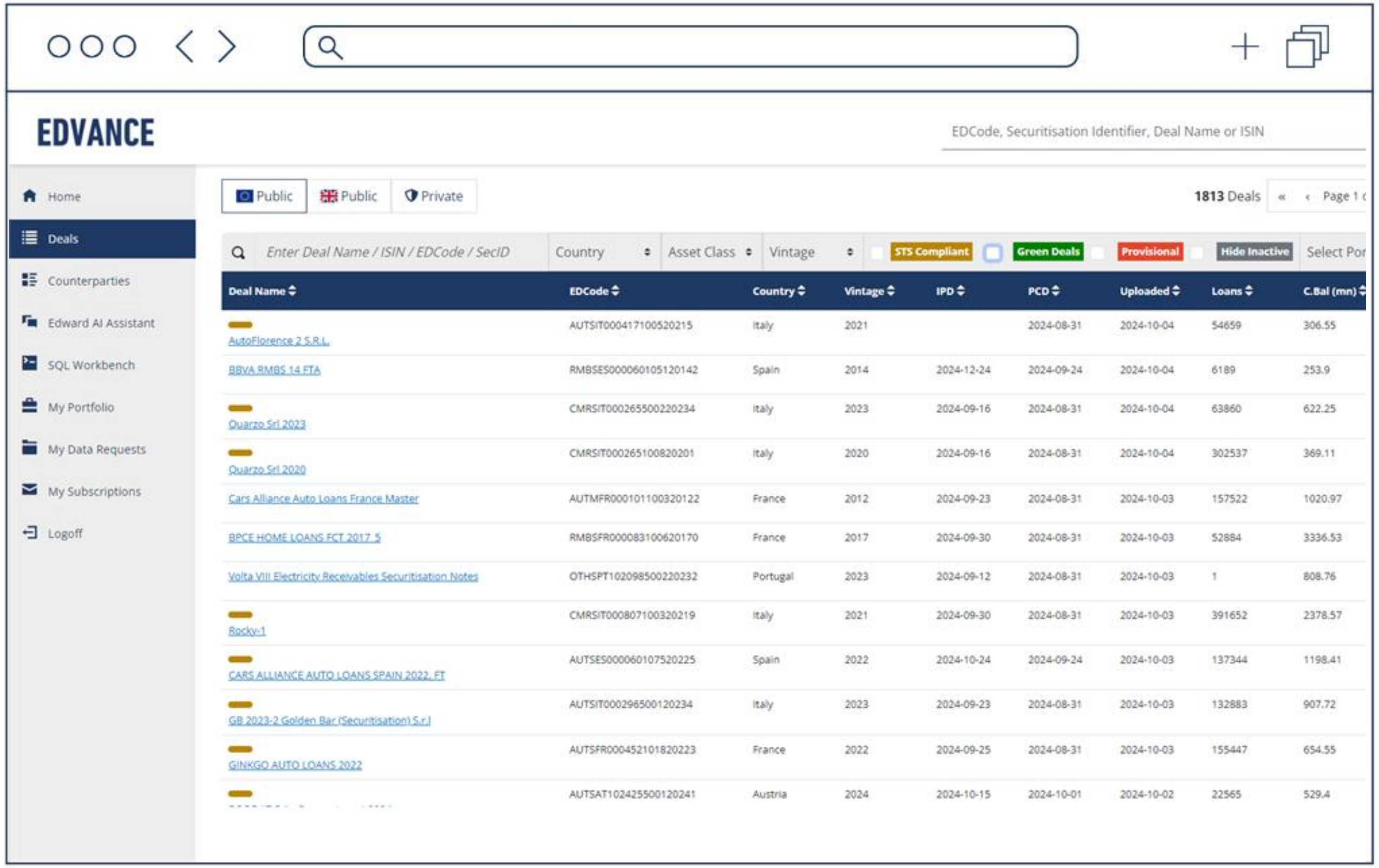
Sources: IMF WEO, Macrobond, Morningstar DBRS.

# LATEST DEVELOPMENTS IN EDW PRODUCTS AND DATA QUALITY

## MANUEL LOPES, EUROPEAN DATAWAREHOUSE

# EDVANCE

## DISCOVER ALL-IN-ONE DATA ACCESS




- The cutting-edge tool consolidates all the features and functionalities that users previously accessed through EDITOR, SQL Access, and Deal Reports, into a **single, comprehensive portal**.
- EDVANCE allows you to **easily access public & private securitisations** and analyse data across ESMA and FCA templates.
- **Manage your portfolios**, query and **analyse loan data** using SQL, access our **counterparty network** and explore the benefits of EDW's **AI Assistant**, EDWARD

# THE ALL NEW EDVANCE

**ACCESS AND ANALYSE PUBLIC AND PRIVATE SECURITISATIONS SEAMLESSLY ON OUR ALL-NEW ALL-IN-ONE AI-POWERED PLATFORM**

### DEAL VIEWER

Explore a comprehensive overview of deals hosted on our platform

### MY PORTFOLIO

Track multiple portfolios and subscribe to notifications & alerts

### AI ASSISTANT

Chat with EDWARD, a natural-language-to- SQL AI Assistant that empowers your data analysis

### COUNTERPARTY DATABASE

Get to know nearly 700 contacts and providers for thousands of deals

### DATA REQUESTS

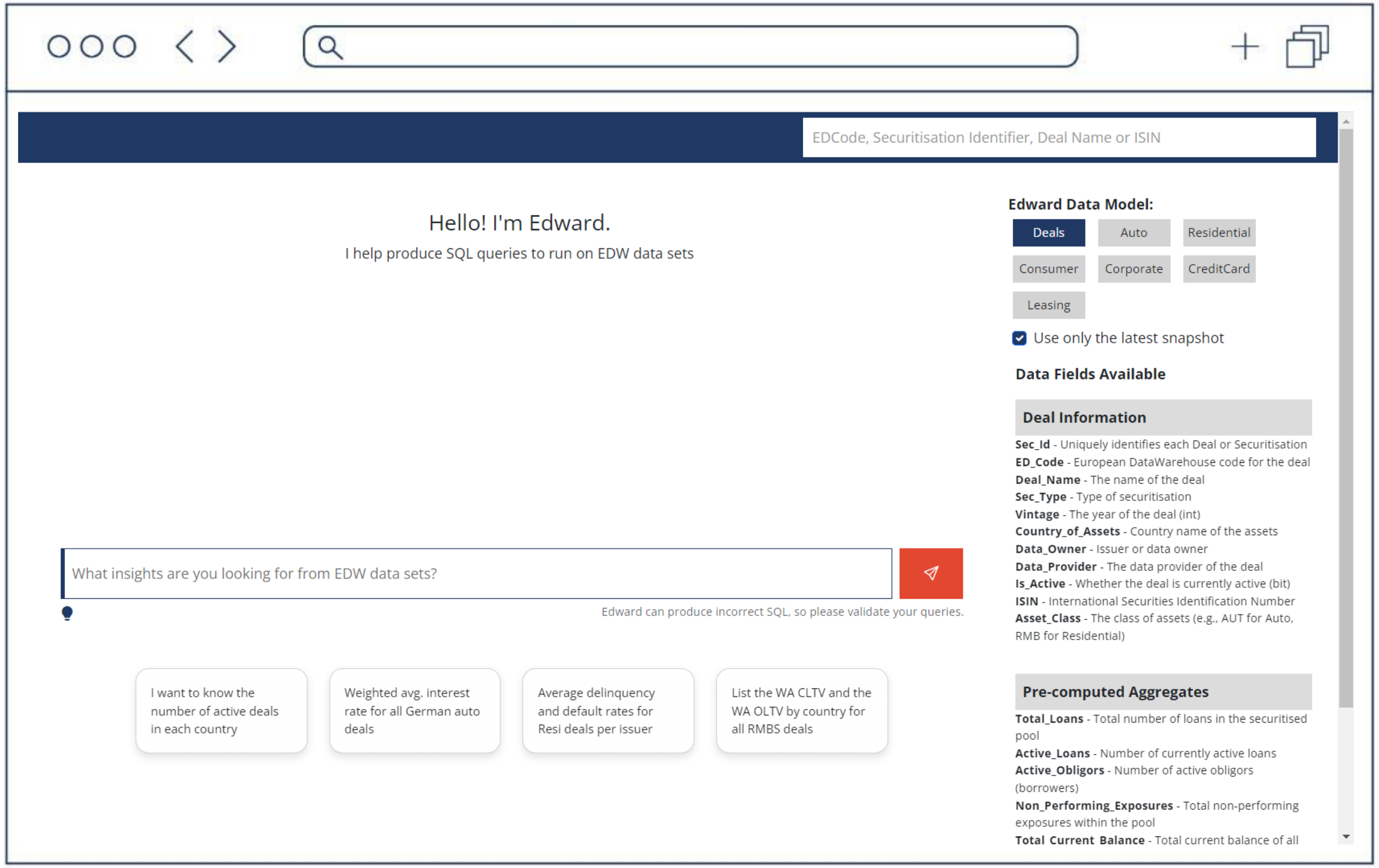
Get your portfolio's data delivered directly to you through email or SFTP

### ANYTIME, ANYWHERE

Seamlessly access data without burdensome firewall settings & IT involvement.

# EDWARD

## OUR NEWEST TEAM MEMBER IS OUR LATEST INNOVATION




- The **AI assistant** from EDW
- A powerful tool that changes the way analysis is conducted, and statistics and data are retrieved.

### BENEFITS AND MAIN FEATURES:

- Ease and accessibility
- **Eliminates the need for complex SQL training**, saving time and resources
- You can write in **any language**
- EDWARD can identify errors in the queries and provides answers accordingly.

# SUPPORT SERVICE FOR INVESTOR DUE DILIGENCE

## BESPOKE DATA EXTRACTION THAT CATERS FOR ARTICLE 5 COMPLIANCE REPORTING

| COMPLIANCE WITH: | SECREG | EBA | CRR |
|---|---|---|---|

**Article 7 of the Securitisation Regulation (EU) 2017/2402 requires the disclosure of detailed, loan-by-loan information for all securitised assets. This level of transparency is highly valuable—not only does it allow investors and market participants to monitor portfolio performance and better understand the risk characteristics of the underlying loans, but it also plays a critical role in regulatory compliance.**

In particular, the granular data is essential for the calculation of risk-weighted assets (RWA) under the Capital Requirements Regulation (CRR), as amended by Regulation (EU) 2017/2401.

Fields we extract from the database:

- **Attachment** and **Detachment Point**
- Outstanding **amount** of the **most senior notes**;
- **The type of excess spread** and its current amount
- The **type of amortisation**

Specially for STS deals:

- We check if there were any loans in **default at the time of inclusion**
- We verify if, **at the time inclusion no single obligor represented more than 2%** of the total underlying exposures.
- We calculate the **RWA's**.

# ADDITIONAL SERVICIES OVERVIEW

## PRODUCT TERMS – ADDITIONAL SERVICES

INCREASING DELEGATION TO EDW

### INITIAL DATA MAPPING CONSULTATION

Review of client data tapes and initial mapping to FCA/ESMA templates

Required loan-level and investor report data

Consultation re data field definitions and usage of ND options

### CUSTOM CONVERTER

Initial data mapping consultation

Creation of a customised converter tool for loan-level data to produce ESMA templates from client data tapes

Ongoing converter support

### LLD TEMPLATE PRODUCTION

Quarterly or Monthly production of ESMA compliant loan-level templates based on client data tapes

(BoE loan-level templates on request)

### IR/SE TEMPLATE PRODUCTION

Quarterly or Monthly production of ESMA compliant investor report and significant events templates based on client or cash manager information

### FULL OUTSOURCING

Full delegation of quarterly or monthly reporting and upload based on client data tapes

### CASH FLOW MODEL

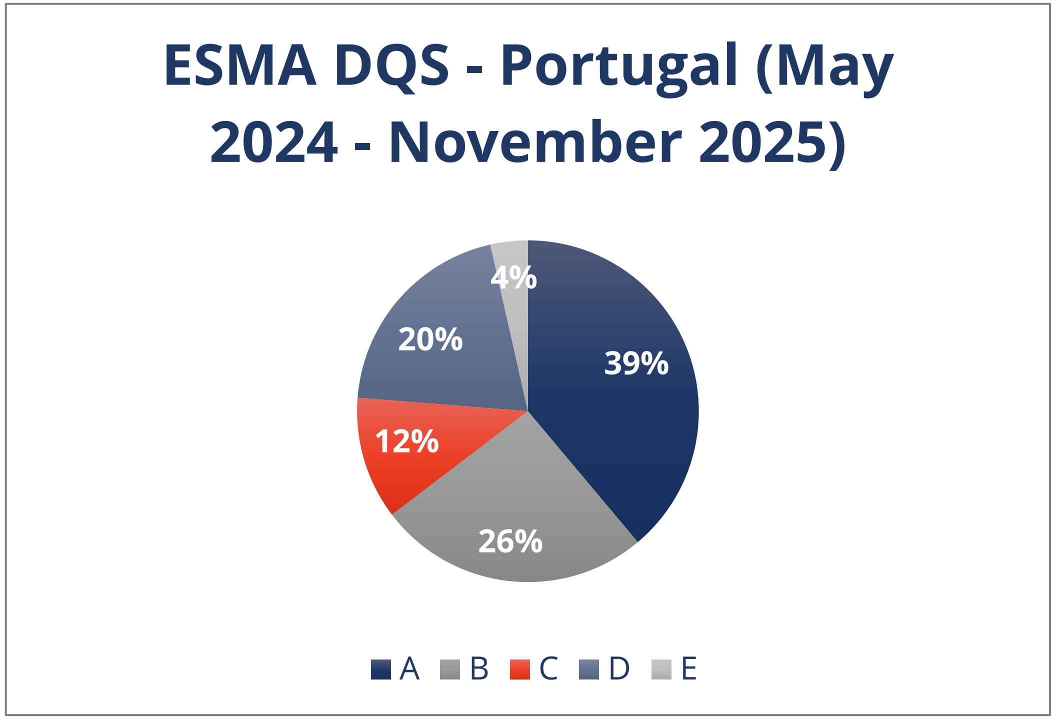
Production of STS compliant cash flow model in Excel

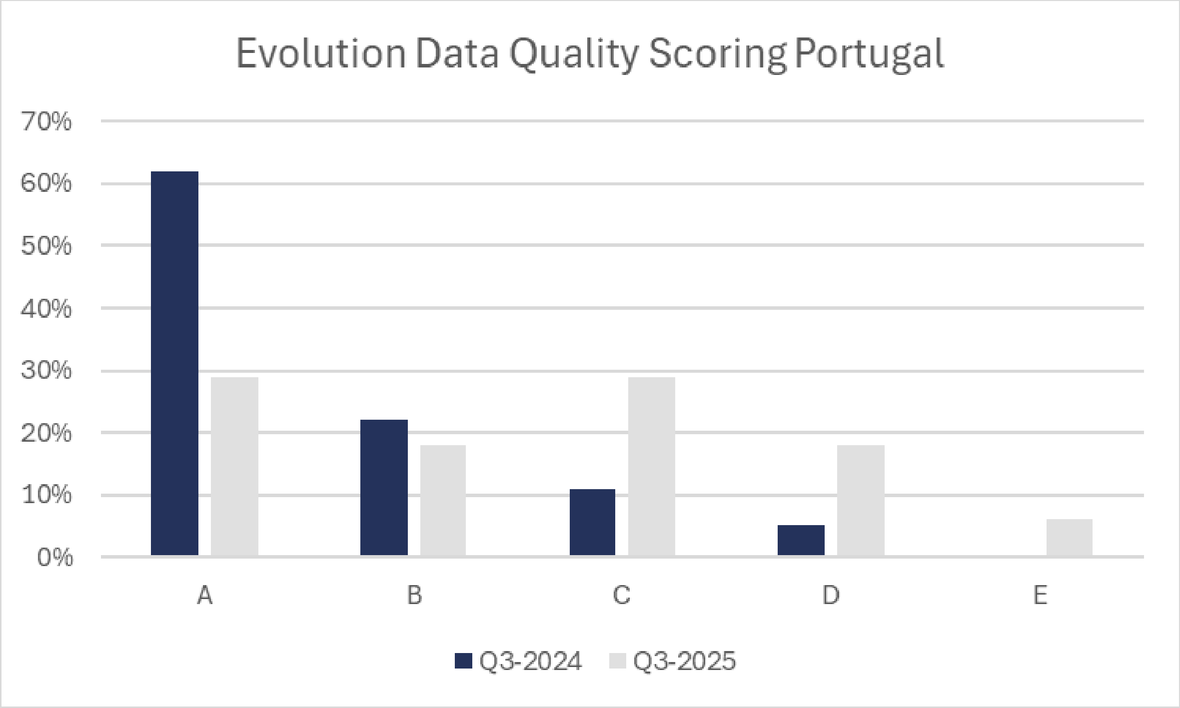
Customised model based on individual transaction characteristics

# PORTUGAL: DATA QUALITY

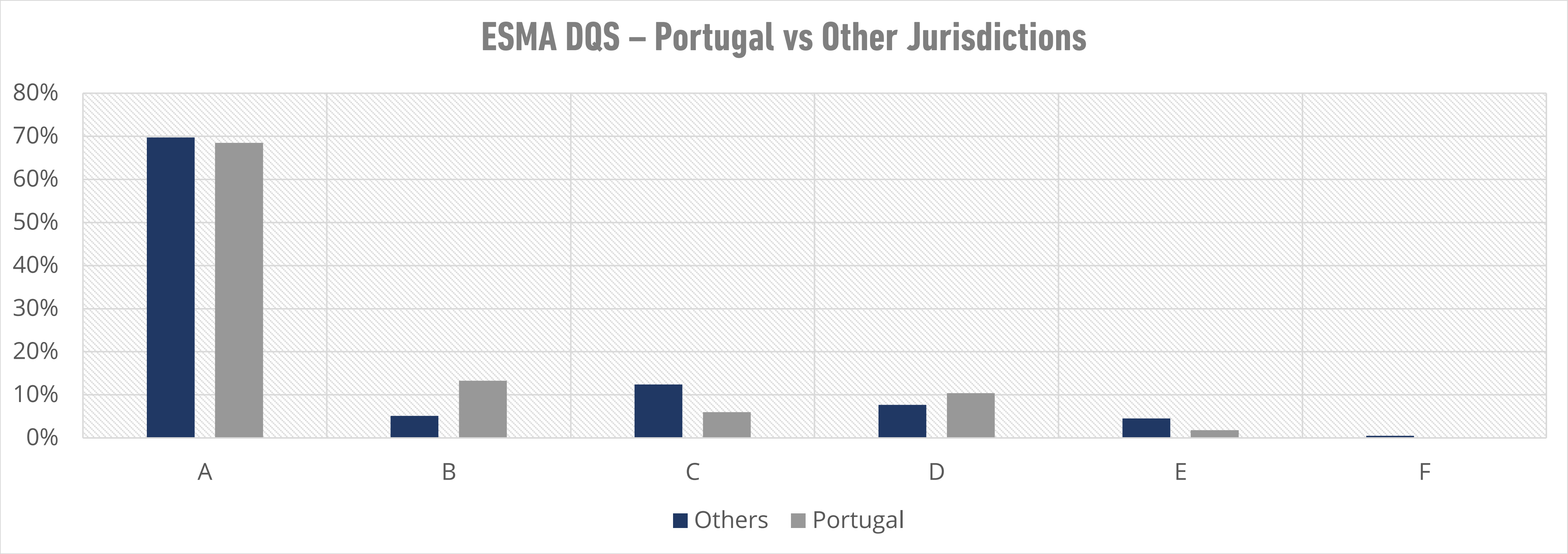
# PORTUGAL: A DATA QUALITY CONSTANTLY IMPROVING

## 65% OF PORTUGUESE DEALS WERE RATED A OR B FROM MAY 2024 TO SEPTEMBER 2025



# PORTUGAL: A DATA QUALITY OUTPERFORMING OTHER JURISDICTIONS



# DATA QUALITY: FOCUS ON CDRS & CPRS

# ANNUALISED CONSTANT DEFAULT RATE (CDR) – DEFINITION

## CALCULATION METHOD AS DEFINED BY THE ESMA TAXONOMY

| | | |
|---|---|---|
| **IVSS27** | Annualised Constant Default Rate | The annualised Constant Default Rate (CDR) for the underlying exposures based on the periodic CDR. Periodic CDR is equal to the [(total current balance of underlying exposures classified as defaulted during the period) / (total current balance of non-defaulted underlying exposures at the beginning of the period)]. This value is then annualised as follows: 100*(1-((1-Periodic CDR)^number of collection periods in a year))<br>"Periodic CDR" refers to the CDR during the last collection period, i.e. for a securitisation with quarterly paying bonds this will usually be the prior three month period. |

$$CDR = 100 * \left(1 - \left(1 - \frac{Current\ Balance\ of\ Defaulted\ Loans\ during\ the\ Period}{Current\ Balance\ of\ Non-Defaulted\ Loans\ at\ the\ beginning\ of\ the\ Period}\right)^{Number\ of\ Collection\ Periods\ in\ a\ Year}\right)$$

# ANNUALISED CONSTANT DEFAULT RATE (CDR) – DEFINITION

## OUR DEFINITION OF A LOAN DEFAULT

We classify a loan as defaulted if any of the following apply:

- **Account Status** changes to Default this Period
- **Default Amount** appears this Period
- **Default Date** falls within Reporting Period

# ANNUALISED CDR - COMPARISON

## RECALCULATED VS. REPORTED CDR: A NUMERICAL COMPARISON

**16%**

of reported CDR aligns with our recalculated CDR (Current Balance) ±10%

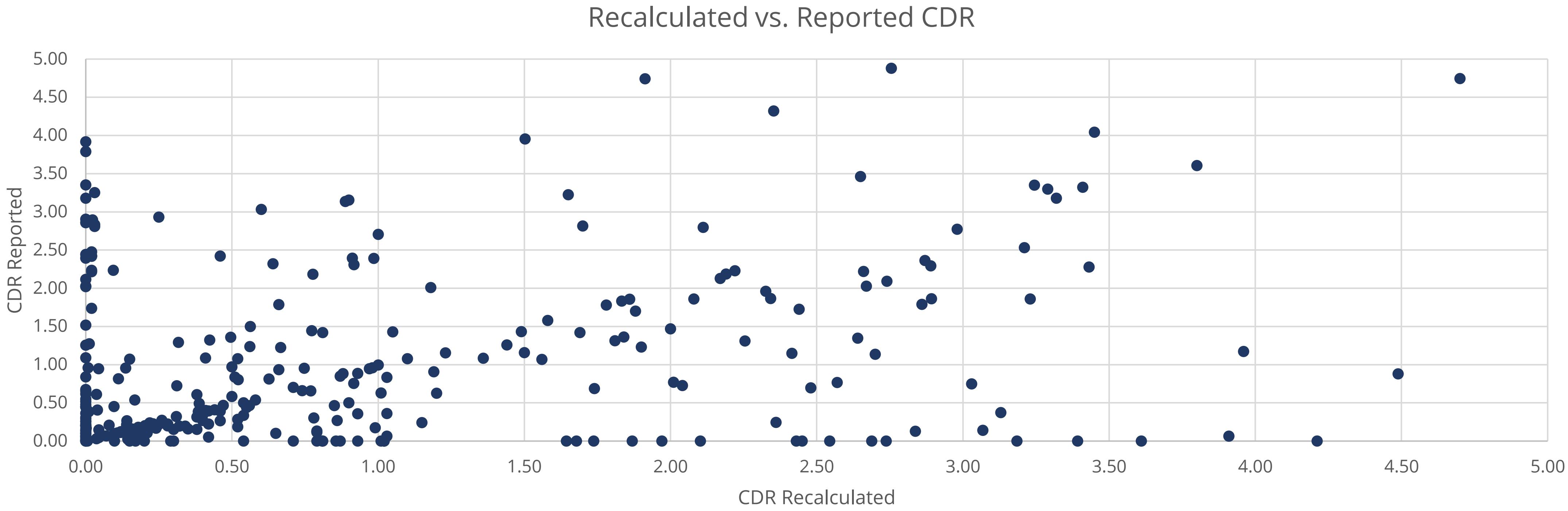
**55%**

of reported CDR aligns with one of our recalculated CDR (Current Balance, Default Amount or Gross Charge-Offs) ±10%

Sample Data: Latest Pool Cutoff – 326 Public Active Deals with Defaults

# ANNUALISED CDR – COMPARISON

## RECALCULATED VS. REPORTED CDR: ILLUSTRATED COMPARISON



# ANNUALISED CONSTANT PREPAYMENT RATE (CPR) – DEFINITION

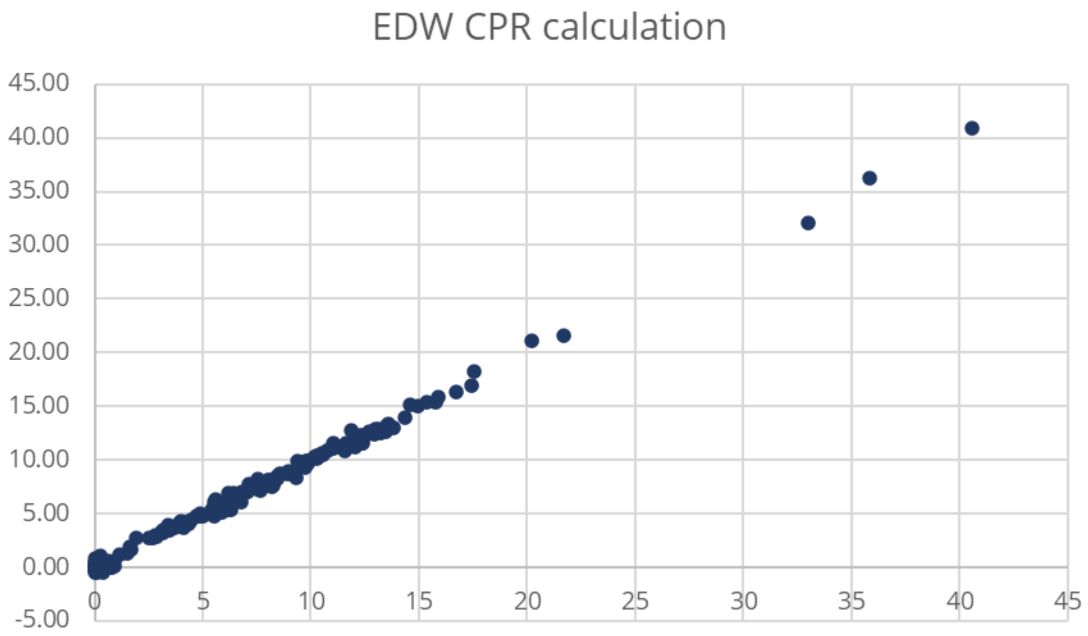
## CALCULATION METHOD AS DEFINED BY THE ESMA TAXONOMY

| | | |
|---|---|---|
| **IVSS22** | Annualised Constant Prepayment Rate | The annualised Constant Prepayment Rate (CPR) of the underlying exposures based upon the most recent periodic CPR. Periodic CPR is equal to the [(total unscheduled principal received at the end of the most recent collection period) / (the total principal balance at the start of the collection period)]. The Periodic CPR is then annualised as follows:<br>100*(1-((1-Periodic CPR)^number of collection periods in a year))<br>'Periodic CPR' refers to the CPR during the last collection period i.e. for a securitisation with quarterly paying bonds this will usually be the prior three month period. |

$$CPR = 100 * \left(1 - \left(1 - \frac{Unscheduled\ Principal\ Prepayments\ During\ the\ Period}{Current\ Balance\ of\ All\ Performing\ Loans\ at\ start\ of\ the\ period}\right)^{Number\ of\ Collection\ Periods\ in\ a\ Year}\right)$$

# ANNUALISED CPR - COMPARISON

## RECALCULATED VS. REPORTED CDR: ILLUSTRATED COMPARISON




- The scatter plot shows the extent to which the EDW CPR calculations match the CPRs reported by data owners/providers for each transaction.
- Points clustering along the diagonal indicate strong correlation and overall consistency, validating the methodology and reliability of both data sources.

# ALL-IN-ONE DATABASE

## THE HISTORICAL ECB DATA AND THE RECENT ESMA DATA INTEGRATED IN A SINGLE DATABASE

# ALL IN ONE DATABASE DESCRIPTION

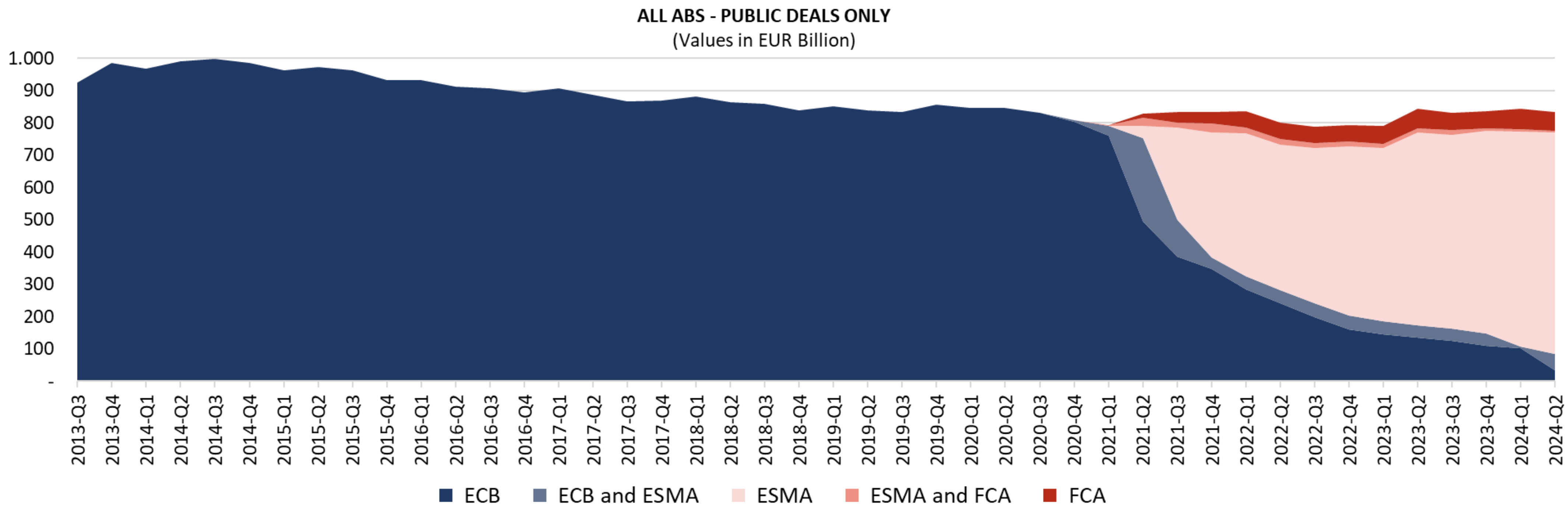
## ECB AND ESMA DATA INTEGRATED IN ONE DATABASE

Our All-in-One database (AIO), merges ECB and ESMA data and preserves loan level data time series since 2013, for the six main asset classes.

**AIO facilitates time series type work, and also improves user experience in other ways:**

- We endeavour to correct errors found in the original data (done for ECB data, work in progress for ESMA data)
- We optimised field size and format. Among other improvements, the number fields are already “CAST AS NUMBER”
- AIO contains “calculated fields”, that make it more user-friendly
- AIO contains all the ESMA fields, to which we add the ECB fields without ESMA equivalents, plus calculated fields.

# HISTORICAL DATA IS IN ECB FORMAT, RECENT DATA IS IN ESMA FORMAT



# FIRESIDE CHAT: SECURITISATION REGULATION REVIEW

## MODERATOR: MARCO ANGHEBEN, EDW

## GONÇALO MARTINS, PLMJ

## PEDRO CASSIANO SANTOS, VDA

# Securitisation in Portugal

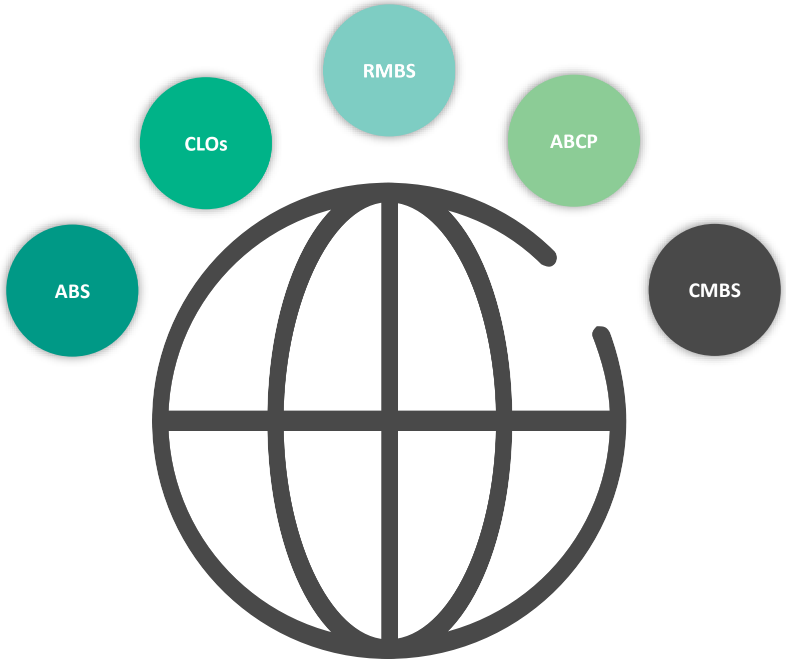
November 2025

VIEIRA DE ALMEIDA

# Structured Financing transactions

*Structured Finance* aims at gathering financing with structures that increase the levels of protection awarded to creditors/investors, enabling the access to better market conditions, raising the levels of protecion agaisnt risk inehenrent to the Investments being made (or to the facilities made available to borrowers), enabling the association of such investment/financing on exclusive basis to the performance of given assets/projects/portfolios.

Some strcutured finance transactions are construed on top of contractual facilities like overdarfst and loan agréments, and others resort to market going instruments, construed on otp of Securities issuances, usually qualified as fixed income Securities, generally denominated *Asset Backed Securities*.

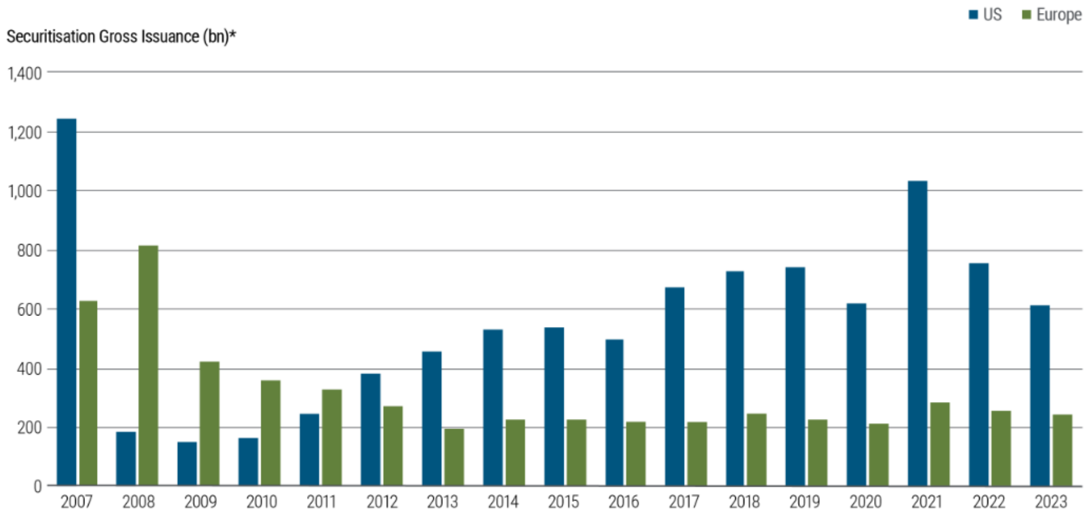



**Structured finance credit quality and asset performance will remain strong.**

# *Asset-backed security* (ABS)

| Old alphabet soup, new taste | |
|---|---|
| **ABS** (*asset-backed security*) | Most generic form of securitization, includes credit-card debt, car loans, or any packaged income stream. Making steady comeback |
| **MBS** (*mortgage-backed security*) | Backed either by commercial (CMBS) or residential (RMBS) mortgages. The most problematic in the downturn, fueled subprime crisis |
| **CDO** (*collateralized debt obligation*) | Pre-crisis these were often invested in “tranches” of ABSs and MBSs or in other CDOs. Not popular with regulators |
| **CLO** (*collateralized loan obligation*) | Frequently filled with sliced and diced loans extended to poor-credit firms, such as those taken over by private-equity. Making a comeback |

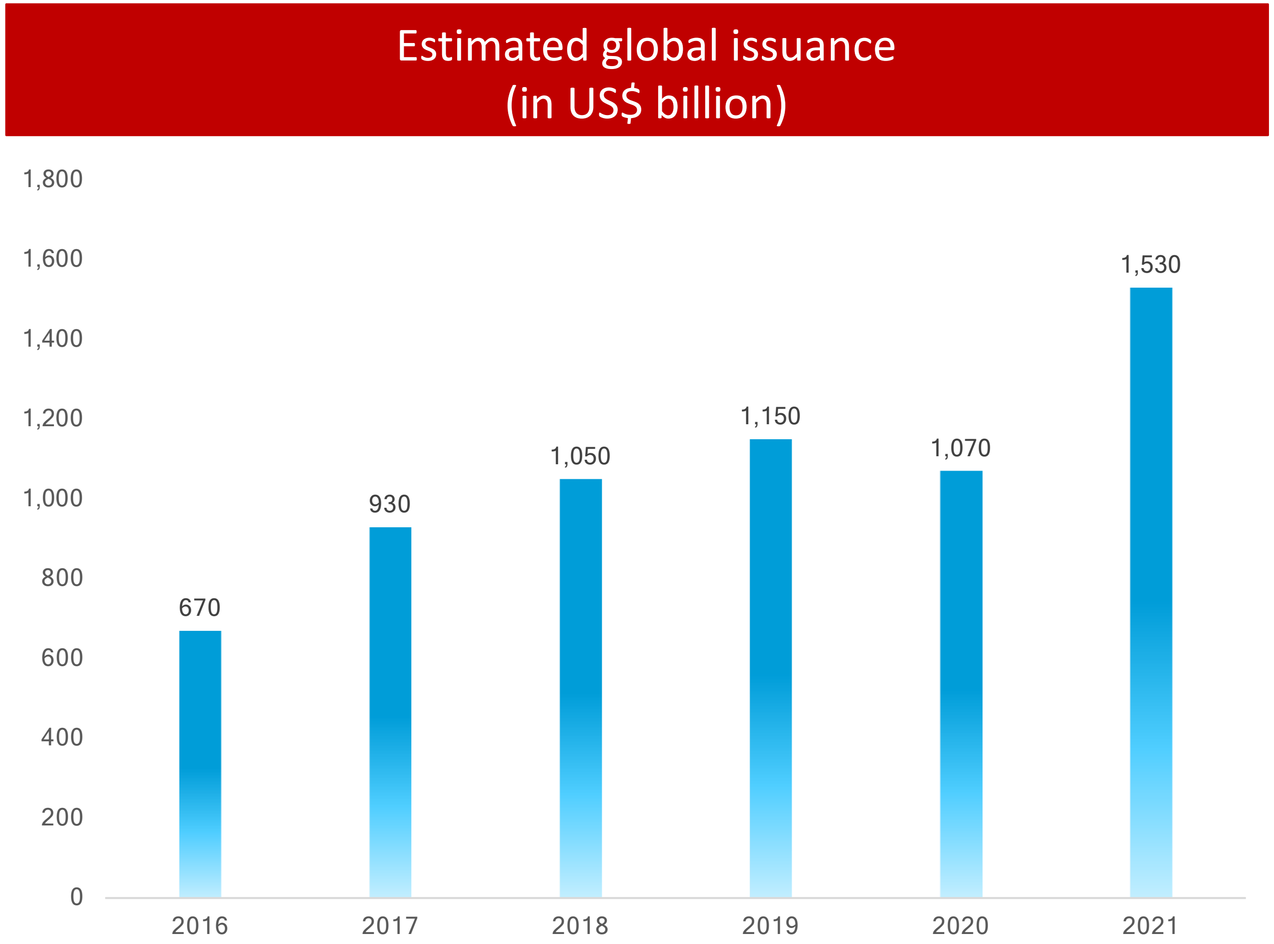
Sources: Dealogic; *The Economist*




Source: J.P. Morgan as of 31 December 2023. Securitisation issuance includes asset-backed securities (ABS), non-agency residential mortgage-backed securities (MBS), collateralised loan obligations (CLOs), and commercial MBS. * US issuance in US dollars; Europe issuance in euros. Europe figures include both distributed and retained issuance.

# Securitization

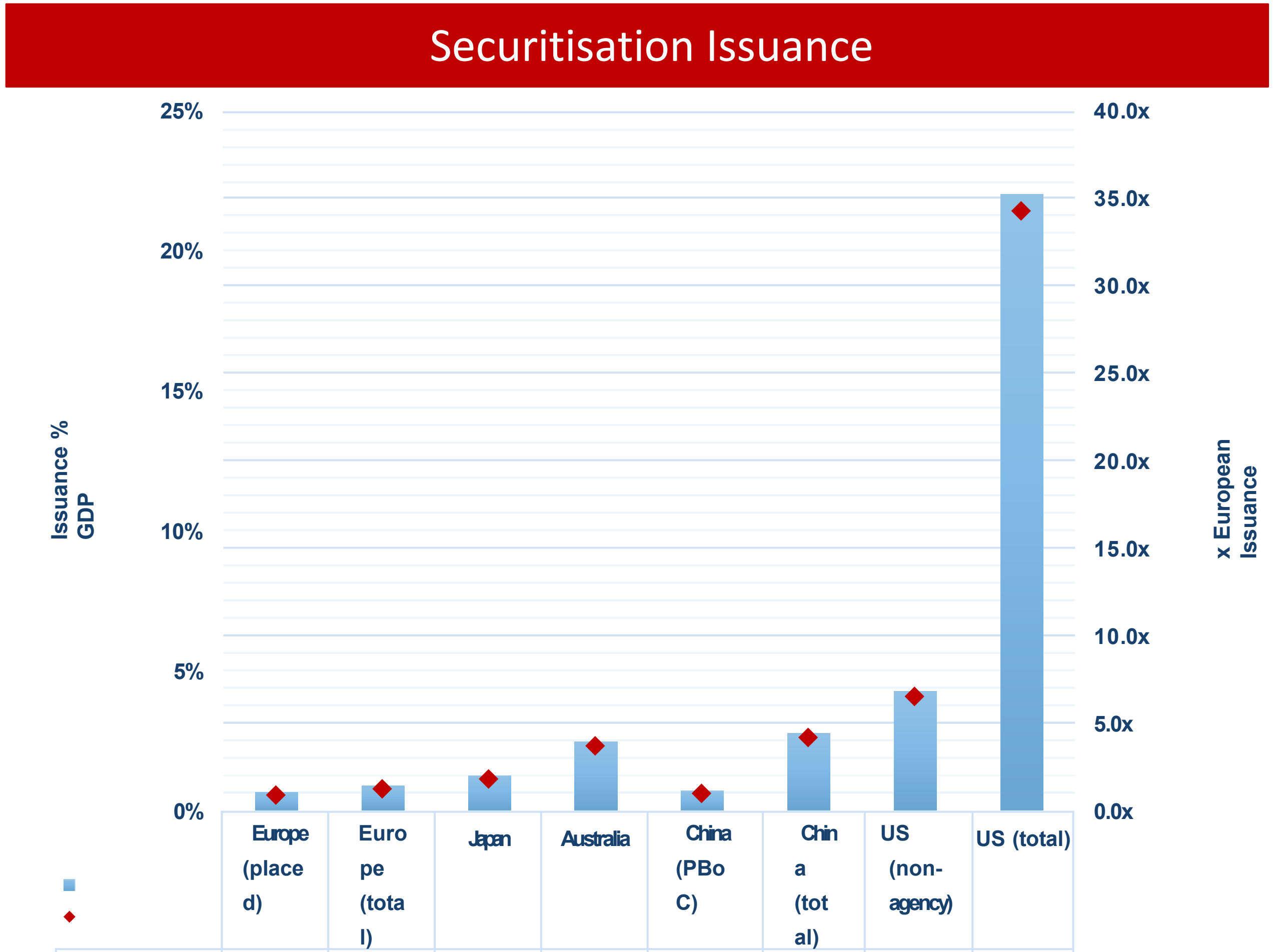
## Securitisation around the world – The global picture




*Source: S&P Global Ratings*

# Securitization

## Securitisation around the world – Securitisation Issuance as a % of GDP

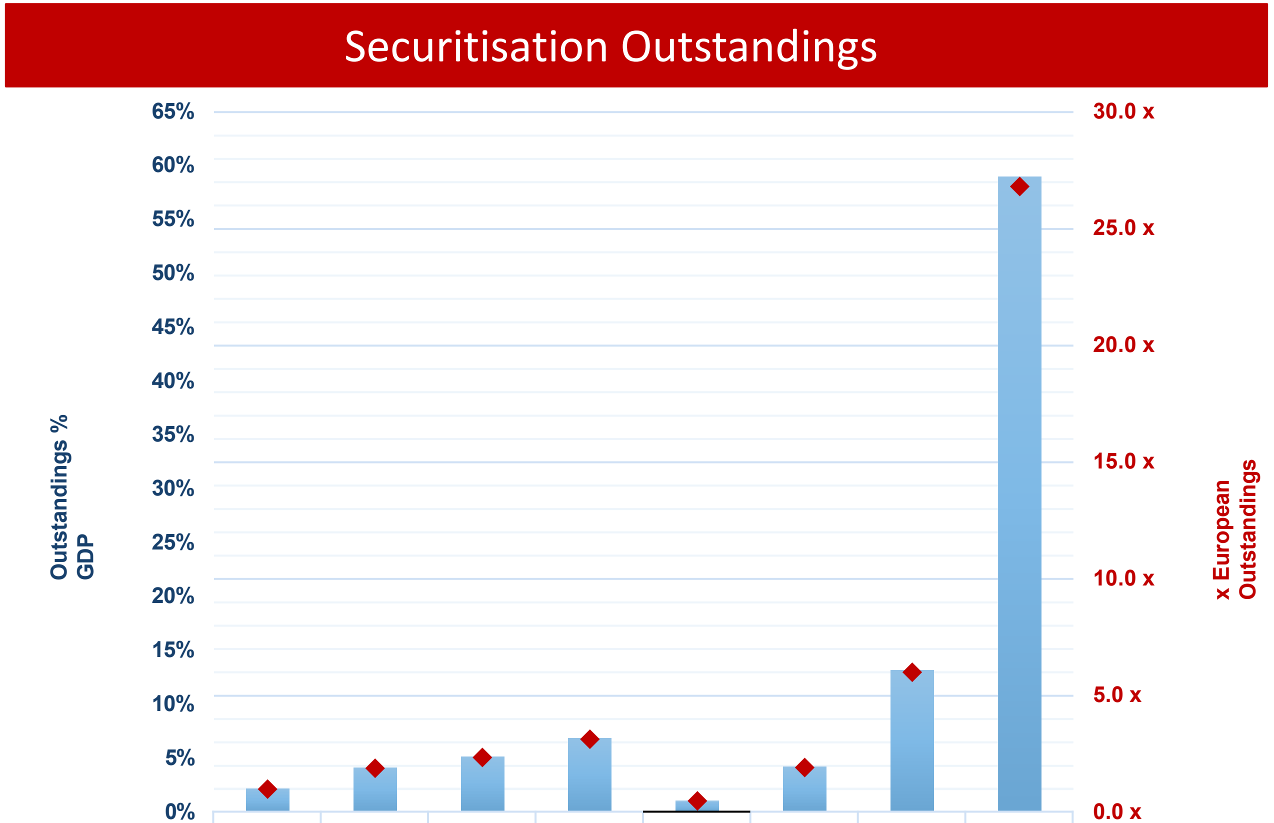



| | Europe (placed) | Europe (total) | Japan | Australia | China (PBoC) | China (total) | US (non-agency) | US (total) |
|---|---|---|---|---|---|---|---|---|
| % GDP 2021 | 0.6% | 0.9% | 1.2% | 2.4% | 0.7% | 2.8% | 4.3% | 22.0% |
| x Europe 2021 | 1.0x | 1.4x | 1.9x | 3.8x | 1.1x | 4.3x | 6.6x | 34.4x |

*Source: World Bank (GDP) and various*

# Securitization

## Securitisation around the world – Securitisation Outstandings as a % of GDP




| | Europe (placed) | Europe (total) | Japan | Australia | China (PBoC) | China (total) | US (non-agency) | US (total) |
|---|---|---|---|---|---|---|---|---|
| % GDP 2021 | 2.2% | 4.2% | 5.2% | 6.9% | 1.1% | 4.2% | 13.2% | 59.0% |
| x Europe | 1.0 x | 1.9 x | 2.4 x | 3.1 x | 0.5 x | 1.9 x | 6.0 x | 26.8 x |

*Source: World Bank (GDP) and various*

# Securitization or “titularização”

*“A titularização de créditos, usualmente conhecida por* ***securitização****, consistindo, no essencial, numa agregação de créditos, sua autonomização, mudança de titularidade e emissão de valores representativos, conheceu os seus primeiros desenvolvimentos nos Estados Unidos, no início da década de 80, tendo sido já objeto de tratamento legislativo na generalidade dos Estados Membros da Comunidade Europeia. A sua utilização tem sido reconhecidamente bem sucedida, assumindo-se rapidamente como relevante fator de competitividade das economias.“*

Decreto-Lei n.º 453/99, de 5 de novembro de 1999, conforme alterado pela lei n.º 69/2019

*“Credit securitization, usually known as* ***securitizatoin****, consists essentially in agregating a pool of credits, the autonomizatoin thereof, a change in the ownership thereof and the issuance of Securities representing na interest in such portfolio, was firstly developed in the United States of America, in the early 80s, having already been the object of legislative coverage in the generality of the Members States of the European Comunities. Usage of this concept as recognizedly been well succeeded, fastly becoming a relevant factor of economic competitiveness.“*

# Securitization

Originators

Asset Pool

STC/SPV

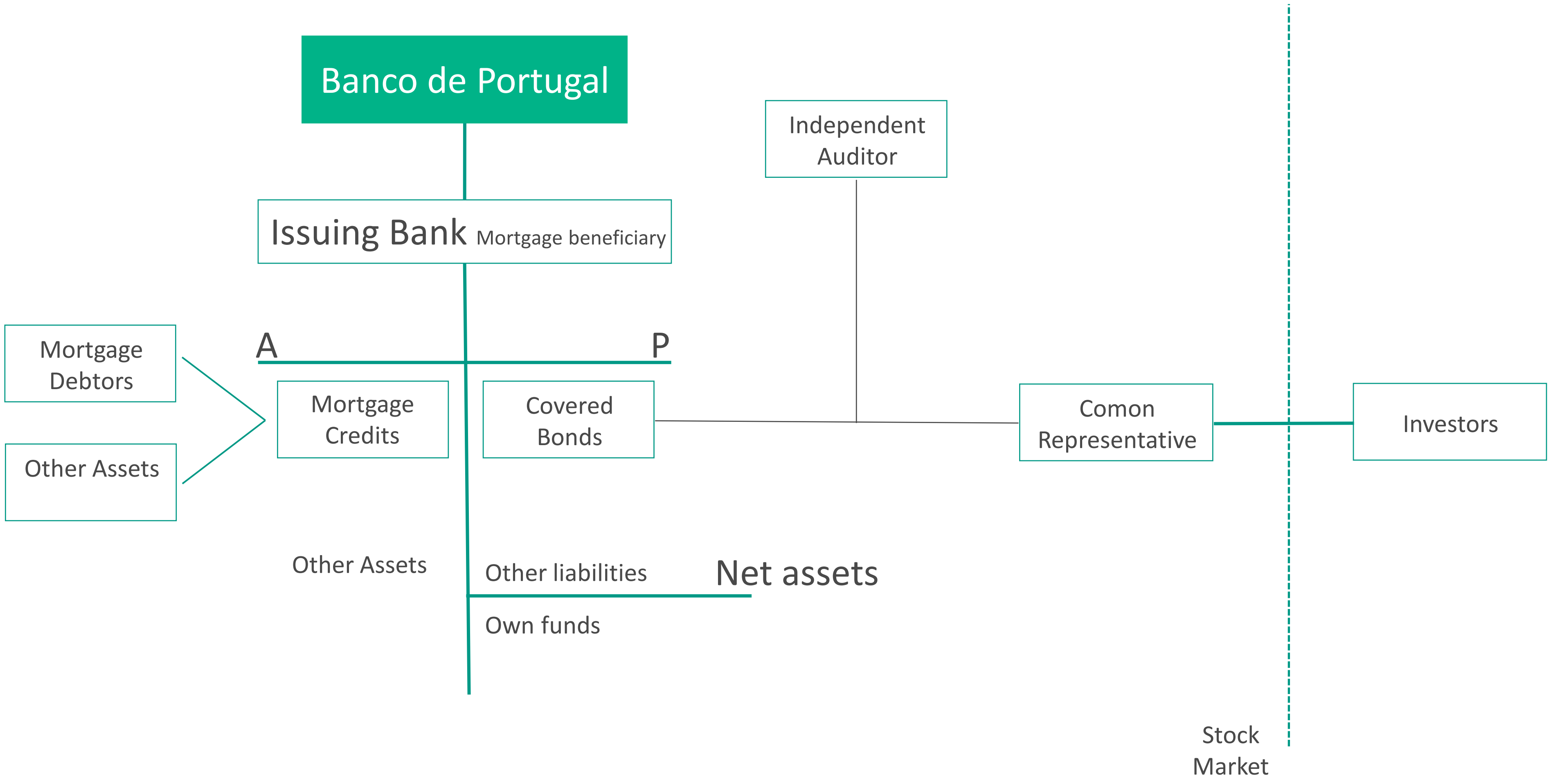
Credit Enhancement

Note Issue

- Class A Notes
- Class B Notes
- Class C Notes

Investors

# Covered Bonds



# Using these instruments

Santander

**BANCO SANTANDER TOTTA, S.A.**

**(incorporated with limited liability in Portugal)**

**EUR 12,500,000,000**

**COVERED BONDS PROGRAMME**

Banco Santander Totta, S.A. (the "**Issuer**", "**Bank**" or "**BST**"), incorporated under Portuguese law, with head office at Rua Áurea, No. 88, 1100-063 Lisbon, Portugal, with a registered and fully-paid share capital of EUR 1,391,779,674.00 and registered with the Commercial Registry Office of Lisbon under the sole registration and taxpayer number 500 844 321, is an authorised credit institution for the purposes of Decree-Law No. 31/2022, of 6 May 2022 (the "**Legal Regime of Covered Bonds**"). The Covered Bonds (as defined below) will constitute covered bonds for the purposes, and with the benefit, of the Legal Regime of Covered Bonds.

Under this EUR 12,500,000,000 Covered Bonds Programme (the "**Programme**"), the Issuer may from time to time issue covered bonds (the "**Covered Bonds**") denominated in any currency agreed between the Issuer and the relevant Dealer (as defined below).

Covered Bonds will be issued in nominative form (*nominativas*) and be represented in book-entry form (*forma escritural*). The maximum aggregate nominal amount of all Covered Bonds from time to time outstanding under the Programme will not exceed EUR 12,500,000,000 (or its equivalent in other currencies calculated as described herein), subject to increases as described herein. Covered Bonds may be issued on a continuing basis to one or more of the Dealers specified under *Overview of the Covered Bonds Programme* and any additional Dealer appointed under the Programme from time to time by the Issuer (each a "**Dealer**" and, together, the "**Dealers**"), which appointment may be for a specific issue or on an on-going basis. References in this Base Prospectus to the relevant Dealer shall, in the case of an issue of Covered Bonds being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to purchase such Covered Bonds.

**See *Risk Factors* for a discussion of certain risk factors to be considered in connection with an investment in the Covered Bonds.**

This document comprises a base prospectus (the "**Base Prospectus**") for the purposes of Regulation (EU) No. 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published

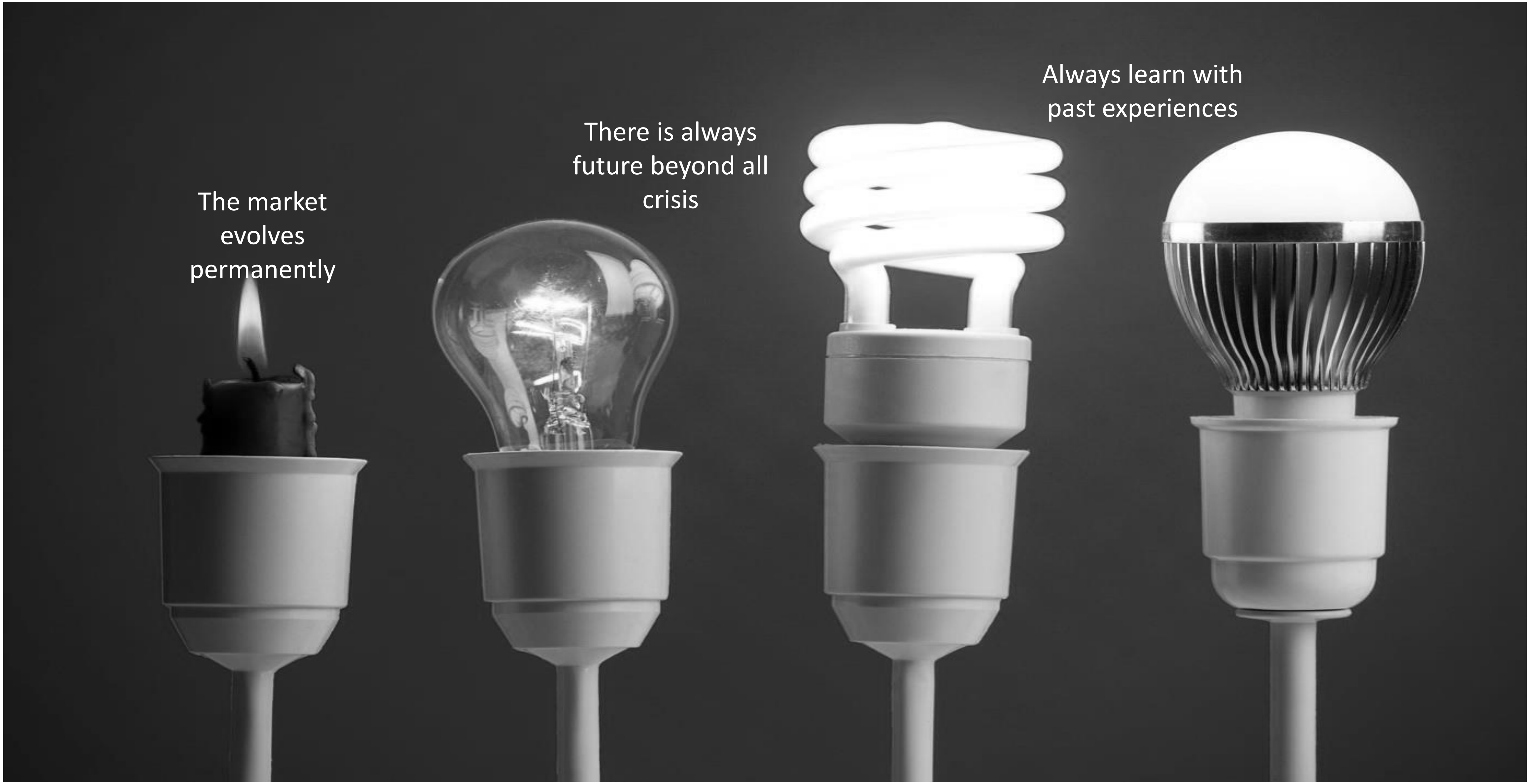
**VASCO FINANCE NO. 2**

**(Article 62 Asset Identification Code 202410TGSWNZS00N0177)**

| | Amount (in EUR) | In % of the Receivables Portfolio on Closing Date | Interest Rate (%) | Expected Ratings Fitch / DBRS |
|---|---|---|---|---|
| **Class A** | EUR 193,800,000 | 69.21% | EURIBOR for one-month euro deposits plus 1.18% | AA+/AA(high) |
| **Class B** | EUR 24,500,000 | 8.75% | EURIBOR for one-month euro deposits plus 1.80% | A+/A |
| **Class C** | EUR 15,400,000 | 5.50% | EURIBOR for one-month euro deposits plus 2.60% | BBB+/BBB |
| **Class D** | EUR 19,600,000 | 7.00% | EURIBOR for one-month euro deposits plus 4.00% | BB+/BB |
| **Class E** | EUR 14,000,000 | 5.00% | EURIBOR for one-month euro deposits plus 5.65% | B+/B |
| **Class F** | EUR 12,600,000 | 4.50% | EURIBOR for one-month euro deposits plus 8.50% | N/R |
| **Class X** | EUR 5,200,000 | 1.86% | EURIBOR for one-month euro deposits plus 3.18% | BB+/A(high) |
| **Class G** | EUR 100,000 | 0.04% | 5.75% (in addition to Class G Distribution Amount) | N/R |

Issue Price: 100% (one hundred per cent.)
Issued by
**TAGUS – Sociedade de Titularização de Créditos, S.A.**
(Incorporated in Portugal with limited liability under registration number 507 130 820, with a fully subscribed and paid-up share capital of €888,585.00, and registered office at Rua Castilho, 20, 1250-069 Lisbon, Portugal)

This document constitutes a prospectus dated 15th October 2024 and relates to the admission to trading on a regulated market of the Listed Notes described herein for the purposes of the Prospectus Regulation (as defined below). This document does not constitute a document for admission to trading in respect of the Junior Note.


The market evolves permanently
There is always future beyond all crisis
Always learn with past experiences

VIEIRA DE ALMEIDA

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www.vda.pt

# COFFEE BREAK

# PRODUCT UPDATE: DEALDOX AND PRIVATE AREA SOLUTIONS

## MARTIN KUHN, EUROPEAN DATAWAREHOUSE

EUROPEAN
DATAWAREHOUSE

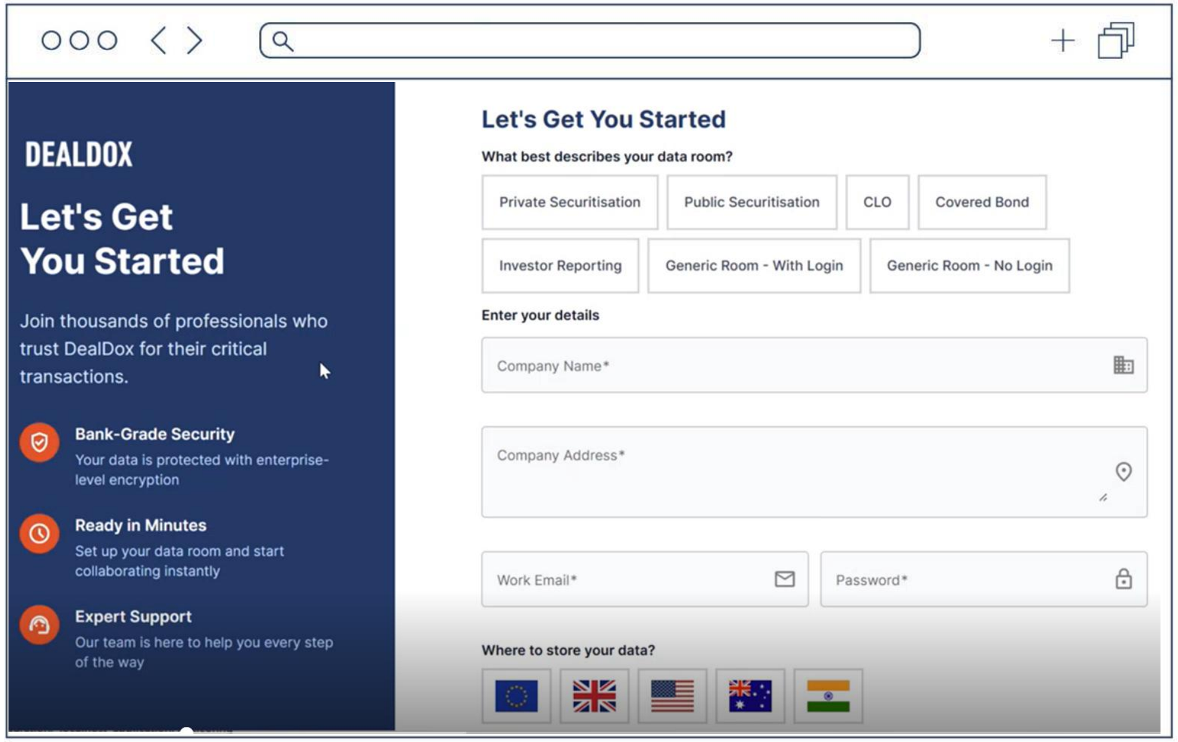
# DEALDOX: EDW'S VIRTUAL DATA ROOM

## DOCUMENT HOSTING MADE SIMPLE, SECURE, AND SEAMLESS

# DEALDOX™

## A NEW ERA OF EFFICIENCY AND SECURITY IN DEAL DOCUMENTATION HOSTING

In response to the evolving needs of the structured finance industry, EDW has developed a **bespoke virtual data room solution tailored to the needs of the market.** Crafted with meticulous attention to detail **and informed by years of expertise in data management**, this specialised offering promises to **elevate your document management experience, offering unparalleled features and benefits.**



# THE HIGHEST SECURITY STANDARDS

## BANK-LEVEL SECURITY AND STABILITY

**The platform is already certified as highly secure.**

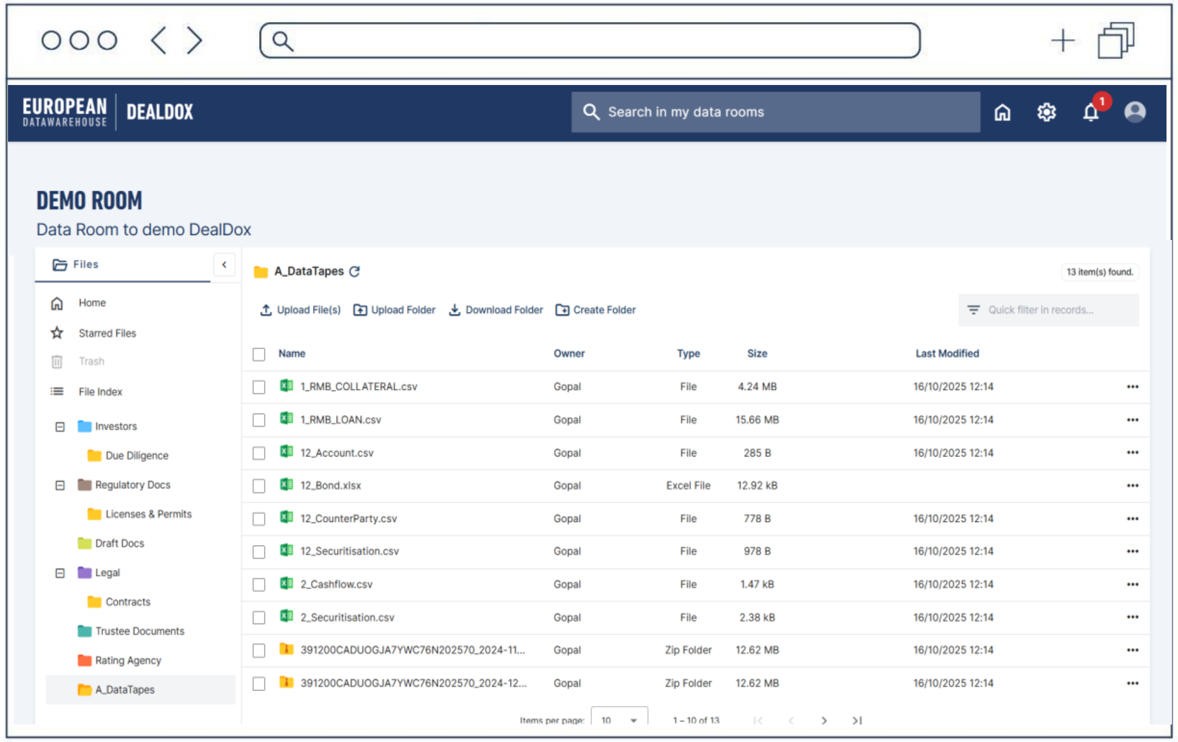
- In October 2025 EDW received **SOC2 (Type 1)** and **ISO 27001 certification**.
- EDW aims to obtain **SOC2 Type2 certification by Q2 2026**, (a continuum audit), the gold standard in IT Security.

# KEY BENEFITS AND FUNCTIONALITY

## NOW YOU CAN WORK FASTER, WORRY LESS, TRUST EVERY CLICK

**Key benefits at-a-glance:**

- Easy-to-use data rooms with bank grade security
- Hierarchical folder structures
- **User-controlled access and permissions for secure viewing**
- Comprehensive **audit trails** and **data user access analytics**
- Configurable terms and conditions
- **Secure, interactive workspace**
- **Intuitive drag-and-drop UI**
- Secure hosting developed and **housed in the EU**
- Redact, annotate, highlight, and even collect signatures in sensitive files in an **interactive PDF viewer**

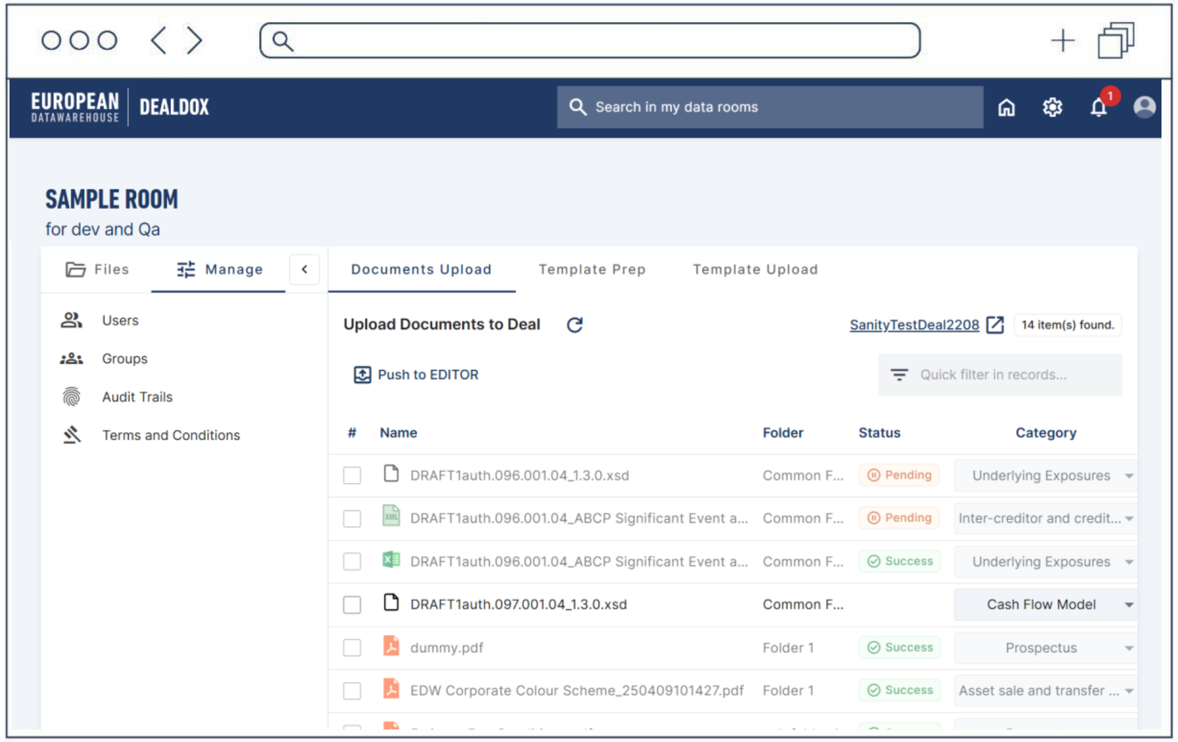


# BENEFITS ONLY FOUND ON DEALDOX™

## DEALDOX IS BUILT ON COMPLIANCE, PRECISION, AND INTUITIVE DESIGN. REGULATED, CERTIFIED, AND HOSTED IN THE EU

**Benefits you can only get from DealDox™:**

- **The only VDR built for the ABS Industry, by industry experts**
- **Complete EDITOR integration**
  - **Sync and push** for documents **seamless reporting**
  - Connect a deal
  - Publish templates
  - Download **feedback files** and **deal reports**
- Integrated CSV-to-XML converter
- Personalised support from industry experts
- **DealDox™ is already being used in an EC-funded project involving academia and several National Competent Authorities across Europe.**



# FOUNDATIONS OF DEALDOX™

**COMPLIANT. CONTROLLED. SIMPLE.**

### INDUSTRY-FIRST SOLUTION

DEALDOX™ is the **first and only VDR built especially for the securitisation industry** by experts who know it best.

### SUPERIOR SECURITY

Built in-line with internationally recognised security standards and hosted in the EU, your data and deals are **bank-vault secure**.

### COLLABORATIVE AND CUSTOMISABLE

Collaborate with your peers with co-editing, comment, and chat functions as well as a PDF redaction workspace.

### SEAMLESS ONBOARDING AND INTEGRATION

Already use EDITOR? Then **EDW is whitelisted by your company and integrated into your systems**.

### CONTROLLED AND COMPLIANT

Define **custom terms & conditions** while **managing and monitoring access on a user-by-user basis.**

### ONE-OF-A-KIND

Only DEALDOX™ offers push-to-publish functionality for **ESMA compliance**, and an **integrated CSV-to-XML converter**

# PANEL: LATEST DEVELOPMENTS IN PORTUGAL'S ABS MARKET

## MODERATOR: MARTIN KUHN, EDW

## INÊS PONTE, BANCO SANTANDER

## CARLOS CASTRO, MOODY'S

# SUSTAINABLE FINANCE: GAS AND ENGAGE FOR ESG

## MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

ENGAGE
for ESG

# Trends towards the simplification of ESG reporting


Co-funded by the
European Union

# Energy Poverty in Portugal

| Arrears on utility bills | Inability to keep house adequately warm | Dwelling with leaking roof, damp walls or rotten frames |
|---|---|---|
| 3.8 % | 20.8 % | 29 % |

*Source: Data as of 2023, European Building Stock Observatory*

- **3.8%** of the total population was having arreas on their utility bills.
- **20.8%** of the total population was not able to keep their home adequately warm over the cold periods of the year.
- About **29%** of the total population was living in a dwelling with leaking floor, damp walls or rotten windows, frames or floor.

Co-funded by the European Union

# ENGAGE for ESG Initiative

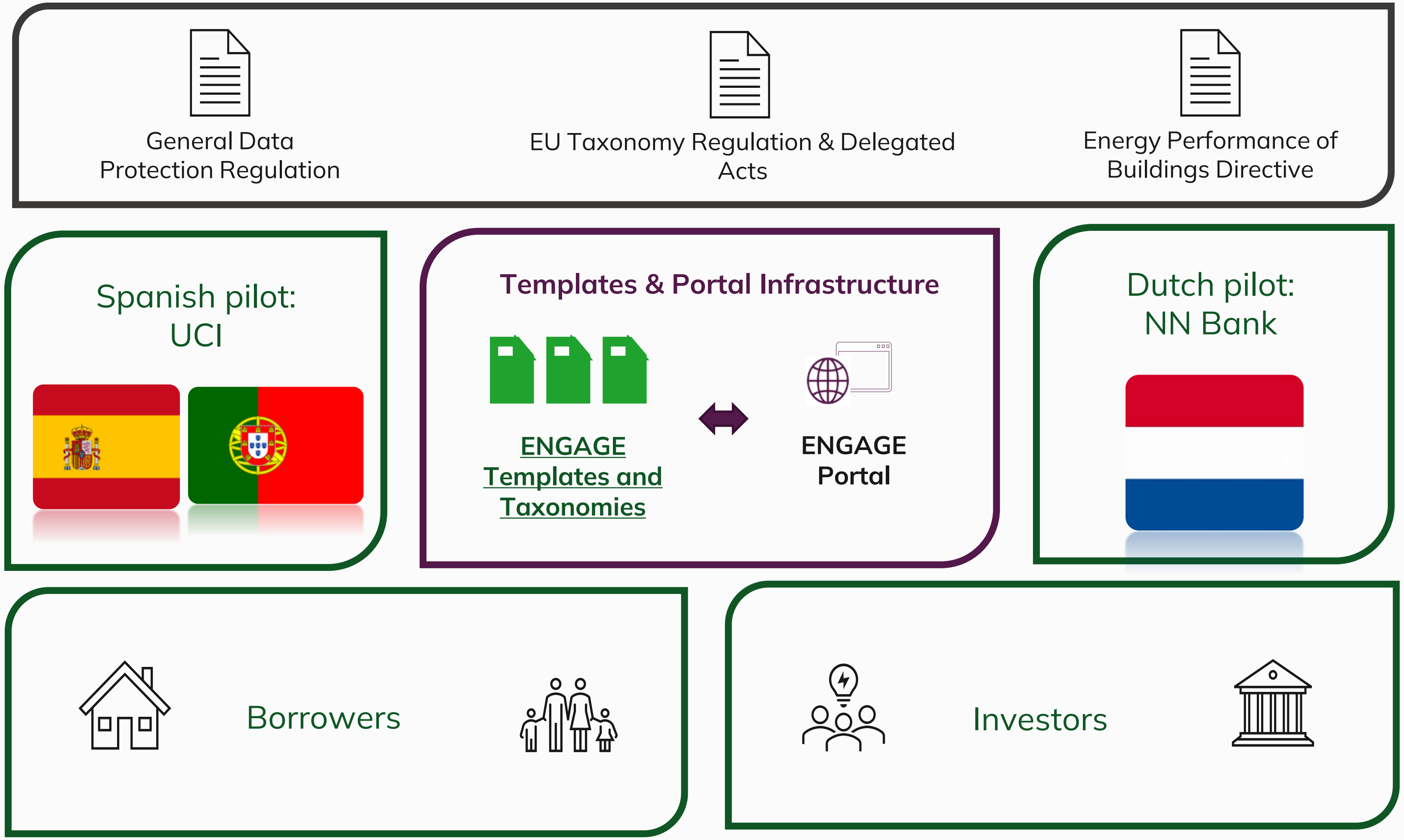
- Launched in November 2022 and co-funded by the European Union with a LIFE grant.
- The ENGAGE for ESG initiative aims to provide a simple solution for ESG reporting for mortgages and home renovation loans.

Co-funded by the
European Union

# ENGAGE for ESG Initiative Description

**Two main pillars:**

- A **disclosure template** for residential real estate data;
- A **portal** to assess EU Taxonomy alignment and data quality.

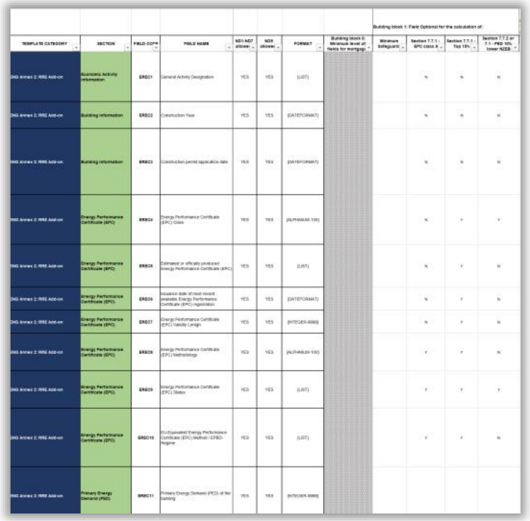


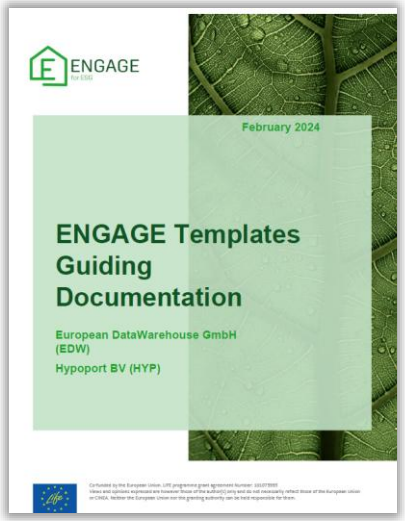
# The ENGAGE Templates

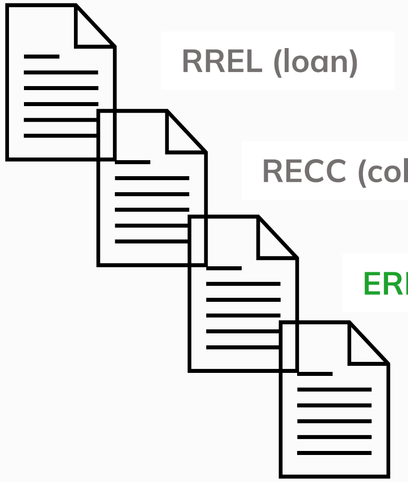
**Templates**

**Guiding Documentation**

**Sample files**





RREL (loan)

RECC (collateral)

EREC (energy efficiency collateral extension)

EGFF (governance file)

Available upon request via a simple form:
Request for Access to the ENGAGE Templates

Co-funded by the European Union

# The ENGAGE Templates: Structure

Building block 1 delivered

Building block 2 delivered

**Building block 0**

- Current ESMA underlying exposures for residential mortgages (Annex 2) and consumer loans (Annex 6)

**Building block 1**

- Compliance with the EU Taxonomy Regulation for:

a) Mortgages for the acquisition of new buildings and existing buildings;
b) Loans for the renovation of existing buildings.

**Building block 2**

- European Investment Bank information requirements (Group Green Checker) to capture funds from green financing programs for the financing of the renovation wave.

Co-funded by the European Union

# The ENGAGE Templates: How it Works

**Building Block**
- Fields marked with **0** denote the original ESMA Template
- Fields marked with **1** indicate the ENGAGE Add-On fields

**Fields used for Taxonomy Technical Screening Criteria (TSC) assessment**
- Fields with **N** are <u>not</u> optional for the TSC assessment for that economic activity.
- Fields with **Y** are not needed per se for the specific check, for that economic activity.

| ND Options for the BUILDING BLOCK 0 | | ND Options for the BUILDING BLOCK 1 | | | | Building block 1: Field Optional for the calculation of: | | | | Building block 1: Field Optional for the calculation of: | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ND1-ND4 allowe | ND5 allowe | ND1-ND7 allowe | ND5 allowe | FORMAT | Building block 0: Minimum level of fields for | Minimum Safeguards | Section 7.7.1 - EPC class | Section 7.7.1 - Top 15 | Section 7.7.2 or 7.1 - PED 10% lower NZ | DNSH 7.7 | DNSH 7.1 |
| | | | | | | | | | | | |
| | | NO | NO | {ALPHANUM-28} | | | | | | | |
| | | YES | YES | {ALPHANUM-1000} | | | N | N | N | | |

| | EREC1 | EREC2 | EREC3 | EREC4 | EREC5 | EREC6 | EREC7 | EREC8 | EREC9 | EREC10 | EREC11 | EREC12 | EREC13 | EREC14 | EREC15 | EREC16 | EREC17 | EREC18 | EREC19 | EREC20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Section 7.7.1 - EPC class A | | Y | Y | Y | Y | Y | | Y | Y | Y | | | | | | | | | | |
| Section 7.7.1 - Top 15% | | Y | Y | Y | Y | | | | | | | | | | | | | | | |
| Section 7.7.2 or 7.1 - PED 10% lower NZEB | | Y | Y | Y | Y | | | | Y | | | | | Y | | | | Y | | |

| | EREC21 | EREC22 | EREC23 | EREC24 | EREC25 | EREC26 | EREC27 | EREC28 | EREC29 | EREC30 | EREC31 | EREC32 | EREC33 | EREC34 | EREC35 | EREC36 | EREC37 | EREC38 | EREC39 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Section 7.7.1 - EPC class A | | | | | Y | | | | | | | | | | | | | | |
| Section 7.7.1 - Top 15% | Y | | Y | Y | | | | | | | | | | | | | | | |
| Section 7.7.2 or 7.1 - PED 10% lower NZEB | | | | | | | | | | | | | | | | | | | |

**We have transparently indicated per economic activity which data fields the ENGAGE Portal applies in the EU Taxonomy Technical Screening Criteria assessment**

**Only a limited number of data fields are actually needed!**

In this example, of the ENGAGE v1.2 EREC file we see that only a limited number of data fields is needed for the economic activity 7.7 assessment checks:

- In green the minimum data needed for SCC checks
- In purple the DNSH check
- In light blue the PCAF / CO2 financed emissions

| | FIELD CODE | CONTENT TO REPORT | Section 7.7.1 - EPC class A | Section 7.7.1 - Top 15% | Section 7.7.2 10% lower NZEB |
|---|---|---|---|---|---|
| *Identifiers* | EREC1 | Unique Identifier | | | |
| | EREC2 | Underlying Exposure Identifier Building block 0 | | | |
| | EREC3 | Collateral Identifier Building block 0 | | | |
| | EREC4 | General Activity Designation | Y | Y | Y |
| *SCC 7.7* | EREC5 | Construction Year | Y | Y | Y |
| | EREC6 | Construction permit application date | | | |
| | EREC7 | Energy Performance Certificate (EPC) Class | Y | | |
| | EREC8 | Estimated or officially produced EPC | Y | | |
| | EREC9 | Issuance date of most recent EPC | Y | | Y |
| | EREC10 | EPC original Validity | Y | | |
| | EREC11 | EPC Methodology | | | |
| | EREC12 | Energy Performance Certificate (EPC) Status | | | |
| | EREC13 | EU-Equivalent EPBD-Regime | | | |
| | EREC14 | Primary Energy Demand (PED) of the building | | | Y |
| | EREC15 | Estimated or officially produced Primary Energy Demand (PED) | | | |
| | EREC16 | Primary Energy Demand (PED) Based on Reference Building | | | |
| | EREC17 | Primary Energy Demand (PED) Based on Building or Building unit | | | |
| | EREC18 | Nearly zero-energy building (NZEB) theshold | | | Y |
| | EREC19 | Climatic zone code | | | |
| | EREC20 | Geographic Region - climatic zone | | | |
| | EREC21 | Building unit in top 15% indicator | | Y | |
| | EREC22 | Top 15% Explanatory Variable | | | |
| | EREC23 | Top 15% Object Reference Value | | Y | |
| | EREC24 | Top 15% Object Treshold Value | | Y | |
| *DNSH* | EREC25 | DNSH EO2 Indicator | Y | Y | Y |
| | EREC26 | DNSH EO3 Indicator | | | |
| | EREC27 | DNSH EO4 Indicator | | | |
| | EREC28 | DNSH EO5 Indicator | | | |
| | EREC29 | DNSH EO6 Indicator | | | |
| *Renovation SCC* | EREC30 | Balance for renovation of existing buildings | | | |
| | EREC31 | Balance of IMR of EE equipment | | | |
| | EREC32 | Balance of IMR of RE equipment | | | |
| | EREC33 | Balance of EE equipment | | | |
| | EREC34 | Balance of RE equipment | | | |
| | EREC35 | Large new constructions | | | |
| *Financed Emissions* | EREC36 | Financed CO2-emission | Y | Y | Y |
| | EREC37 | Surface Area | Y | Y | Y |
| | EREC38 | GHG Data Score | Y | Y | Y |
| | EREC39 | GHG Emission Factor | Y | Y | Y |

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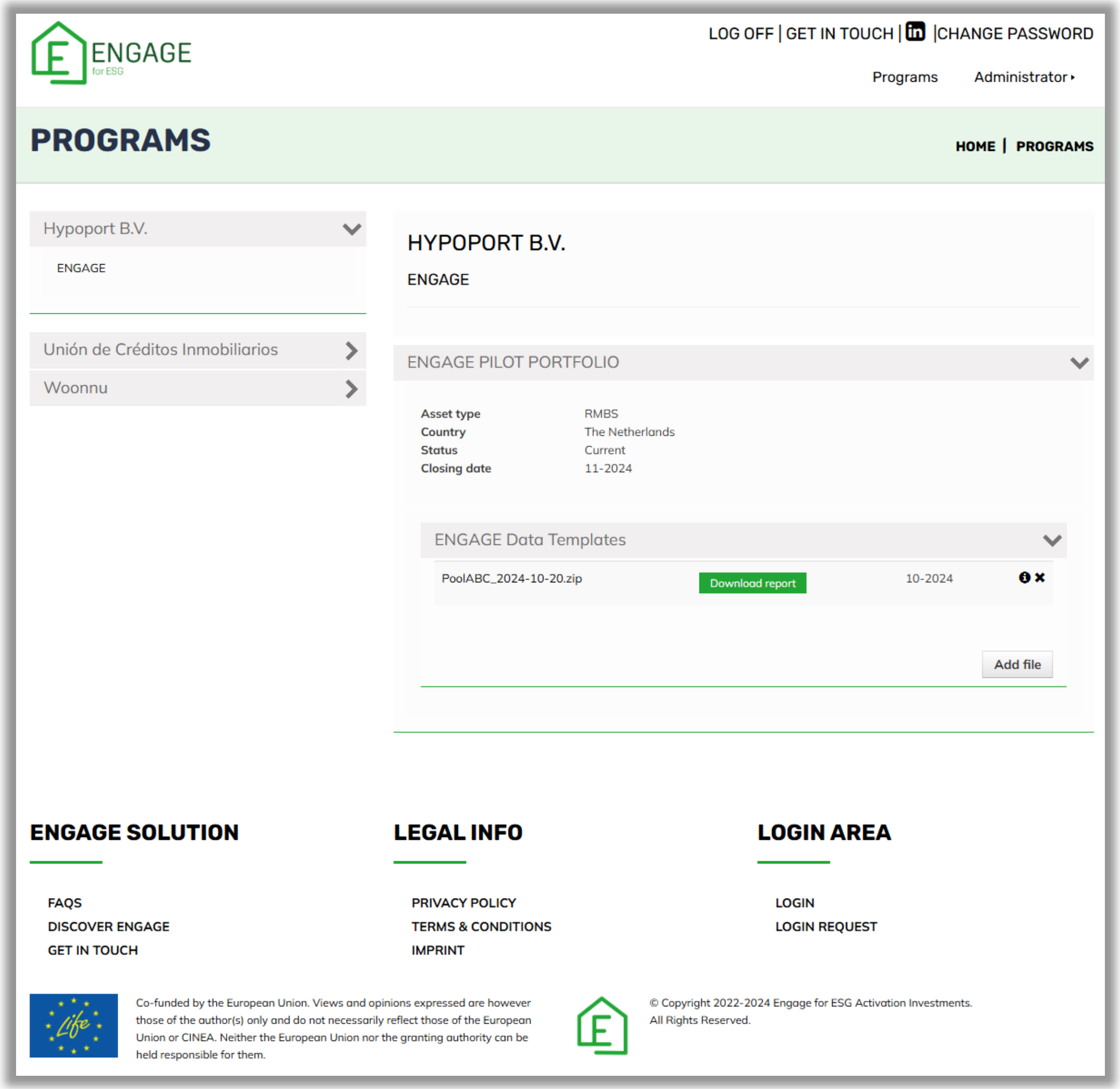
# The ENGAGE Portal: high level overview

- The ENGAGE Portal enables lending institutions to **upload and assess the alignment of their loan portfolios with the EU Taxonomy**.
- The Portal incorporates detailed **loan** and **collateral level checks**.
- Access to multiple stakeholders (internal reporting, rating agencies, investors, regulatory supervisors, etc.) upon invitation.
- The ENGAGE Portal allows users to assess multiple portfolios based on the EU Taxonomy.
- The Portal output is twofold:
    1. The **data quality feedback**;
    2. The **EU Taxonomy alignment report**.
- **Trial access** available subject to a standard legal arrangement (available upon request).



# ENGAGE EU Taxonomy Alignment Report

ENGAGE
for ESG

| | |
|---|---|
| **Portfolio Name** | *Example Portfolio 2024* |
| **Portfolio Date (DD-MM-YY)** | *01-08-2024* |
| Total # of Loans | 1300 |
| Total # of Building Units | 1100 |
| Total Balance | €444,600,000.00 |
| TSC passed % | **0.00%** |

**TSC assessment***

| **Section** | **Economic Activity** | **Subsection** | **SCC (check passed)** | | | **DNSH* (check) passed** | | | **TSC Passed (SCC + DNSH)** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | # of loans | # of Building Units | Balance | # of loans | # of Building Units | Balance | # of loans | # of Building Units | Balance |
| 7.1 | Construction of new buildings | | | | | | | | | | |
| 7.2(1) | Renovation of existing buildings | *Major Renovations* | | | | | | | | | |
| 7.2(2) | | *Reduction of (net) Primary Energy Demand* | | | | | | | | | |
| 7.3 | Installation, maintenance and repair of energy efficiency equipment | | | | | | | | | | |
| 7.4 | Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) | | | | | | | | | | |
| 7.5 | Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings | | | | | | | | | | |
| 7.6 | Installation, maintenance and repair of renewable energy technologies | | | | | | | | | | |
| 7.7(1) | Acquisition and ownership of buildings | *Buildings built before 31 December 2020: building has at least an Energy Performance Certificate (EPC) class A.* | | | | | | | | | |
| 7.7(1a) | | *Buildings built before 31 December 2020 - Alternative: building is within Top 15%* | | | | | | | | | |
| 7.7(2) | | *Buildings built after 31 December 2020* | | | | | | | | | |
| **Total** | | | | | | | | | | | |

**TSC pass Total Portfolio**

| **Section** | **SCC (check passed)** | | | **DNSH (check) passed** | | | **TSC Passed (SCC + DNSH)** | | |
|---|---|---|---|---|---|---|---|---|---|
| | % of all loans | % of total Building ur | % of total Balance | % of total loans | % of total Building ur | % of total Balance | % of total loans | % of total Building ur | % of total Balance |
| 7.1 | | | | | | | | | |
| 7.2(1) | | | | | | | | | |
| 7.2(2) | | | | | | | | | |
| 7.3 | | | | | | | | | |
| 7.4 | | | | | | | | | |
| 7.5 | | | | | | | | | |
| 7.6 | | | | | | | | | |
| 7.7(1) | | | | | | | | | |
| 7.7(1a) | | | | | | | | | |
| 7.7(2) | | | | | | | | | |
| **Total** | | | | | | | | | |

ENGAGE – EU Taxonomy alignment report with a breakdown of Technical Screening Criteria assessment per economic activity

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# ENGAGE EU Taxonomy Alignment Report

| | |
|---|---|
| **Portfolio Name** | *Example Portfolio 2024* |
| **Portfolio Date (DD-MM-YY)** | *01-08-2024* |
| Total # of Loans | 1300 |
| Total # of Building Units | 1100 |
| Total Balance | €444,600,000.00 |
| TSC passed % | **50.94%** |

**TSC assessment***

| **Section** | **Economic Activity** | **Subsection** | **SCC (check passed)** | | | **DNSH* (check) passed** | | | **TSC Passed (SCC + DNSH)** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | # of loans | # of Building Units | Balance | # of loans | # of Building Units | Balance | # of loans | # of Building Units | Balance |
| 7.7(1) | Acquisition and ownership of buildings | *Buildings built before 31 December 2020: building has at least an Energy Performance Certificate (EPC) class A.* | 460 | 411 | €133,400,000.00 | 414 | 370 | €120,060,000.00 | 411 | 363 | €119,190,000.00 |
| 7.7(1a) | | *Buildings built before 31 December 2020 - Alternative: building is within Top 15%* | 392 | 301 | €113,680,000.00 | 353 | 271 | €102,370,000.00 | 349 | 301 | €101,210,000.00 |
| 7.7(2) | | *Buildings built after 31 December 2020* | 23 | 22 | €6,670,000.00 | 21 | 20 | €6,090,000.00 | 21 | 22 | €6,090,000.00 |
| | **Total** | | 875 | 734 | €253,750,000.00 | 788 | 661 | €228,520,000.00 | 781 | 686 | €226,490,000.00 |

**This block displays the Technical Screening Criteria (TSC) assessment, per Economic (Sub) Activity. This section of the report displays the absolute number of loans, building units and corresponding balance that passed these checks.**

# ENGAGE EU Taxonomy Alignment Report

| | |
|---|---|
| **Portfolio Name** | *Example Portfolio 2024* |
| **Portfolio Date (DD-MM-YY)** | *01-08-2024* |
| Total # of Loans | 1300 |
| Total # of Building Units | 1100 |
| Total Balance | €444,600,000.00 |
| TSC passed % | **50.94%** |

**TSC pass Total Portfolio**

| SCC (check passed) | | | DNSH (check) passed | | | TSC Passed (SCC + DNSH) | | |
|---|---|---|---|---|---|---|---|---|
| % of all loans | % of total Building u | % of total Balance | % of total loans | % of total Building u | % of total Balance | % of total loans | % of total Building u | % of total Balance |
| 35.38% | 37.36% | 30% | 31.85% | 33.64% | 27% | 31.62% | 33.00% | 27% |
| 30.15% | 27.36% | 26% | 27.15% | 24.64% | 23% | 26.85% | 27.36% | 23% |
| 1.77% | 2.00% | 2% | 1.62% | 1.82% | 1% | 1.62% | 2.00% | 1% |
| 67.31% | 66.73% | 57.07% | 60.62% | 60.09% | 51.40% | 60.08% | 62.36% | 50.94% |

**This block displays the Technical Screening Criteria (TSC) assessment, per Economic (Sub) Activity. This section of the report displays the relative (vis-à-vis the portfolio) number of loans, building units and corresponding balance that passed these checks.**

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# ENGAGE for ESG: a Tool for Investors, Rating Agencies, Regulators, and Auditors

The ENGAGE solutions help you:

- Gain insights into RMBS, covered bonds, and residential real estate mortgage and home renovation loan portfolios
- Collect granular ESG information to produce your ESG ratings
- Access granular information to prepare reports and policy recommendations

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# The UCI Experience: Data Availability

## Data fields available for all loans*

| | | | | | |
|---|---|---|---|---|---|
| General Activity Designation | Building Top15 indicator | Geographic Region - Climate Area | URL towards MSS Issuer Statement | Environmental Objective | Link towards eight fundamental conventions |
| Nearly zero-energy building (NZEB) threshold | Top15_Explanatory Variable | Top15 Methodology Description | Description on how Minimum Safeguards are complied with | Link towards UN Guiding Principles on Business and Human Rights | Link alignment with the OECD Guidelines for Multinational Enterprises |

## Data fields available for 80-99% of the loans

| | | | | |
|---|---|---|---|---|
| Construction Year | Estimated or officially produced (EPC) | Primary Energy Demand (PED) of the building | Primary Energy Demand (PED) Based on Building or Building unit | Climate Area code |
| Energy Performance Certificate (EPC) Class | Energy Performance Certificate (EPC) Status | Estimated or officially produced Primary Energy Demand (PED) | Primary Energy Demand (PED) Based on Reference Building | |

## Data fields available for 1-40% of the loans

| | | | |
|---|---|---|---|
| Issuance date of most recent available (EPC) registration | Energy Performance Certificate (EPC) Methodology | Energy Performance Certificate (EPC) Validity Length | EU-Equivalent EPC) Method / EPBD-Regime |

## Non-available data

| | | | | |
|---|---|---|---|---|
| Top15 Numerator | Building unit in top-15% indicator | Top15_Object Threshold Value | Top15_ Document Issuance Date | Construction permit application date |
| Top15 Denominator | Top15_Object Reference Value | Top15_ Document Name | Top15_ Document URL | |

* Statistics obtained from a large data sample in the ENGAGE Portal

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# The UCI Experience: Benefits and Challenges

**BENEFITS**

- Serves for **self-assessment** and to verify the percentage of information we have about these relevant points.
- **Enhances our data quality and accuracy**, as we can use the validation rules and checks provided by the ENGAGE Templates to ensure that our data is complete and consistent.
- Increases our **market visibility and reputation**, as we can demonstrate our transparency and accountability to our stakeholders and potential customers. The Templates **mitigate our reporting process operational risk** which helps us with the accurancy of the data and therefore covers our reputational risk.
- Gives us leverage to ask Spanish and Portuguese authorities to update mandatory property information.

**CHALLENGES**

- The **Spanish challenge** is to release to the financial sector information needed to calculate certain classifications (such as natural hazard exposures and real estate stockage EPC distribution for each province). After having this information, we estimate a 6-month development to codify this information in the system for new originations. For the portfolio we assume to use estimation models. Public information about the energy certification of buildings in Spain can be found at https://www.miteco.gob.es/.
- The **Portuguese challenge** is aligning our internal data systems and processes with the ENGAGE Templates. This requires an investment in IT infrastructure and human resources to map, extract, transform, and load our data into the ENGAGE Templates. Public information about the energy certification of buildings in Portugal can be found at https://www.sce.pt/.

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# Free ENGAGE Trial Period Until July 2026

**Request ENGAGE Templates**

- Version 1.2 of the ENGAGE Templates available now through Request for Access to the ENGAGE Templates
- **80 institutions** have requested access to the ENGAGE Templates

**ENGAGE Demonstration**

- The ENGAGE Team is available for clarifications

**Submission to ENGAGE Portal**

- Signature of a standard legal arrangement for the safe processing of the data
- Possibility to submit the ENGAGE sample files various times enriching the information

**Output Reports**

- For each sample file submission two reports are generated: 1) a data quality report; 2) an EU Taxonomy alignment report.

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# Remain informed

- Scan the QR code to stay up to date on ENGAGE for ESG with all initiative updates, research insights, and upcoming events;
- Visit our website;
- And follow us on LinkedIn!

ENGAGE for ESG

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# CLOSING REMARKS

## MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE

# CORPORATE UPDATE & ONE MORE THING...

# UPCOMING EVENTS: Q4 2025 & 2026

| Date | EDW Hosted Event |
| --- | --- |
| 20 November | 2025 German Securitisation Event - Frankfurt |
| 20 November | 2025 Green Auto Securitisation Workshop - Frankfurt |
| 25 November | 2025 Italian Securitisation Event – Rome |
| 16 December | Q4 Research Update Webinar |
| 17 December | Regulatory Roundtable Webinar: Updates and Outlook |
| 9 January | 2025 French Securitisation Event - Paris |

| Date | Third-Party Conferences |
| --- | --- |
| 18 November | LSEG/EDW Securitisation Summit - London |
| 25-26 November | Australian Securitisation Conference - Sydney |

# PLEASE VOTE FOR EDW FOR THE 2026 GC SECURITISATION AWARD


**Save the dates for the 2026 *GlobalCapital* European Securitization Awards!**

| Nominations | Shortlist | Voting | Ceremony |
|---|---|---|---|
| October - November, 2025 | December, 2025 | December 2025 - January, 2026 | March 26, 2026 \| London |
| Coming soon | Coming soon | Coming soon | Coming soon |

# Q&A

# THANK YOU

# THANK YOU

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