

Optimise capital absorption with Finalyse RWA SmartCheck

With the entry into force of CRR III and its requirements, such as the introduction of the RWA Output Floor, financial institutions are required to perform RWA calculation applying the Standardised Approach across the entire portfolio. The demand applies also where IRB models are in place, envisaging a potentially significant impact on the overall capital absorption.

Finalyse RWA SmartCheck supports Bank by performing RWA calculation aligned with the regulatory framework, applying both the Standardised and IRB approach. The tool performs RWA calculation and allows to assess RWA optimisation opportunities, given its ability to analyse the drivers impacting RWA levels, thus allowing for the implementation of targeted and defensible optimisation action.

Built as an open-source, Python-based solution, RWA SmartCheck integrates smoothly into existing banking systems and data infrastructure. Delivered with expert support for setup, data ingestion, and configuration from Finalyse professionals, it provides a practical and auditable framework for continuous RWA analysis and optimisation.

RWA SmartCheck is built for:

- Heads of Credit Risk
- Regulatory & Capital teams
- Model Validation
- Finance / CFO functions
- CRR III / Basel IV program leads

Used when:

- Assessing output floor impact and monitoring
- Responding to supervisory findings
- Designing RWA optimisation strategy



**Explore opportunities for capital optimisation
with Finalyse RWA SmartCheck**

Request a demo at banking@finalyse.com



Basel IV/CRR III aftercare:

The guidelines, aiming to reduce complexity and harmonise calculation techniques, entailed significant changes for Banks in terms of RWA calculations and overall capital requirements

Reduce Complexity

- Revised Standardised Approach
- Foundation-IRB for large corporates and institutions
- Removal of the advanced measurement approach (AMA) for Operational Risk

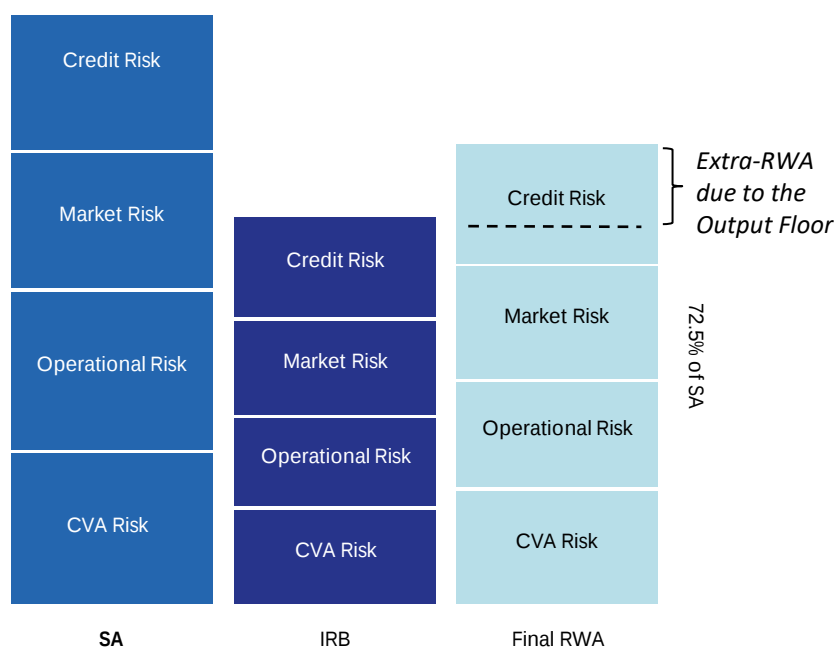
Improve Transparency

- Disclosure of both Standardised RWA's and internal model RWA's

Avoid model and measurement error

- Update of PD floors for IRB approach
- LGD and EAD floors to ensure minimum level of capital
- Introduction of RWA output floor

*Illustrative example of the **Output Floor** impact on a Bank relying on IRB models



SA RWA calculation

It is due to the requirement introduced with CRR III that banks need to calculate RWA on their entire portfolio using the Standardised Approach to estimate the RWA Output Floor

Granular data and test cases

The increased RWAs and capital requirements lead to a higher focus on:

- granular data for RWA calculation (e.g.: asset classification data, credit ratings etc.).
- exhaustive test cases to address the complexities related to the CRR III / Basel IV guidelines

CRR III Aftercare: What does it mean for banks?

- Heightened portfolio monitoring: ensure constant monitoring of key metrics pertaining to the Standardised and IRB approach
- Impact assessment: banks must be able to identify key metrics impacting on RWA levels in a traceable way
- Ensure continuous compliance: the complexity of CRR III rules and RWA calculations mandate sharpened focus on ongoing compliance
- RWA optimisation techniques: strategize the portfolio in an optimal manner and explore optimisation techniques (such as Securitizations/SRT) accordingly

Finalyse RWA SmartCheck

The tool core capabilities



SA and IRBA RWA calculation

- ✓ CRR III / Basel IV compliant RWA calculation applying both the Standardised and IRB approach
- ✓ Output-floor benchmarking for quick estimation of its impact



RWA optimisation

- ✓ Identification of key drivers contributing to RWA for strategic decision making and estimation of potential RWA optimisation
- ✓ Drivers include:
 - LGD floor & CRM allocation
 - Asset classification
 - External rating enhancement



Customization and traceability

- ✓ Development of highly customisable impact assessments
- ✓ Fully amendable parameters for flexible adaptation to local requirements
- ✓ Completely transparent audit-validation traceability



Test cases generator

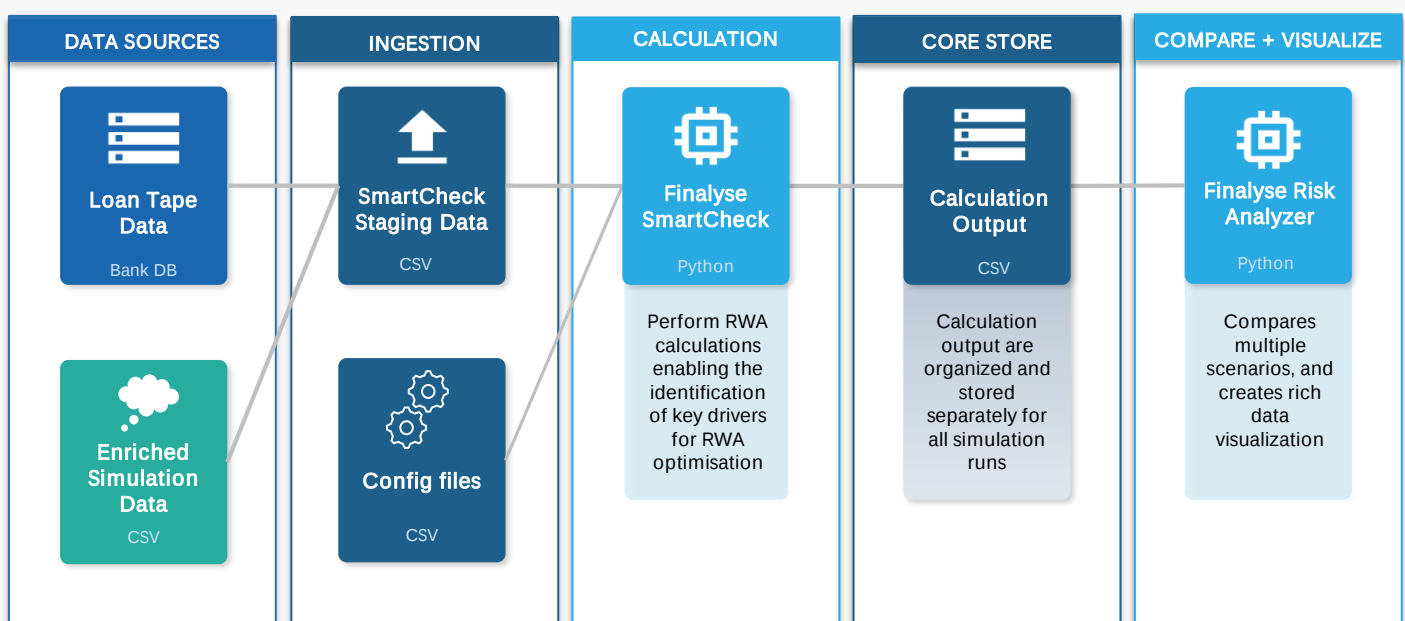
- ✓ Instant test cases generation of large portfolios, satisfying user-defined characteristics and eliminating the effort of manual test case development
- ✓ Easy addition of asset class specific dimensions (e.g. specialized lending, residential/commercial mortgages, retail transactors etc.)

Finalyse RWA SmartCheck leverages on an optimized workflow

Having worked with top-providers of RWA calculators in the markets, we have leveraged our expertise and know-how to develop our custom calculator with an optimized workflow:

- 1 Data sourcing:** RWA SmartCheck works on the data provided by the bank via Loan Tapes and enriched simulation data that are fed too the model accordingly
- 2 Data ingestion:** Both the Bank data and those resulting from data enrichment activities are ingested as staging data. In this step configuration files are also defined
- 3 RWA calculation:** The tool performs CRR III/Basel IV compliant calculations, applying both Standardised and IRB approach on the given sets of staging and configuration data
- 4 Calculation ouptut storing:** The calculation results, obtained as output of the previous stage, are organized and stored separately for all simulation runs
- 5 Data comparison and visualisation:** a purpose-built dashboarding tool (i.e. Risk Data Analyzer) allows to compare multiple scenarios, creates rich data visualization with details on specific RWA drivers' contributions

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Finalyse RWA SmartCheck shows the euro impact of your choices

Below are two illustrative examples of the results obtained by the RWA Smartcheck on a €10B composite portfolio of corporate and retail exposures, with mixed sizes and LGD characteristics:

Results under the IRB Approach

The tool allows to identify the following levers for potential RWA optimisation:

- ✓ **Turnover sourcing improvement:** enhance obligor turnover data sourcing to correctly classify large corporates and apply supporting factors for SMEs avoiding conservative fallbacks
- ✓ **LGD floor & CRM allocation:** optimize LGD flooring treatment and CRM allocation to reduce RWA under the revised IRB framework

Optimized IRB RWA through LGD Floor Optimisation + Turnover Sourcing

ILLUSTRATIVE



Results under the Standardised Approach

The levers identified for RWA reduction when the SA is applied are:

- ✓ **Retail/Non-Retail asset classification:** reclassify Retail / Non-retail exposures to benefit from lower SA risk weights under CRR III criteria
- ✓ **External rating enhancement:** extend ECAI rating coverage to substitute unrated 100% risk weights with lower rated equivalents

Optimized Standardized RWA through Enhanced Retail Classification + External Ratings

ILLUSTRATIVE



Finalyse RWA SmartCheck

Book your demo session and discover opportunities for capital optimisation



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