



Revision to the SA and IRB Approach – EBAs perspective

Ensuring consistency in risk-weighted assets from a regulatory perspective

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Susanne Roehrig

Why does the IRB Approach have to be reviewed ?

- Lack of trust regarding the use of internal models:
 - Concern that models are used to ensure low capital requirements, i.e. regulatory arbitrage, by some institutions
 - Technical model choices lead to substantial different outcomes, which indicate that capital requirements depend on non-risk based drivers
 - Supervisory practices are divergent
- **Report on the comparability and pro-cyclicality of capital requirements** published in December 2013 confirmed the existence of non-risk based variance in particular in the scope of application of the IRB Approach, PD & LGD calibration and in the treatment of defaulted assets.
- The concerns raised are general for all internal models. However, given that around 80% of capital requirements on average stem from credit risk, a revision of IRB models is the natural starting point.

Discussion Paper on the Future of the IRB Approach

- The EBA has published a Discussion Paper on the Future of the IRB Approach (EBA/DP/2015/01) in March 2015.
- EBA believes that the solution must be based on three strains of work:
 - **Regulatory review of the framework** (the topic of this presentation)
 - **Ensuring supervisory consistency** (benchmarking, home-host issues)
 - **Increased transparency** (harmonised disclosure)
- The EBA's review of the IRB Approach must be done within the legal framework of the CRR:
 - CRR requirements cannot be overruled by EBA's technical standards and guidelines
 - The review has to be carried out within the EBA's mandates
- The feedback from industry to the discussion paper is summarized in the EBA's Report on the regulatory review of the IRB Approach.
<http://www.eba.europa.eu/regulation-and-policy/credit-risk/discussion-paper-on-the-future-of-the-irb-approach>

EBA Review of the IRB Approach

The EBA has undertaken a bottom-up approach to repairing the drawbacks of internal modelling: excessive RWA variability and lack of comparability across modelling outcomes

Prioritisation	Regulatory products	Current status
Phase 1: Assessment methodology	RTS on IRB assessment methodology	Finalised ✓
Phase 2: Definition of default	RTS on materiality threshold GL on default of an obligor	Finalised ✓
Phase 3: Risk parameters	GL on PD estimation GL on LGD estimation GL on treatment of defaulted assets RTS on downturn conditions	Consultation stage Preparation stage
Phase 4: Credit risk mitigation	RTS on conditional guarantees RTS on liquid assets RTS on master netting agreements	Planning stage

Implementation of the Changes

- Many of the changes in rating systems resulting from the regulatory review will be classified as material. The timelines for implementation will include time necessary for supervisory assessment processes.
- The EBA has published additional guidance for competent authorities on how to carry out the implementation process in the most efficient manner. It is also stated that the EBA is of the opinion that the effective implementation of the changes should be finalised by the end of 2020.
(<http://www.eba.europa.eu/documents/10180/1359456/EBA-Op-2016-01+Opinion+on+IRB+implementation.pdf>)
- Implementation will be based on the phased-in approach – competent authorities will agree on the timelines individually with each institution.
- The end 2020 deadline and the phased-in approach will allow the changes to be implemented complementary to the changes implied by the IRB review at Basel level avoiding multiple or unnecessary model changes.

Phase 1: Assessment Methodology

- Addressed to competent authorities
- Sets general framework for further work in specific areas
- Applies to all types of supervisory assessment in relevant scope, including:
 - Initial application for the IRB Approach
 - Subsequent applications based on the roll-out plan
 - Changes to the rating systems
 - Ongoing review of the IRB Approach
- Defines both criteria and methods of assessment
- Covers all aspects of the IRB Approach, not only internal models

Phase 1: Assessment Methodology – Main Policy Decisions

- 1) General rules – scope of application of the RTS
- 2) Roll-out plans and permanent partial use of the Standardised Approach



No minimum coverage ratio specified, qualitative criteria for exclusion of portfolios

- 3) Validation of internal estimates, internal governance and oversight



Independence of the validation function based on staff separation, reporting lines or organisational structure


- 4) Use test and experience test



Specification of obligatory and additional areas of use test

Phase 1: Assessment Methodology – Main Policy Decisions

- 5) Assignment of exposures to grades or pools
- 6) Definition of default
- 7) Rating systems design, operational details and documentation
- 8) Risk quantification




- Specification of long-run average default rate
 - Number of defaults weighted LGD
- 9) Assignment of exposures to exposure classes
- 10) Stress test used in assessment of capital adequacy
- 11) Own funds requirements calculation
- 12) Data maintenance
- 13) Internal models for equity exposures
- 14) Management of changes to rating systems

Phase 2: Definition of Default

- Changes in the definition of default will apply both to IRB and the Standardised Approach.
- The final draft RTS on materiality threshold for credit obligations past due (EBA/RTS/2016/06) has been published on 28 September 2016.
- The final Guidelines on the application of the definition of default (EBA/GL/2016/07) has been published on 28 September 2016.
- Simultaneously a QIS was launched to assess the likely impact of the most important policy options included in the draft Guidelines and an alternative option for materiality threshold.
- A report with the results from the QIS on the proposed regulatory changes for a common EU approach to the definition of default has been published as well at the 28 September 2016.

Phase 2: Definition of Default – Main Policy Decisions

- 1) Days past due criterion
 - 2) Indications of unlikelihood to pay
 - 3) Default definition in external data – only for IRB Approach
 - 4) Criteria to return to non-defaulted status
-  Specification of probation periods – at least 3 months, 1 year for distressed restructuring
- 5) Consistency of default definition
 - 6) Retail exposures
 - 7) Documentation and governance – governance only for IRB Approach

Phase 2: RTS on Materiality Threshold

1) Level of application of the threshold



The level is applied at obligor level (exception for retail-exposures where facility level may be applied)

2) Reference amount for the threshold



Credit obligation past due is defined as the sum of all amounts past due

3) Application of the threshold in default detection process



Breach of the threshold means the start of the counting of the 90 (or where applicable 180) days

Phase 2: RTS on Materiality Threshold

4) Absolute Threshold



The absolute threshold cannot be higher than EUR 100 for retail exposures or EUR 500 for non-retail exposures

5) Relative Threshold



The relative threshold should be set at the level of 1% for both retail and non-retail exposures (in any case lower than 2,5%)

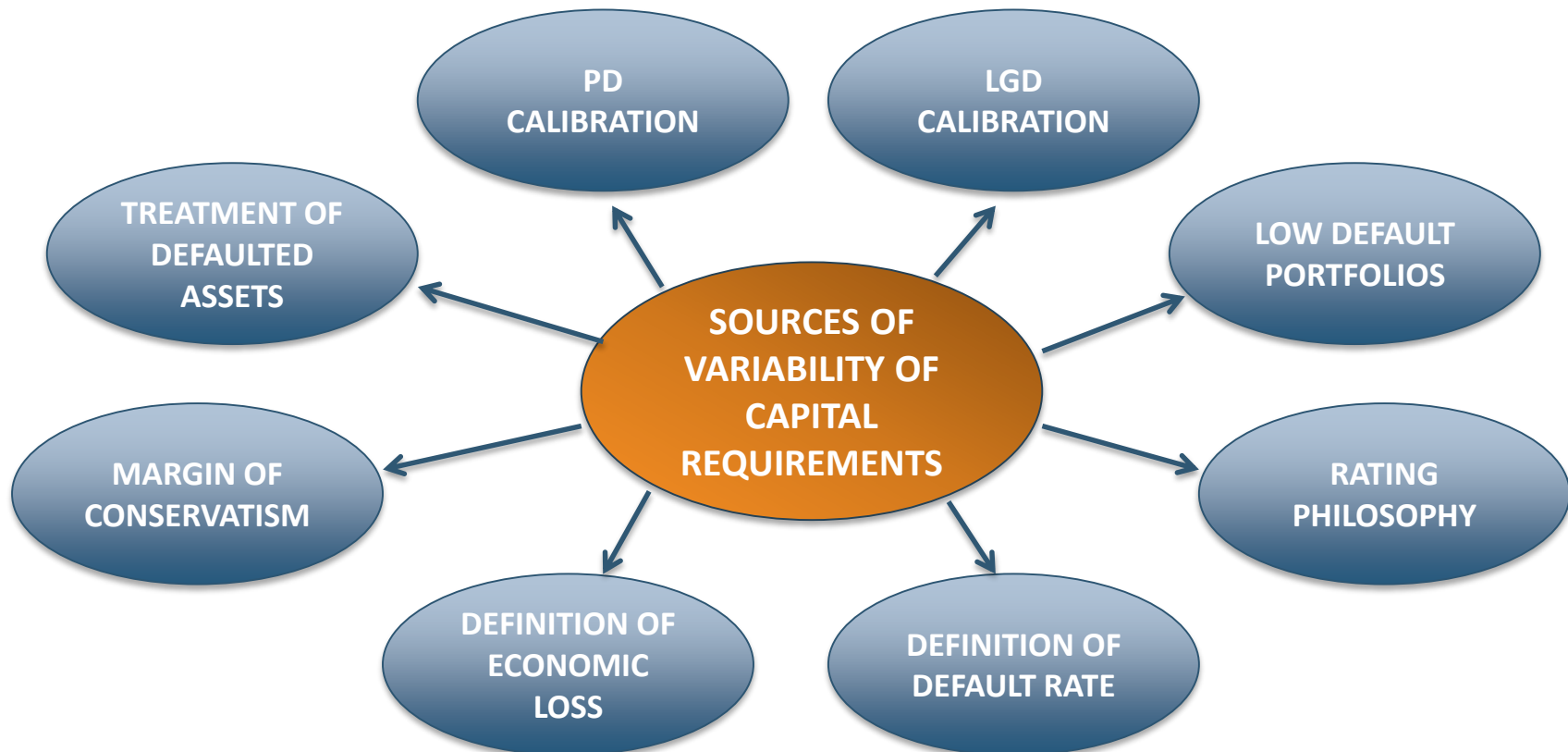
6) Application of the threshold in default detection process



In the case where both of those limits are breached for 90 consecutive days (or 180 days where applicable) a default has occurred

Phase 3: Draft Guidelines on PD & LGD estimation and the treatment of defaulted assets

- The consultation paper on the draft Guidelines (EBA/CP/2016/21) has been published on 14 November 2016.



Phase 3: Draft Guidelines on PD & LGD estimation and the treatment of defaulted assets– Main Policy Decisions

General estimation requirements

- Segmentation principles – rating systems for homogeneous exposures in terms of credit related information
- Data quality – accuracy, completeness, appropriateness
- Human judgement in model development
- Margin of conservatism – categorisation and quantification

PD estimation

- Data requirements
 - Development sample – possible different definition of default, representativeness of key characteristics
 - Calibration sample – no data exclusions
- Observed default rates – treatment of fees-only exposures, short-terms contracts, seasoning effects
- Long-run average default rate
 - Historical observation period has to include downturn
 - Benchmark based on the most recent 5 years and all data
- PD estimation – design of grades or pools and calibration (various methodologies available)

Phase 3: Draft Guidelines on PD & LGD estimation and the treatment of defaulted assets– Main Policy Decisions

LGD estimation

- Data requirements – minimum scope of reference data set and data representativeness (no data exclusions)
- Definition of economic loss and realised LGD
 - Discounting rate = 1Y EURIBOR + 5%
 - Include additional drawings, fees and interest after default
- Long-run average LGD
 - Historical observation period based on all observed data
 - Include estimated recoveries on incomplete processes
- LGD estimation – various methodologies available but all main types of collateral have to be included as a risk driver
 - Repossession treated as recovery subject to a haircut

Estimation of EL_{BE} & LGD in-default

- EL_{BE} and LGD in-default within the definition of LGD model and based on the same methodology (only for a given reference date instead of the moment of default)
- Calibration – consideration of economic conditions:
 - EL_{BE} – current economic circumstances
 - LGD in-default – economic downturn
- Individually assessed provisions may be lead to override

About us

- European Banking Authority was established as an independent Agency on 1 January 2011 and took over all tasks and responsibilities from the Committee of European Banking Supervisors (CEBS).

Mission: build a single regulatory and supervisory framework for the entire banking sector in the EU, so as to ensure an efficient, transparent and stable Single Market



Development of European Single Rulebook -
- single set of harmonised prudential rules for financial institutions throughout the EU

Promoting convergence of supervisory practices and cross-border supervisory cooperation for cross-boarder banking groups

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EUROPEAN BANKING AUTHORITY

Floor 46, One Canada Square, London E14 5AA

Tel: +44 207 382 1776

Fax: +44 207 382 1771

E-mail: info@eba.europa.eu

<http://www.eba.europa.eu>