EUROPEAN CENTRAL BANK

**ECB-PUBLIC** 

<Company> <Street> <City> <Country>

To the attention of the Board

11 June 2018

# Status update on TRIM: overview of outcome of general topics review and interim update on preliminary results of credit risk on-site investigations

Dear Sir or Madam,

I am writing to share with you some aggregated information on the first outcomes of our targeted review of internal models (TRIM) investigations. This should provide a broader context in which to view the first decisions you have already received or will receive soon. Further information will be provided as additional results become available.

As you know, TRIM is an SSM-wide multi-year project (2016-2019).<sup>1</sup> It aims to assess whether the internal models currently used by significant institutions (hereinafter simply "institutions") to calculate their Pillar 1 own fund requirements comply with the applicable regulation, and whether the risk estimates they produce are reliable and comparable.

To that end, a sequential approach is being implemented:

- (i) A review of how the institutions implemented the non-model-specific provisions ("general topics") contained in Regulation (EU) No 575/2013<sup>2</sup> (the "CRR") was completed by the end of 2017. Institutions were informed about possible remediation needs and were asked to react by end-May 2018. In parallel, a public consultation on the corresponding chapter of the ECB guide to internal models (hereinafter "the ECB guide")<sup>3</sup> took place.<sup>4</sup>
- (ii) On-site investigations are being performed to review the compliance of selected models with the

<sup>&</sup>lt;sup>1</sup> The execution of the project can be roughly divided into two key phases: (i) phase one (2017-Q2 2018) involved a review of the models used to assess credit risk for retail and small and medium-sized enterprise portfolios, as well as market risk and counterparty credit risk; (ii) phase two (Q3 2018-2019) mainly focuses on the models used to assess credit risk for low-default portfolios. See also:

https://www.bankingsupervision.europa.eu/about/ssmexplained/html/trim.en.html

<sup>&</sup>lt;sup>2</sup> Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

<sup>&</sup>lt;sup>3</sup> The ECB guide to internal models (formerly "Guide for the TRIM") provides transparency on how the ECB aims to apply the relevant regulatory provisions on internal models consistently when assessing whether institutions meet those requirements. A revised version of the credit risk chapter will be published for consultation in due course.

<sup>&</sup>lt;sup>4</sup> See https://www.bankingsupervision.europa.eu/legalframework/publiccons/html/internal\_models.en.html

CRR requirements (all internal models used for market risk and counterparty credit risk, as well as the most material and critical models for credit risk). The execution phase of the project has progressed according to plan. In 2017, 92 on-site investigations were launched and by the end of June 2018, a total of 115 TRIM investigations across 12 countries will have been carried out.

In preparation for the next phase of TRIM, the supervisory expectations and the methodology are being fine-tuned to cater for the specificities of the models applied to so-called low-default portfolios.<sup>5</sup> TRIM on-site investigations on these models are currently planned to start by the end of the third quarter of 2018 and to run through 2019. More details on these upcoming investigations will be provided in a dedicated communication in the course of summer 2018.

Section 1 of this letter gives an overview of the outcome of the general topics review and the corresponding decisions and follow-up letters sent to the institutions concerned. Section 2 provides a preliminary update on the outcomes that have emerged so far from the TRIM on-site investigations, with a focus on credit risk.<sup>6</sup>

### 1. Outcome of the general topics review

General topics include the principles overarching the different risk types, implementation of the IRB approach, internal models governance, internal validation, internal audit, model use, model change management and the involvement of third-parties. The review of these topics started in the summer of 2016, with a standard request for information and documentation addressed to in-scope institutions. The off-site analysis of the information received was complemented and refined by means of short supervisory visits at the institutions' premises, conducted in the fourth quarter of 2016 and the first quarter of 2017. On that basis, further horizontal analyses to ensure a consistent follow-up on potential issues detected were conducted.

The supervisory follow-up to the general topics review was two-fold. On the one hand, cases of outright non-compliance with the applicable regulation were addressed through supervisory decisions that imposed obligations on the affected institutions to remediate the shortcomings within certain deadlines (see Table 1 for examples). On the other hand, additional potential misalignments with further aspects of the regulatory framework (as presented in the general topics chapter of the ECB guide) were communicated to the institutions via follow-up letters. Institutions were asked to respond to these letters by providing the JSTs with written feedback on the current status of each issue (see Table 2 for examples).

<sup>&</sup>lt;sup>5</sup> Models covering the following exposure classes: Corporate – Other, Corporate – Specialised Lending and Institutions.

<sup>&</sup>lt;sup>6</sup> The results presented in section 2 reflect an interim view based on a significant sample of assessment reports that have been included in the horizontal analysis so far. This view may change once more investigations are included in the analysis.

#	Description of shortcomings	Share of institutions with obligations <sup>7</sup>
1	Absence of a model change policy at the institution or absence of notification of material model changes to the competent authority	29%
2	Lack of evidence of annual back-testing for some rating systems	24%
3	Use of the standardised approach without formal authorisation of a permanent partial use (PPU)	19%
4	No strict separation of staff performing validation activities and staff involved in tasks of the credit risk control function (e.g. model development and monitoring)	19%
5	Current resources allocated to the internal validation function preventing a robust validation process	14%

### Table 1 – General topics review: examples of non-compliance cases (non-exhaustive)

## Table 2 – General topics review: examples of issues communicated in the follow-up letters (non-exhaustive)

#	Description of issues	Share of institutions affected <sup>8</sup>
1	<ul> <li>Implementation of a model risk management framework</li> <li>Despite some measurement of model risk and partial controls in place, practices not formalised/documented</li> <li>Absence of model risk management (steering and mitigation)</li> <li>Model risk not identified as a material risk by the institution (lack of awareness)</li> </ul>	31% 27% 13%
2	<ul> <li>Application of the IRB approach and monitoring of permanent partial use (PPU) provisions</li> <li>Absence of monitoring of the PPU conditions</li> <li>Absence of clear criteria for the decision of the application of the IRB approach (selection done on a case-by-case basis)</li> </ul>	58% 31%
3	<ul> <li>Decision-making responsibilities and internal reporting</li> <li>Level of detail in the reporting is not appropriate</li> <li>Management body (or a designated committee thereof) does not approve all risk management policies</li> </ul>	36% 25%
4	<ul><li>Organisation of the internal validation function</li><li>Deficiencies in the validation policy and procedures</li></ul>	7%
5	<ul> <li>Scope and frequency of the audit review of the rating systems</li> <li>Lack of resources to allow a relevant assessment of the IRB requirements</li> <li>Some of the rating systems not reviewed by internal audit</li> </ul>	36% 31%
	Certain aspects of the rating systems not reviewed regularly	22%

<sup>&</sup>lt;sup>7</sup> Out of the 21 institutions that received a dedicated supervisory decision on general topics.

<sup>&</sup>lt;sup>8</sup> Out of the 55 institutions that received a follow-up letter on general topics.

#	Description of issues	Share of institutions affected
6	Non-rated exposures and outdated ratings	
	<ul> <li>Non-rated exposures or exposures with outdated ratings not monitored by the institution</li> </ul>	25%
	<ul> <li>No specific prudential treatment for non-rated exposures, or exposures with outdated ratings, or such exposures treated under the standardised approach</li> </ul>	20%
7	Change policy and re-rating process	
	Process for the re-rating and implementation of the new model     not formalised	62%
	<ul> <li>Model change policy missing key elements such as responsibilities, impact assessment procedures or process for the classification of the changes</li> </ul>	15%

### 2. Interim update on the outcome of credit risk investigations

As communicated in previous information letters, TRIM investigations have first focused on credit risk models related to the exposure classes Retail and Corporate – SME ("retail and SME models"). Investigations of those models are expected to be largely completed by end-June 2018. After the completion of the on-site phase, each TRIM draft assessment report undergoes consistency checks to ensure a harmonised approach across investigations and a consistent application of the tools and methodology. Then, the report is discussed with the institution in "exit meetings", where the institution can provide comments on the facts and findings. After incorporation of the institution's comments, where appropriate, the final report is shared with it.

As explained in the previous letters, the supervisory follow-up is based on the final assessment report; it is organised according to a two-step approach in TRIM:

- Cases of non-compliance with the CRR are addressed in a supervisory decision directly after each investigation, and banks are asked to address these findings. Furthermore, the ECB may also provide recommendations with a view to supporting future compliance with upcoming legal requirements and further specifications added to existing requirements.
- Whenever necessary, and after due consideration of all the specific circumstances of each institution, a separate letter may be sent at a later stage, taking into account (i) horizontal analyses of the outcome of the TRIM investigations, (ii) the entry into force of new regulations, and (iii) the updated ECB guide.

The final supervisory decisions are currently being shared with the institutions. This letter presents an interim update on the results that have emerged so far. Figure 1 provides an overview of the findings identified for probability of default (PD) and loss given default (LGD)<sup>9</sup> in about 60 credit risk investigations. For presentational purposes, the overview categorises the findings according to the relevant risk parameter and related sub-topic. The figure provides an indication of the number of findings raised per topic, with a breakdown by severity, as well as the percentage of investigations for which at least one finding on the respective topic has been raised.

<sup>&</sup>lt;sup>9</sup> Investigations considered so far have focused mainly on exposures to residential real estate and therefore the credit conversion factor-related findings are not representative enough for a horizontal analysis at this stage. Furthermore, feedback on aspects related to data quality is not included in this overview.

Regarding the PD parameter, a significant number of findings are related to the long-run average. The shortcomings triggering findings on this topic are typically related to the calculation of default rates and to the definition of the period representative of the long-run average. The EBA has provided institutions with detailed guidance by means of the Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures<sup>10</sup> (hereinafter "the EBA guidelines"), to which the ECB extensively refers in its guide.

A comparable number of findings still concerning PD are also related to risk differentiation. This was one of the areas in which the assessment teams performed extensive analyses challenging the PD models in place at the institutions. The shortcomings in this area are typically related to a lack of consideration of relevant risk drivers or to the lack of an appropriate definition of the grades.



Figure 1: Overview of findings on PD/LGD in TRIM investigations

Regarding the LGD parameter, the highest number of findings relates to the calculation of realised LGD. Shortcomings in this area typically involve one or more of the following potential issues: on the one hand, the use of an inappropriate discount rate (e.g. risk-free rate, or contractual interest rate) and the treatment of multiple defaults (e.g. lack of an appropriate treatment to account for possible dependency among multiple defaults), which should in the future benefit from the detailed guidance provided by the EBA guidelines and the ECB guide; on the other hand, a significant number of findings are related to specific aspects of the calculation (e.g. lack of an appropriate treatment of restructuring cases, or insufficient consideration of indirect costs) that were identified during the intensive walk-throughs performed by the assessment teams during the on-site investigations.

In addition to the calculation of realised LGD, a significant share of findings is related to the estimation of

<sup>&</sup>lt;sup>10</sup> EBA/GL/2017/16, published on 20/11/2017 and available on the EBA's website: <u>https://www.eba.europa.eu/documents/10180/2033363/Guidelines+on+PD+and+LGD+estimation+%28EBA-GL-2017-16%29.pdf</u>

long-run average LGD, in particular the treatment of incomplete work-outs, the downturn adjustment and the treatment of defaulted assets (i.e. models for expected loss best estimate and LGD in default). These topics have previously been identified as sources of non-risk-based variability of risk-weighted assets and were addressed in detail in both the EBA guidelines and the ECB guide.

Finally, common to both PD and LGD, a significant number of findings relate to the frameworks for determining margins of conservatism and the reviews of estimates. This situation, characterised by very different practices across institutions, was expected to a certain extent and had also led to the development of the detailed guidance in the EBA guidelines.

### 3. Next steps

With respect to the general topics review, after communication of the shortcomings and further issues identified in the review, the immediate next step was for institutions to act on the decisions received and, by end-May 2018, to provide to the ECB their responses to the follow-up letters. Now that this step is complete, the ECB will monitor progress as part of the general ongoing dialogue between the institutions and the joint supervisory teams.

With respect to TRIM on-site investigations, the next information letter will be sent during summer 2018 to provide an update on the upcoming investigations of low-default portfolios. This letter will include an update on the TRIM-related Supervisory Examination Programme 2018 and further clarifications on the practical and logistical considerations for this new batch of investigations.

I trust that the information contained in the current letter regarding the outcome of the general topics review and the interim results of TRIM credit risk investigations will support your institution in better understanding the context of the procedure and facilitate its involvement in the supervisory follow-up process. Let me emphasise that the involvement of institutions' top management in TRIM is essential to the success of the project and ultimately to the role played by internal models.

On behalf of the ECB and all staff involved in the TRIM project, I would like to express once more my appreciation for the commitment your institution has shown so far to making the project a success and I thank you in advance for continuing your collaborative engagement into the rest of 2018 and 2019.

Yours sincerely, [signed] Korbinian Ibel Director General – DG Microprudential Supervision IV