Management Solutions
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IFRS 9 Implementation by EU institutions

Summary of EBA's second monitoring report

The EBA has published the second monitoring report on the implementation of IFRS 9 by EU institutions with the aim to promote further improvements in their ECL model practices

Context

- Since 2016, the European Banking Authority (EBA) has been monitoring the effective implementation of the International Financial Reporting Standard (IFRS) 9 among European Union (EU) institutions. Guidelines and a benchmarking exercise have been developed **to assess the consistency on accounting for expected credit losses** (ECL). The aim is to provide transparency on expectations of sound credit risk management practices associated with the implementation and ongoing application of the accounting for ECLs. The EBA published the first IFRS 9 monitoring report in November 2021, and its main observations were that the EBA had to continue working on the integration of High Default Portfolios (HDPs) in the benchmarking exercise and on its extension to institutions applying the standardised approach for credit risk.

- In this context, the EBA has published its **second monitoring report on the implementation of IFRS 9.** This report focuses on HDPs and aims to promote further improvements in **ECL model** practices, **ensuring transparency** on the main areas of concern.

Next Steps

Supervisors will continue to **ensure the consistence in the application of IFRS 9**, and follow-up on key findings highlighted in previous reports by the EBA. The benchmarking exercise will continue to foster a consistent implementation of the standard.

Main findings and observations

①	SICR

- Continued lack of use of collective Significant Increase in Credit Risk (SICR) assessment as required by IFRS 9

②	ECL

- In ECL models, institutions continue to make extensive use of overlays

③	IFRS 9 PD variability and robustness

- The variability of IFRS 9 Probability of Default (PD) estimates observed calls for heightened supervisory scrutiny on a case-by-case basis

④	FLI

- The impact of forward-looking information (FLI) and the non-linearity effect is generally confirmed to be modest, but divergent practices might explain the varying levels of sensitivity observed across institutions

⑤	Backtesting

- Backtesting results should be effectively used for the periodic review and improvement of the IFRS 9 models

Access to Document

Staging approaches that are not well designed and implemented by institutions may result in a delayed recognition of SICR thus, not ensuring the measurement of ECLs with the appropriate time horizon
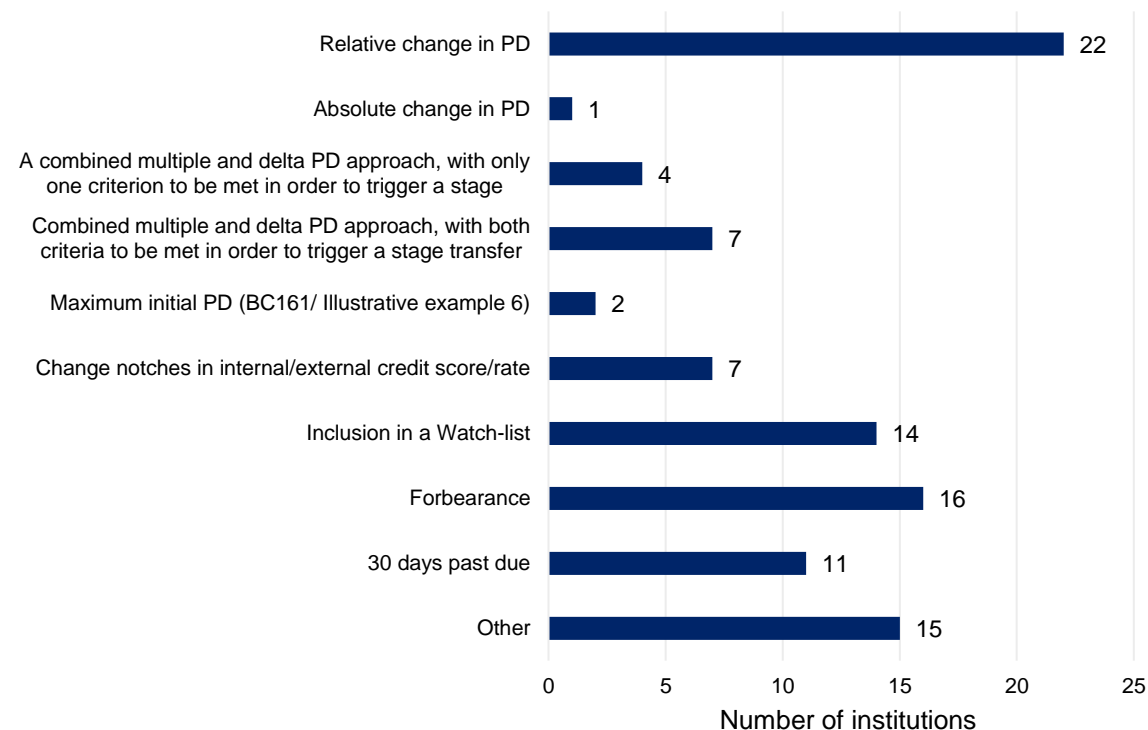
Main changes to the SICR assessment approach

- For HDPs, institutions have generally reported **limited changes to the SICR assessment approaches** compared to the previous investigations:
  - the revision of the existing **quantitative SICR thresholds** or to consider nonlinearity in the SICR assessment;
  - introducing a **threefold increase in lifetime PD** as an additional backstop indicator to prevent delays in transfers to Stage 2;
  - using **collective assessment** and other **sectoral** approaches (related to COVID-19 factors such as vulnerable sectors, moratoria or state-guaranteed loans);
  - adding the **watchlist** to the set of SICR qualitative indicators;
  - introducing **a Stage 2 probation period** under established conditions.

Limited use of SICR collective assessment

- One of the most notable findings of the exercise has been the **continued limited use** of **collective SICR assessments**. Institutions are expected to make **use** of **collective assessments** to **complement individual assessments**, above all in those circumstances where information is not available at the individual level without undue cost or effort.
- **Collective SICR assessment approaches** are expected to be used by institutions **on a regular basis and not only in situations of uncertainties** in the evolution of the current macroeconomic outlook and emerging novel risks in the financial landscape (i.e., inflation, interest rates, geopolitical risks).

Indicators used by institutions to assess SICR[1]

Indicator	Number of institutions
Relative change in PD	22
Absolute change in PD	1
A combined multiple and delta PD approach, with only one criterion to be met in order to trigger a stage	4
Combined multiple and delta PD approach, with both criteria to be met in order to trigger a stage transfer	7
Maximum initial PD (BC161/ Illustrative example 6)	2
Change notches in internal/external credit score/rate	7
Inclusion in a Watch-list	14
Forbearance	16
30 days past due	11
Other	15

Number of institutions

(1) Figure 2: IFRS 9 implementation by EU institutions (EBA, 2023)

The use of LCRE should be limited and always well justified and documented. In addition, some differences have been noted in terms of the levels of PD used to define the scope of LCRE
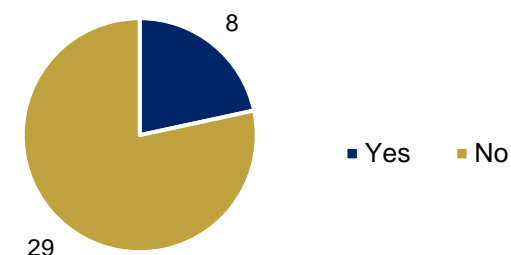
Alignment between the definition of default (DoD) and IFRS 9 exposures in Stage 3

- Despite the differences between the concepts of non-performing exposures, the prudential DoD and credit-impaired financial assets (i.e., Stage 3 under IFRS 9), in practice, it is observed that **institutions** tend to **converge** full **alignment among the three definitions**.
- The **most common rationales provided** for observed deviations were: i) the different definition of cure periods used for Stage 3 and defaulted exposures; and ii) the different materiality thresholds applied.

Application of the LCRE by institutions in the sample[1]

8

29

■ Yes ■ No

Low Credit Risk Exemption (LCRE)

- Nearly a quarter of the institutions make use of the LCRE. Material divergences have been observed in terms of **PD thresholds** used to define the **scope of the LCRE**. This evidence raises some prudential concerns for the following reasons:
    - The use of the LCRE, especially for HDPs, should be limited. This is because an excessive application of LCRE will result in delays in transfers to Stage 2.
    - The determination of LCRE should be consistent with the globally understood definition of low credit risk.
- Institutions making usage of LCRE for HDPs are therefore expected to **review their approaches accounting** for the regulatory and supervisory expectations that were already set on this matter in the EBA Final Guidelines (GLs) on accounting for ECL.

PD Thresholds

- Institutions made use of **quantitative indicators** to assess SICR, which generally correspond, for entities using statistical IFRS 9 models, to a predetermined level of the relative increase in the lifetime PD since origination. The main issue is identifying the specific level of increase in PD to be considered significant according to IFRS 9 and which justifies the transfer of the exposure to Stage 2.
- **Qualitative indicators**, relate to relevant non-statistical information, were also generally used by institutions and led to relevant impact in terms of higher level of transfers to Stage 2.
- In addition, the analyses on SICR practices have also confirmed that some institutions continue relying on the use of **absolute thresholds** only or on a **combination of absolute and relative thresholds.** SICR triggers, defined only in absolute terms, are generally not consistent with the requirements of IFRS 9.

Overlays adjust the ECL outputs to reflect the relevant emerging risks not captured by ECL models, but their use relies on a high degree of judgment and therefore, divergence across institutions

Types of ECL models

- Most institutions have implemented PD*LGD*EAD approaches for determining ECL, but some of them did **not develop designated IFRS 9 models to estimate the ECL amount of specific portfolios.** They instead linked coverage levels of these portfolios to other reference portfolios where IFRS 9 models were applied. This raises **prudential concerns** for material portfolios.
- Institutions are encouraged to **review their approaches** and address any limitations ensuring consistent ECL outputs for portfolios under IFRS 9 impairment model.

Model limitations and use of overlays

- ECL models are not always able to capture all **relevant emerging credit risk factor** and ensure that the **aggregate amount of allowance is adequate**. For this reason, most institutions implement **overlays**. Approximately half of the sample mentioned using overlays and, in most cases, they reported they had a significant impact on the IFRS 9 12-month PD.
- Overlays adjust the ECL outputs to reflect the relevant emerging risks not captured by ECL models, but their use relies on a **high degree of judgment** and therefore, divergence across institutions.
- In most cases, overlays have been applied at the **level of the final ECL outputs**, with some institutions applying model adjustments at **risk parameter level**. The latter is considered more risk sensitive and consistent with the need to incorporate the additional source of risks.
- EBA expects a further **improvement in the process on the calibration of overlays**, reflecting a more granular manner at single risk parameter level.
- Institutions should complement the quantification of overlays at ECL Level with the collective SICR assessment envisaged by IFRS 9.
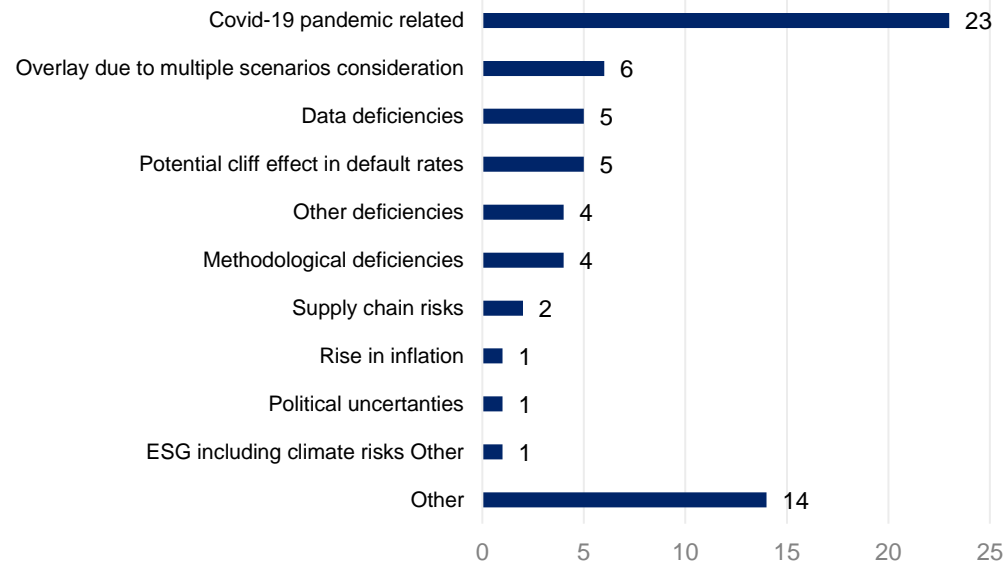
Other risks

- Effects from the **Russian/Ukrainian conflict** have been identified as a material risk and have been reflected by updating macroeconomic variables and using ECL overlays.
- Few institutions have taken **Environmental, Social and Corporate Governance (ESG) factors** into account in their ECL models. EBA welcomes ongoing work to adequately adjust ECL models to account for these novel risk factors and expects institutions to carefully assess the need for their inclusion in ECL estimates.

Most institutions implement overlays, approximately half of the sample mentioned using overlays and, in most cases, they reported they had a significant impact on the IFRS 9 12-month PD

Types of overlays used by institutions in the sample[1]

Type	Value
Covid-19 pandemic related	23
Overlay due to multiple scenarios consideration	6
Data deficiencies	5
Potential cliff effect in default rates	5
Other deficiencies	4
Methodological deficiencies	4
Supply chain risks	2
Rise in inflation	1
Political uncertanties	1
ESG including climate risks Other	1
Other	14

Share of ECLs associated with the use of ECL overlays by type of portfolio[2]

Portfolio	Number of institutions	Avergage impact	Median impact
CORP - Corporates wich are not SMEs	16	26,3%	24,9%
MORT - Retail mortgages which are not SMEs	14	24,9%	13,3%
RETO - Retail other	12	17,8%	11,1%
RQRR -Retail Qualified Revolving	5	14,5%	7,4%
RSMS - Retail SME exposures secured by real estate	12	38,1%	37,4%
SMEC - Corporate which are SMEs	15	29,6%	23,0%
SMOT - Other retail SME exposures	13	37,1%	30,8%

Box-diagrams[3]
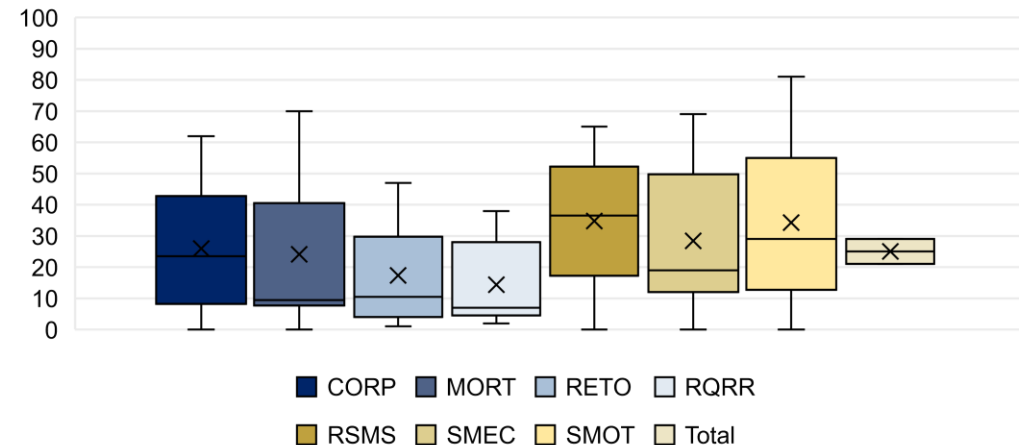
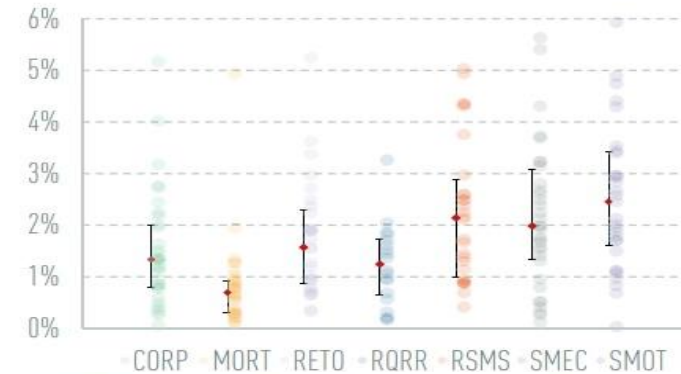Legend: CORP, MORT, RETO, RQRR, RSMS, SMEC, SMOT, Total

Benchmarking data indicates some variability in IFRS 9 12-month PDs across institutions. In addition, there are some differences in the use of IRB models for IFRS 9 estimates, specifically in the DoD, in the risk differentiation and in the risk quantification
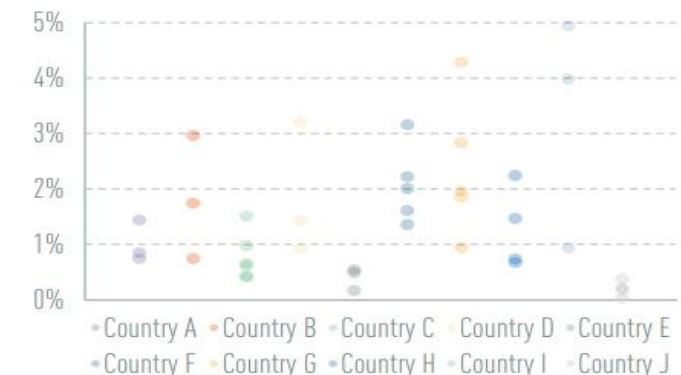
Variability in the IFRS 9 PD

- Small and medium enterprises (SME) exposures classes have shown high default probabilities, while lower IFRS 9 PDs have been reported for retail mortgage portfolios. At the reference date of analysis, variability in IFRS 9 12-month PD estimates was nonetheless observed across institutions of the sample. Benchmarking analysis at geography level on the non-SME corporate exposures indicated **different IFRS 9 PD levels within a certain jurisdiction**. While it is acknowledged that this variability may also be explained by the **different credit standards** and **inherent riskiness of the respective portfolios**, other differences driven by the application of divergent methodological approaches observed among institutions will require further supervisory scrutiny on a case-by-case basis.

- For the vast majority of the institutions in the sample, **IFRS 9 12-month PDs assigned to HDPs** have been significantly **higher** than the correspondent **default rates observed in 2021**. This needs to be read together with the extraordinary circumstances presented in 2020/2021 and with the support measures provided to cope with the COVID-19 crisis, which contributed to maintain default rates at one of the lowest levels of the last 10 year.

- On the contrary, **IFRS 9 12-month PDs** have been generally lower than the **respective internal rating based (IRB) PDs values** due to the more point-in-time (PiT) and forward-looking nature of the accounting estimates as well as the positive macroeconomic outlook embedded in the model at year-end 2021.

Variability in IFRS 9 12-month PD by exposure class and geographical area in December 2021[1]

On the graph below, the analysis was limited to institutions with more than 10% of their total CORP exposures in that geography.

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Differences in the use of IRB models for IFRS 9 estimates

Differences in the DoD

- IFRS 9 does not prescribe the use of a specific approach for determining the ECLs. EBA's DoD GL was used by institutions, with a **partial degree of compliance.** Other institutions reported modelling other events, such as the credit-loss event.
- Differences were also observed in the **implementation of risk parameters** for institutions applying the regulatory DoD.
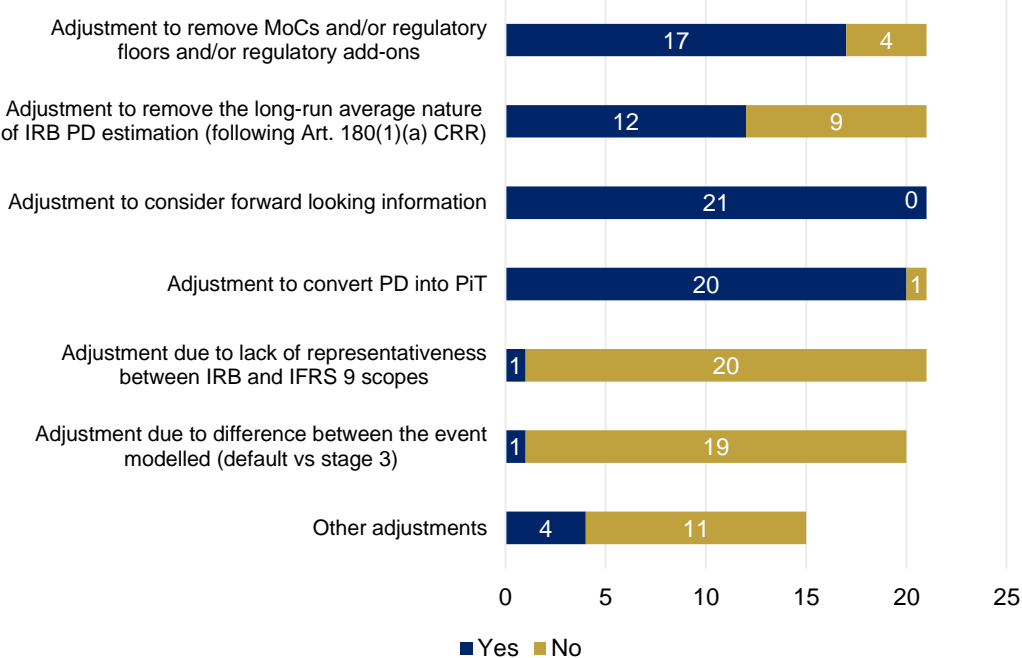
Differences in risk differentiation

- Most institutions leveraged IRB portfolios segmentation for IFRS 9 **modelling.** In other instances, differences were observed **in the degree of alignment**. Institutions suggested that such differences sought to better reflect specific IFRS 9 modelling practices, (i.e., to reflect a higher degree of geographical sensitivity in IFRS 9, different assignment choices of portfolios, and in some cases, further aggregation needs driven by specific data requirements in implemented IFRS 9 models).

Differences in risk quantification

- For institutions using IRB estimates as a starting point, main adjustments are related to the **transformation of unconditional PDs** into **PiT estimates among** other **regulatory adjustments**.
- For institutions using historical default or loss data as a starting point instead, the approaches used to estimate the IFRS 9 PD are based on **regression analysis**, **parametric or nonparametric statistical approaches** and/or **transitional matrices**.

Adjustments performed to the IRB PD for the purposes of the calculation of IFRS 9 PD[1]

Adjustment	Yes	No
Adjustment to remove MoCs and/or regulatory floors and/or regulatory add-ons	17	4
Adjustment to remove the long-run average nature of IRB PD estimation (following Art. 180(1)(a) CRR)	12	9
Adjustment to consider forward looking information	21	0
Adjustment to convert PD into PiT	20	1
Adjustment due to lack of representativeness between IRB and IFRS 9 scopes	1	20
Adjustment due to difference between the event modelled (default vs stage 3)	1	19
Other adjustments	4	11

Relevant areas of variability have been observed in the definition of the relevant macroeconomic scenarios or the methodological approach used to incorporate the FLI and the reflection of non-linearity

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Macroeconomic scenarios

- Scenarios were updated **optimistically consistent** with the forecast at the end of 2021 and the expectations of a rebound of the economy after the COVID-19 crisis.

- The reliance on internal projections has caused **variability across institutions** in the **forecasted macroeconomic variables figures** embedded in the ECL models, which has naturally resulted in **divergent effects of the FLI incorporation** and **final ECL model's outputs**.

- The benchmarking analysis on HDPs has unveiled dispersion of the Gross Domestic Product (GDP) values projected for the next 3 years for similar geographical areas which may question, in some cases, the soundness of the underlying assumptions behind the internal scenarios forecasted, especially, when a larger deviation among institutions is observed. This evidence reiterates the need for institutions that **use internal macroeconomic projections** to have the necessary forecasting expertise and proper internal resources, as well as to rely on sound processes for selecting the scenarios to be used in the ECL assessment.

Variability of the methodological approach for incorporation of FLI and reflection of non-linearity

- Different practices have been observed on **HDPs on the approaches** taken to **incorporate FLI into the ECL measurement**. Institutions have generally adopted multi-scenario approaches, calculating a **probability weighted ECL based on scenarios**, with an intermediate step of calculating risk parameters, for each scenario, reflecting scenario-specific macroeconomic information.
- The most common approach is to **envisage three scenarios** with few institutions reporting using a simulative approach. Others have reported the use of a **single scenario approach** but **reflecting the non-linearity** with a specific adjustment, and few institutions, continue to use a **single scenario without any adjustment**.
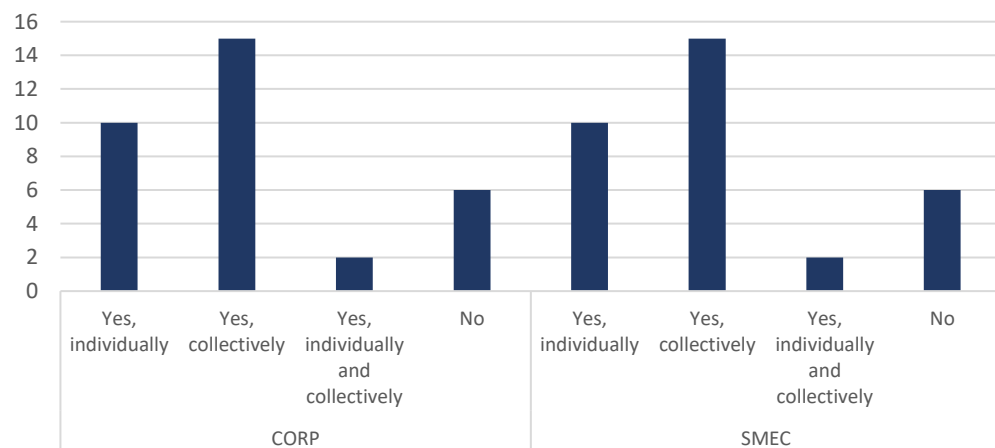
The absence of incorporating FLI in the IFRS 9 LGD parameters may result in estimates that do not align with forward-looking expectations and may therefore not meet the expectations of IFRS 9
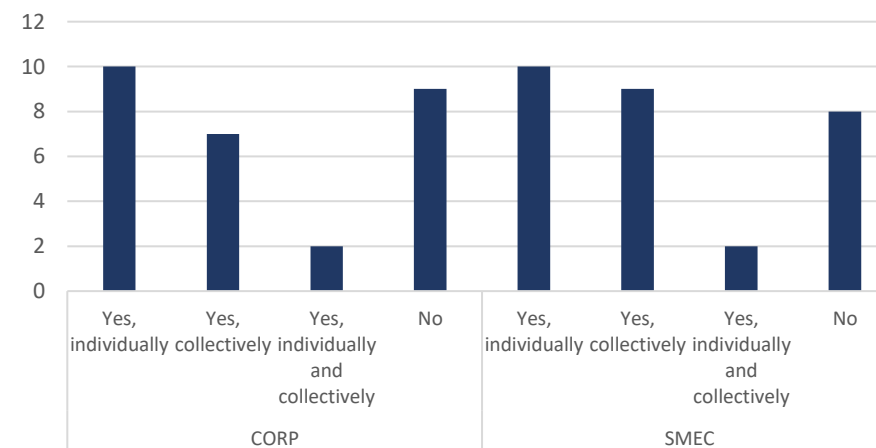
Incorporation of FLI for LGD parameter

- The absence of incorporating a forward-looking component in the LGD may introduce an additional layer of **variability in the final ECL estimates** and raises prudential concerns when it is not demonstrated (i.e., with statistical evidence) that there is a **lack of correlation between the macroeconomic variables and the risk parameter.** For instance, an institution may evaluate for collateralised portfolios the extent to which recovery values are influenced by the **evolution of specific macroeconomic indicators** such as the Housing Price Index.
- When not justified by robust evidence, the lack of consideration of FLI in IFRS 9 LGD parameters may lead to estimates **not representative of forward-looking expectations** and may therefore not meet the expectations of IFRS 9.

Incorporation of FLI for LGD parameter for exposures in Stage 1 and/or Stage 2[1]

Incorporation of FLI for LGD parameter for exposures in Stage 3[2]

Relevant areas have been observed in different parts of the FLI incorporation process, such as variability in the impact and different sensitivities from FLI among institutions and the effect of non-linearity and the probability framework


Variability in the impact and different sensitivities from FLI

- FLI impact at single ECL parameter level has been quite divergent across institutions. The effect coming from the incorporation of FLI has been **generally material**. Nonetheless, the high degree of variability of the impact and the presence of outliers may suggest the existence of additional aspects driving **differences in the sensitiveness to FLI** among institutions. These aspects might be linked to the set of data, methodologies and statistical models used to incorporate FLI at PD level.

Effect of non-linearity and probability framework

- The effect of non-linearity on the ECL estimates has been quite limited in 2021 for HDPs. The low impact of non-linearity raises prudential concerns as this implies that the ECL figures remain mainly driven by the **assumptions underlined in the baseline scenario** and the **effects of alternative scenarios** continue to be **quite limited**. Consequently, the **final ECL figures** may not fully incorporate the **uncertainties** embedded in the **different macroeconomic forecasts** and **may not properly reflect** the **presence of non-linearity between macroeconomic variables** and **final ECL figures.**

- The weights assigned to the baseline scenario accounted for the largest share (almost 60%), while the weights assigned to the alternative scenarios were slightly higher for the downward (27%) versus the upward scenario (17%).The benchmarking analysis of these figures at the individual institution level provides more meaningful insights on institutions' practices in this area of the framework, and a quite relevant dispersion of values across institutions is observed.

Probability weights assigned to the different IFRS 9 macroeconomic scenarios[1]
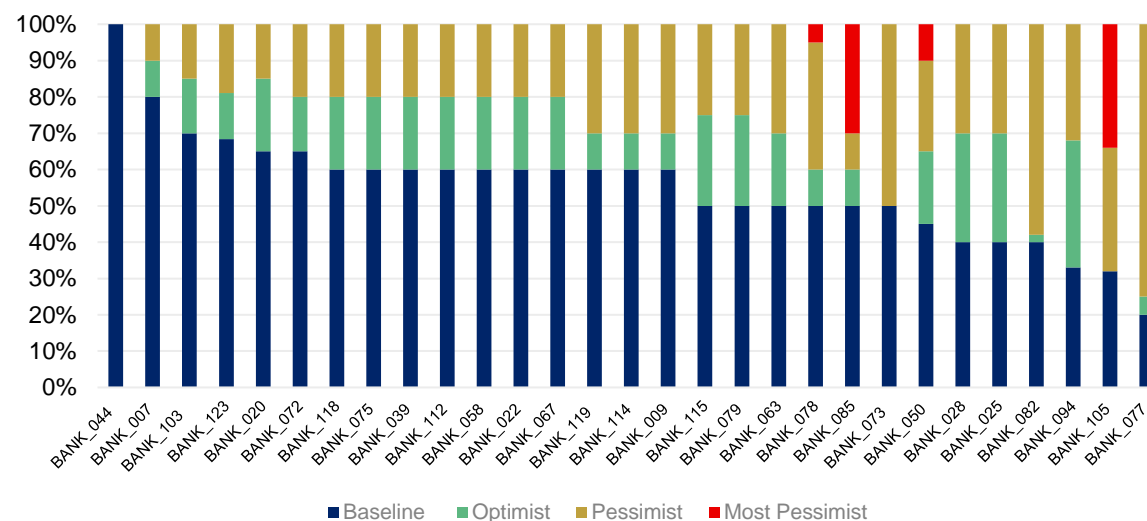
Legend: Baseline · Optimist · Pessimist · Most Pessimist

Backtesting ECL lifetime estimations requires not only robust methodologies, tools, policies and effective processes to be established, but also, sufficient sets of data and actual observations of realised figures

|	
12 months PD	• The backtesting of 12-month PD is the area of the framework **more developed** at the current stage. It is performed by **comparing the 12-month PD under the baseline scenario** and the weighted average 12-month PD per economic scenario as estimated value, with the **realised 1-year default rate** as the observed value.
Lifetime PDs	• A majority of institutions have reported conducting backtesting at the lifetime PD level. However, among those not currently performing backtesting for lifetime PD, nearly half have no plans to implement it in the near future. • Absence of backtesting at the lifetime PD level is not justified by institutions. The reasons are the perceived lack of usefulness and data unavailability.
IFRS 9 LGD estimates	• Institutions have reported using as **estimated value** the LGD under the **baseline scenario**, while a few banks have directly used the weighted average LGD. The choice of the observed value used has been more consistent, which generally corresponds to the **realised losses**. The same considerations already stated for ECL backtesting related to the need to ensure a homogeneous comparison between predicted and realised values are also valid for LGD.

Figure 11: Backtesting exercises performed as part of IFRS 9 ECL model monitoring[1]
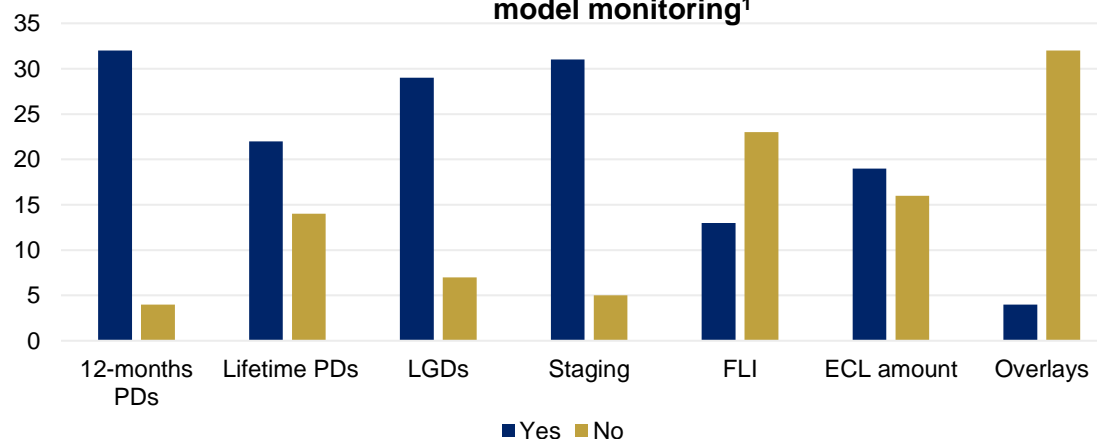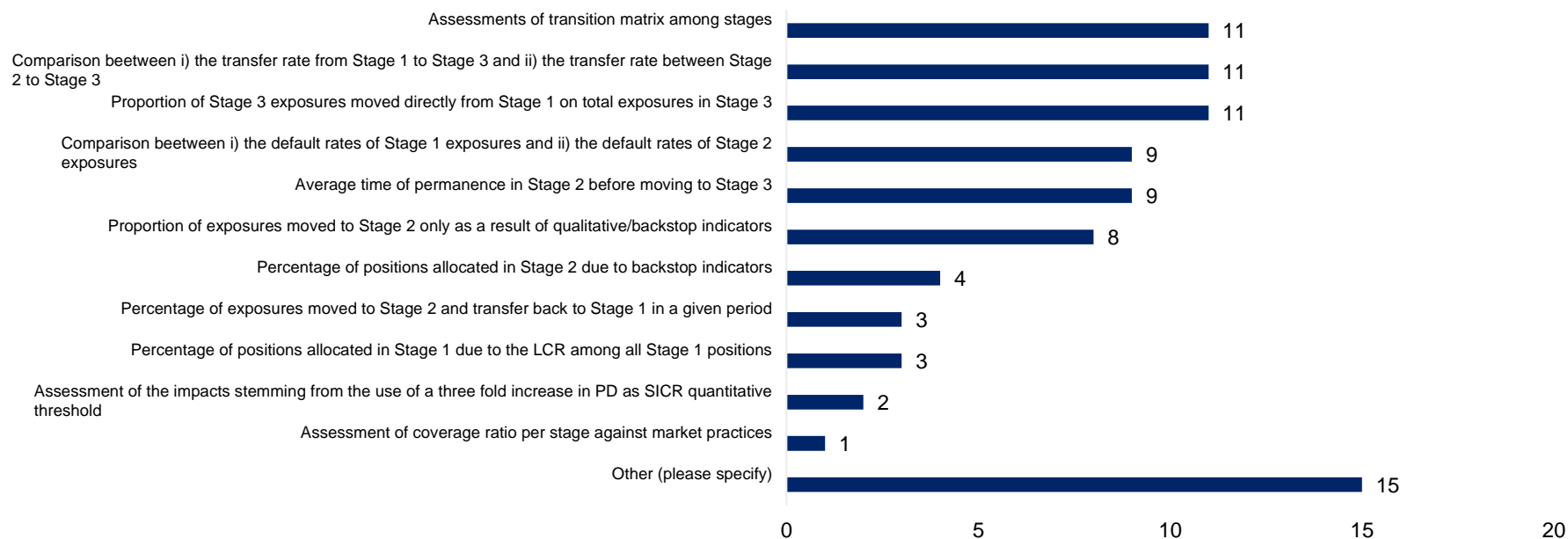
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| Staging allocation | • The **objectives** of the **test performed on the staging allocation** are related to the evaluation of the predictive power of the quantitative thresholds used for SICR assessment, the prior classification to Stage 2 before moving to Stage 3 and the stability of stage allocation over time. |

Type of indicator used for the backtesting of the staging allocation[1]

Indicator	Value
Assessments of transition matrix among stages	11
Comparison beetween i) the transfer rate from Stage 1 to Stage 3 and ii) the transfer rate between Stage 2 to Stage 3	11
Proportion of Stage 3 exposures moved directly from Stage 1 on total exposures in Stage 3	11
Comparison beetween i) the default rates of Stage 1 exposures and ii) the default rates of Stage 2 exposures	9
Average time of permanence in Stage 2 before moving to Stage 3	9
Proportion of exposures moved to Stage 2 only as a result of qualitative/backstop indicators	8
Percentage of positions allocated in Stage 2 due to backstop indicators	4
Percentage of exposures moved to Stage 2 and transfer back to Stage 1 in a given period	3
Percentage of positions allocated in Stage 1 due to the LCR among all Stage 1 positions	3
Assessment of the impacts stemming from the use of a three fold increase in PD as SICR quantitative threshold	2
Assessment of coverage ratio per stage against market practices	1
Other (please specify)	15

Backtesting ECL lifetime estimations requires not only robust methodologies, tools, policies and effective processes to be established, but also, sufficient sets of data and actual observations of realised figures

FLI

- More than half of the institutions in the sample have not implemented backtesting. Main objective has been **assessing the reliability of the forecast of the macroeconomic variables** incorporated into the models.
- Backtesting analyses are expected to be periodically performed by all institutions to **evaluate the performance of the projections** of the internal macroeconomic forecasts used for ECL purposes.

ECL Measurement

- The **objectives of the backtesting of ECL** have been to evaluate whether the estimates of changes in ECL are consistent with the changes observable data.
- Institutions have generally compared the lifetime **ECL amount** with the **cumulated credit losses** incurred in a given period of time, others have compared the estimated ECL to the amount of actual losses incurred in the first year after the reporting period under consideration.

Overlays

- Overlays have often not been backtested, with the majority of institutions having no plans to implement such backtesting in the near future. In recent years, these overlays have become **an integral part of the ECL framework**. Its quantification is expected to be subject to backtesting analysis, in order to assess the **accuracy of the adjustments** introduced against realised figures
- Overlays' backtesting are considered valuable to gather **important insights** about the performance of the methodologies used for **quantifying the model adjustments**.

7 | Why Management Solutions?
A differential value proposal

Extensive experience in the coordination, development, review and reporting of IFRS 9 models to the Supervisor, ensuring regulatory compliance and improvement of the models for risk management purposes, and promoting appropriate communication both with the Supervisor and internally

Experience with supervisory bodies. With 8 framework agreements signed, MS is accredited as a "highly qualified external service provider" in internal capital modelling by different European and American Supervisors.

Experience in regulatory inspections and other supervisory exercises: MS has extensive experience supporting institutions and supervisors in regulatory exercises: thematic reviews, OSIs, benchmarking exercises…

Proven methodology: Management Solutions has supported GSIBs and DSIBs at the European and international level in the process of diagnosing, development, evolution and validation of IFRS 9 models, which allows us to provide lessons learned and identify best practices.

Holistic vision: MS has experience in the different lines of work of IFRS 9: accounting aspects (SPPI, Business Model, accounting circuit adaptation,...), PMO & global coordination, ECL calculation (methodological definition, parameter estimation, backtesting,...), development / evolution of provision calculation engine, provisioning and Data Quality, management reporting, integration in management, etc.

CORP	Corporates wich are not SMEs		LCRE	Low Credit Risk Exemption
EAD	Exposure At Default		LDP	Low Default Portfolio
EBA	European Banking Authority		LGD	Loss Given Default
ECL	Expected credit losses		MOC	Margin of conservatism
ESG	Environmental, Social and Corporate Governance		MORT	Retail mortgages which are not SMEs
EU	European Union		PD	Probability of Default
FLI	Forward-Looking Information		PiT	Point-in-Time
GDP	Gross Domestic Product		RETO	Retail Order
GLs	Final Guidelines		RQRR	Retail Qualified Revolving
DoD	Definition of Default		RSMS	Retail SME exposures secured by real estate
HDP	High Default Portfolio		SICR	Significant Increase in Credit Risk
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