



COMMISSION DELEGATED REGULATION (EU) 2024/856

of 1 December 2023

supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the supervisory shock scenarios, the common modelling and parametric assumptions and what constitutes a large decline

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC ⁽¹⁾, and in particular Article 98(5a), third subparagraph, thereof,

Whereas:

- (1) The supervisory shock scenarios have been specified by the Basel Committee on Banking Supervision (BCBS) ⁽²⁾ and are reflected in the European Banking Authority Guidelines on the management of interest rate risk arising from non-trading book activities ⁽³⁾ that apply from 30 June 2019. It is appropriate that the supervisory shock scenarios set out in this Regulation build on that specification and methodology.
- (2) For the purposes of calculating the economic value of equity and the net interest income, it is necessary to specify common modelling and parametric assumptions that the institutions should use. To that end, for the calculation of the net interest income, a constant balance sheet assumption over a one-year period should be used, while, for the calculation of the economic value of equity, a run-off balance sheet assumption where maturing positions are not replaced should be used. These assumptions aim to provide a good balance in terms of calculation accuracy, reliability of estimates and operational complexity.
- (3) To strike the right balance between ensuring comparability of the results and providing the flexibility necessary due to the long-term horizon and the inherent operational complexity, commercial margins and spread components should be included in the calculation of the net interest income, but for the calculation of the economic value of equity, institutions should proceed in accordance with their internal management and measurement approach for interest rate risk in the non-trading book.
- (4) According to the BCBS standards, any outlier test mandated in addition to the test on the economic value of equity should use a threshold to identify outlier banks that is at least as stringent as the one applied to the test on the economic value of equity (15 % of Tier 1 capital). That threshold should actually reflect the current environment in a prudentially sound and proportionate manner, thereby contributing to legal certainty and achieving harmonisation across the Union, having also regard to the fact that exceeding the thresholds for economic value of equity and net interest income outlier tests will neither necessarily require institutions to recalibrate their internal arrangements, processes or mechanisms and corresponding models and approaches, nor entail the automatic exercise of supervisory powers, where the institution's management of the interest rate risk arising from non-trading book activities is adequate, proportionate to the business model and the institution is not excessively exposed to such a risk.

⁽¹⁾ OJ L 176, 27.6.2013, p. 338.

⁽²⁾ SRP – Supervisory review process – SRP31 – Interest rate risk in the banking book (link).

⁽³⁾ EBA/GL/2018/02 of 18 July 2018 (link).

- (5) To ensure harmonised methodologies for the supervisory outlier test on what constitutes a large decline on net interest income as a result of a sudden and unexpected change in interest rates, a reference threshold at least as stringent as the threshold for the supervisory outlier test on the economic value of equity as well as a specification of the calculation of the net interest income should be introduced.
- (6) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Banking Authority.
- (7) The European Banking Authority has conducted an open public consultation on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010 of the European Parliament and of the Council (*),

HAS ADOPTED THIS REGULATION:

Article 1

Supervisory shock scenarios

1. The six supervisory shock scenarios referred to in Article 98(5), second subparagraph, point (a), of Directive 2013/36/EU shall be the following:
 - (a) parallel shock up, where there is a parallel upward shift of the yield curve with the same positive interest rate shock for all maturities;
 - (b) parallel shock down, where there is a parallel downward shift of the yield curve with the same negative interest rate shock for all maturities;
 - (c) steeper shock, where there is a steepening shift of the yield curve, with negative interest rate shocks for shorter maturities and positive interest rate shocks for longer maturities;
 - (d) flattener shock, where there is a flattening shift of the yield curve, with positive interest rate shocks for shorter maturities and negative interest rate shocks for longer maturities;
 - (e) short rates shock up, with larger positive interest rate shocks for shorter maturities to converge with the baseline for longer maturities;
 - (f) short rates shock down, with larger negative interest rate shocks for shorter maturities to converge with the baseline for longer maturities.
2. The two supervisory shock scenarios referred to in Article 98(5), second subparagraph, point (b), of Directive 2013/36/EU shall be the following:
 - (a) parallel shock up, where there is a parallel upwards shift of the yield curve with the same positive interest rate shocks for all maturities;
 - (b) parallel shock down, where there is a parallel downwards shift of the yield curve with the same negative interest rate shocks for all maturities.
3. Institutions shall determine the supervisory shock scenarios referred to in paragraphs 1 and 2 on the basis of the currency-specific interest rate shocks set out in Part A of the Annex or, for the currencies not specified therein, on the basis of interest rate shocks calibrated in accordance with Part B of the Annex.

Institutions shall perform the calibration of interest rate shocks in accordance with Part B of the Annex at least every five years.

(*) Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC (OJ L 331, 15.12.2010, p. 12).

4. The supervisory shock scenarios referred to in paragraphs 1 and 2 shall apply to the exposure of institutions to the interest rate risk arising from non-trading book activities denominated in each currency separately for which the institution has relevant positions, i.e. where the accounting value of financial assets or liabilities denominated in that currency amounts to either of the following:

- (a) 5 % or more of the total non-trading book financial assets or liabilities;
- (b) less than 5 % of the total non-trading book financial assets or liabilities if the sum of financial assets or liabilities included in the calculation is lower than 90 % of total non-trading book financial assets, excluding tangible assets, or liabilities.

Article 2

Specification of supervisory shock scenarios

Given, for each currency c , the specified size of the parallel, short and long shocks to the 'risk-free' interest rate, the following parameterisations of the six supervisory shock scenarios shall be applied:

- (1) *Parallel shock for currency c* : A constant parallel shock up or down across all time buckets:

$$\Delta R_{parallel,c}(t_k) = \pm \bar{R}_{parallel,c}$$

- (2) *Short rate shock for currency c* :

$$\Delta R_{short,c}(t_k) = \pm \bar{R}_{short,c} \cdot e^{\frac{-tk}{4}},$$

where t_k is the midpoint (in time) of the k^{th} time bucket.

- (3) *Long rate shock for currency c* :

$$\Delta R_{long,c}(t_k) = \pm \bar{R}_{long,c} \cdot \left(1 - e^{\frac{-tk}{4}}\right)$$

- (4) *Rotation shocks for currency c* :

$$\Delta R_{steepener,c}(t_k) = -0.65 \cdot |\Delta R_{short,c}(t_k)| + 0.9 \cdot |\Delta R_{long,c}(t_k)|;$$

$$\Delta R_{flattener,c}(t_k) = +0.8 \cdot |\Delta R_{short,c}(t_k)| - 0.6 \cdot |\Delta R_{long,c}(t_k)|.$$

Article 3

Changes in the institution's economic value of equity

1. Institutions shall reflect in their calculations of the economic value of equity the common modelling and parametric assumptions set out in paragraphs 2 to 10:

2. Institutions shall include the following in their calculations of the economic value of equity:

- (a) all non-trading book positions from interest rate sensitive instruments;
- (b) small trading book business within the meaning of Article 94(1) of Regulation (EU) No 575/2013 of the European Parliament and of the Council ^(*) unless its interest rate risk is captured in another risk measure;
- (c) automatic and behavioural options;
- (d) pension obligations and pension plan assets unless their interest rate risk is captured in another risk measure;

^(*) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

- (e) the cash flows from interest rate sensitive instruments, which shall include any repayment of principal, any repricing of principal and any related interest payments;
- (f) instrument-specific interest rate caps and floors.

For the purpose of point (c), institutions shall adjust key behavioural modelling assumptions of interest rate sensitive instruments to the features of different interest rate scenarios taking into account the proportionality and materiality thresholds set out in Article 8(10), Article 9(2), Article 10(4), Article 12(2) and Article 23(1) of Commission Delegated Regulation (EU) 2024/857 ⁽⁶⁾.

3. All CET1 instruments and other perpetual own funds without any call dates shall be excluded from the calculations.

4. Institutions with a non-performing exposures ratio of 2 % or more shall include non-performing exposures as general interest rate sensitive instruments whose modelling should reflect expected cash flows and their timing. Non-performing exposures shall be included net of provisions. For these purposes, non-performing exposures shall be determined by debt securities, loans and advances classified as non-performing in accordance with Article 47a(3) of Regulation (EU) No 575/2013, while the non-performing exposures ratio shall be calculated as the amount of non-performing exposures divided by the amount of total gross debt securities, loans and advances calculated at the level of the institution.

5. Commercial margins and other spread components in interest payments in terms of their exclusion from or inclusion in the cash flows shall be treated in accordance with the institutions' internal management and measurement approach for interest rate risk in the non-trading book. If commercial margins and other spread components are excluded, institutions shall:

- (a) use a transparent methodology for identifying the risk-free rate at inception of each instrument;
- (b) use a methodology that is applied consistently across business units;
- (c) ensure that the exclusion of commercial margins and other spread components from the cash flows is consistent with how the institution manages and hedges interest rate risk arising from non-trading book activities;
- (d) notify their exclusion to the competent authority.

6. The change in economic value of equity shall be computed with the assumption of a run-off balance sheet, where existing positions mature and are not replaced.

7. A maturity-dependent post-shock interest rate floor shall be applied for each currency starting with -150 basis points for immediate maturity. That floor shall increase by 3 basis points per year, eventually reaching 0 % for maturities of 50 years and more. If observed interest rates are lower than the post-shock interest rate floor, institutions shall apply the lower observed interest rate.

8. When calculating the aggregate change for each interest rate shock scenario, institutions shall add together any negative and positive changes occurring in each currency. Currencies other than the reporting currency shall be converted to the reporting currency at the European Central Bank spot FX rate on the reference date. Positive changes shall be weighted by a factor of 50 % or a factor of 80 % in the case of Exchange Rate Mechanism – ERM II currencies with a formally agreed fluctuation band narrower than the standard band of +/- 15 %. Weighted gains shall be recognised up to the greater of (a) the absolute value of negative changes in EUR or ERM II currencies and (b) the result of applying a factor of 50 % to the positive changes of ERM II currencies or EUR, respectively.

9. For discounting, an appropriate general 'risk-free' yield curve per currency shall be applied. That yield curve shall not include instrument-, sector- or entity-specific credit spreads or liquidity spreads.

⁽⁶⁾ Commission Delegated Regulation (EU) 2024/857 of 1 December 2023 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying a standardised methodology and a simplified standardised methodology to evaluate the risks arising from potential changes in interest rates that affect both the economic value of equity and the net interest income of an institution's non-trading book activities (OJ L, 2024/857, 24.4.2024, ELI: http://data.europa.eu/eli/reg_del/2024/857/oj).

10. In assessing the risk of interest rate-sensitive products that are linked to inflation or other market factors, prudent assumptions shall be applied. Those assumptions shall be based on the current/last observed value, on forecasts of a reputable economic research institute or on other generally accepted market practices and shall be generally scenario-independent.

Article 4

Changes in the institution's net interest income

1. Institutions shall reflect in their calculations of the net interest income the common modelling and parametric assumptions set out in Article 3(2), (3) and (4) and (7) to (10). In addition, institutions shall reflect in their calculations of the net interest income the common modelling and parametric assumptions set out in paragraphs 2 to 4 of this Article.
2. Institutions shall consider in their calculations interest income and interest expenses over a one-year period regardless of the maturity and the accounting treatment of the relevant interest rate sensitive non-trading book instruments.
3. Institutions shall include in their calculations commercial margins and other spread components.
4. Institutions shall compute the change in the net interest income under the assumption of a constant balance sheet, where its total size and composition, including on- and off-balance sheet items, shall be maintained by replacing instruments with maturing or repricing cash flows with new instruments that have comparable features with regard to the currency, amount and repricing period of the instruments generating the repricing cash flows. Margins of the new instruments shall be based on the margins from recently bought or sold products with similar characteristics. In the case of instruments with observable market prices recent market spreads shall be used and not historical market spreads.

Article 5

Large decline

1. A large decline for the purpose of Article 98(5), second subparagraph, point (b), of Directive 2013/36/EU shall be a decline of an institution's one-year net interest income by more than 5 % of its Tier 1 capital, resulting from a sudden and unexpected change in interest rates as set out in any of the two supervisory shock scenarios set out in Article 1(2).
2. A large decline referred to in paragraph 1 shall be calculated based on the following formula:

$$\frac{NII_{shock} - NII_{baseline}}{Tier\ 1\ Capital} < - 5 \%$$

Article 6

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1 December 2023.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Part A: Interest rate shocks $\bar{R}_{\text{shocktype}, c}$

	ARS	AUD	BGN	BRL	CAD	CHF	CNY	CZK	DKK	EUR	GBP
Parallel	400	300	250	400	200	100	250	200	200	200	250
Short	500	450	350	500	300	150	300	250	250	250	300
Long	300	200	150	300	150	100	150	100	150	100	150

	HKD	HUF	IDR	INR	JPY	KRW	MXN	PLN	RON	RUB	SAR
Parallel	200	300	400	400	100	300	400	250	350	400	200
Short	250	450	500	500	100	400	500	350	500	500	300
Long	100	200	350	300	100	200	300	150	250	300	150

	SEK	SGD	TRY	USD	ZAR
Parallel	200	150	400	200	400
Short	300	200	500	300	500
Long	150	100	300	150	300

ARS	Argentine Peso	INR	Indian Rupee
AUD	Australian Dollar	JPY	Japanese Yen
BGN	Bulgarian Lev	KRW	South Korean Won
BRL	Brazilian Real	MXN	Mexican Peso
CAD	Canadian Dollar	PLN	Poland Zloty
CHF	Swiss Franc	RON	Romanian Leu
CNY	Chinese Yuan	RUB	Russian Rouble
CZK	Czech Koruna	SAR	Saudi Riyal
DKK	Danish Krone	SEK	Swedish Krona
EUR	Euro	SGD	Singapore Dollar
GBP	Pound sterling	TRY	Turkish Lira
HKD	Hong Kong Dollar	USD	United States Dollar
HUF	Hungarian Forint	ZAR	South African Rand
IDR	Indonesian Rupiah		

Part B: Calibration of interest rate shocks for currencies not referred to in Part A

- (1) Institutions shall first calculate the daily average interest rate by collecting a 16-year time series of daily 'risk-free' interest rates, without instrument-specific or entity-specific credit spreads or liquidity spreads, for each currency for the maturities 3M, 6M, 1Y, 2Y, 5Y, 7Y, 10Y, 15Y and 20Y and then calculate the arithmetic average interest rate for each currency c across all observations in the time series and for all maturities. The result shall be a single measure per currency.

- (2) Where the average interest rate calculated in accordance with point (1) for the first seven years is greater than 700 basis points, the data from the most recent 10 years shall be used, subject to data availability. Where the average interest rate calculated in accordance with point (1) for the first seven years is equal to or less than 700 basis points, the full 16-year time series of data shall be used.
- (3) The parallel, short and long interest rate shock by currency shall be derived from applying the relevant global shock parameter from Table 1 to the average interest rate calculated in accordance with point (1) and (2).

Table 1

Baseline global interest rate shock parameters

Parallel	$\bar{\alpha}_{parallel}$	60 %
Short	$\bar{\alpha}_{short}$	85 %
Long	$\bar{\alpha}_{long}$	40 %

- (4) Institutions shall apply a floor of 100 basis points as well as variable caps of 500 basis points for the short-term shock, 400 basis points for the parallel shock and 300 basis points for the long-term shock, respectively.
- (5) The set of interest rate shocks by currency shall then be rounded to the nearest 50 basis points.