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Directorate C – Macro-economic statistics
C.3 – Statistics for administrative purposes

Eurostat Report on the intermediate update of remuneration and pensions of EU officials

**In accordance with the Articles 64, 65 and Annex XI of the
Staff Regulations applicable to officials and other servants of
the European Union**

Eurostat Report on the intermediate update of remuneration and pensions of EU officials

Specific indicators; Control Indicators; Joint Belgium-Luxembourg Index; Correction coefficients for Intra-EU staff; Correction coefficients for Pensioners

**Reference period:
1 July 2022 - 1 January 2023**

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EXECUTIVE SUMMARY

This is the tenth intermediate report which is prepared under the EU Staff Regulations as amended by Regulation 1023/2013.

The Eurostat report on the 2022 annual update of remuneration and pensions was prepared and transmitted in October 2022⁽¹⁾. In accordance with the adoption procedure in the Staff Regulations, the definitive update applicable with effect from July 2022 was published in the Official Journal⁽²⁾.

This intermediate report presents all the information required for consideration whether an intermediate update of remuneration and pensions in Belgium/Luxembourg and in other places is required, namely:

- evolution of the purchasing power of national officials (global specific indicator forecast);
- changes in the cost of living in Belgium and Luxembourg (Joint Index);

correction coefficients for Intra-EU staff and pensioners⁽³⁾.

The specified threshold to trigger an intermediate update is a movement in purchasing power parity of $\pm 3.0\%$ or more for the six month period 1 July - 1 January⁽⁴⁾.

For the period 1 July 2022 – 1 July 2023 the forecast global specific indicator (average change in real net remuneration in the sample of 10 countries) is 96.2 (-3.8%). As this is negative, half of it has to be taken into account for any intermediate update, i.e. 98.1 (-1.9%). Details are provided in **Appendix One**.

Note: for the measurement of changes in the cost of living index and correction coefficients, the reference is to the data situation at the first of each month (e.g. 1 January 2023), which in practice means the situation for the preceding month (e.g. December 2022).

For the period 1 July 2022 – 1 January 2023 the Joint Index (change in the cost of living measured for the EU officials) is 103.7 (+3.7%). Details are provided in **Appendix Two**, together with comparative information. This change does exceed the specified threshold. In consequence, a general intermediate update of the nominal remuneration of active European officials and pension of retired European officials is required in Belgium and Luxembourg at 1 January 2023.

The general intermediate adjustment is calculated as the product of the six-month Joint Index and half of the twelve-month Global Specific Indicator forecast, which gives 101.7 (+1.7%).

⁽¹⁾ See document Ares(2022)7485371 dated 28.10.2022.

⁽²⁾ See communication 2022/C 474/10 dated 14.12.2022 for Intra-EU staff and pensioners (and communication 2022/C 474/11 dated 14.12.2022 for Extra-EU staff).

⁽³⁾ Intermediate correction coefficients for Extra-EU staff are presented in a separate report because there are additional rules under Annex X of the Staff Regulations (notably, a different sensitivity threshold applies, and monthly variations are required rather than the six monthly variation).

⁽⁴⁾ Equivalent to $\pm 6.0\%$ for the year 1 July – 1 July. Note: use of the '±' symbol refers to absolute value, i.e. above +6.0% or below -6.0%.

The correction coefficients which should apply to remuneration of active staff outside Brussels and Luxembourg in order to maintain equality of purchasing power at 1 January 2023 are provided in *Appendix Three*.

The correction coefficients which should apply to the pensions of retired staff outside Belgium and Luxembourg in order to maintain equality of purchasing power at 1 January 2023 are provided in *Appendix Three*.

The implicit index is the product of the Joint Index and the changes in the economic parities. For active staff, this does exceed the specified threshold in 19 Intra-EU duty station locations (however, as there will be a general intermediate update, the CC presented in the Appendix will apply directly for all locations).

The corresponding movement in the implicit index for pensioners does exceed the specified threshold in 17 of the EU Member States (however, as there will be a general intermediate update, the CC presented in the Appendix will apply directly for all locations).

A table with the computed values for the intermediate update at 1 January 2023 for active Intra-EU staff and for pensioners is shown in *Appendix Four*.

The general intermediate adjustment will apply with effect from 1 January 2023 in most cases. However, the implicit indices exceed the relevant threshold specified in the staff regulations to trigger early payment with effect from 1 November 2022 to staff in 1 duty station (HU-Budapest) and to Pensioners in 1 Member State (Hungary), and with effect from 16 November 2022 to staff in 2 duty stations (LT-Vilnius and PL-Warsaw) and to pensioners in 3 Member States (Lithuania, Poland and Romania).

On the basis of the available information at the time of drafting this report⁽⁵⁾, it currently seems likely that neither the Exception Clause nor the Moderation Clause will apply for the 2023 exercise. It also currently seems likely that the Exception Clause was correctly implemented for the 2022 exercise and that no retroactive correction is therefore required to the July 2022 annual update. These preliminary assessments will be confirmed in the annual report.

The specific indicator forecasts are based on information provided by responsible authorities in the Member States - in the absence of a specific data transmission, official forecast by DG ECFIN is used (for the current exercise, for salary data that is only the case for Greece, and for inflation data that is the case for Ireland, Greece, Spain, Malta, the Netherlands, Austria and Slovenia). With the exception of the information about staff numbers in Brussels and Luxembourg obtained from Commission internal services and consumption expenditure pattern data compiled by direct survey of staff, all other figures and calculations contained in this report are based on data supplied by the responsible authorities in the Member States.

Note: The United Kingdom left the EU with effect 1 February 2020 and is now a ‘third country’. The transition period introduced by the ‘withdrawal agreement’ expired with effect 31 December 2020. Consequently, the UK is no longer included in the core sample of Member States for specific indicator calculation purposes (the remaining sample continues to represent at least 75% of the remaining EU27 gross domestic product). Similarly, the UK is not included for the calculation of correction coefficient values for active Intra-EU staff (it is included in a separate intermediate report

⁽⁵⁾ DG ECFIN winter 2023 forecast of GDP growth in real terms.

for active Extra-EU staff⁽⁶⁾). By contrast, the UK continues to be included for the calculation of correction coefficient values for pensioners residing in the UK⁽⁷⁾.

Purely for information purposes, this report presents an advance forecast of the Joint Index for the six months to July 2023 (***Appendix Five***), 100.0 (0.0%) and a preliminary estimate of the residual annual update for six months to July 2023, 98.1 (-1.9%) and the total annual update for twelve months to July 2023, 99.8 (-0.2%). It also includes extrapolated values for PPP at July 2023 for Intra-EU staff and for Pensioners (***Appendix Six***).

More information on methodology, detailed results and statistical analysis is available in the annexes to this report and detailed procedural manuals⁽⁸⁾. For any information concerning this report, please contact Eurostat in Luxembourg:

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⁽⁶⁾ Results package covering period August 2020-January 2021, reference Ares(2021)3005164.

⁽⁷⁾ Note: only relevant for pension rights acquired prior to May 2004

⁽⁸⁾ Document A6465/14/26rev5 methodology for the calculation of Specific Indicators (version March 2022); document A6465/14/58rev2 methodology for the calculation of the Joint Index (version March 2020); document A6465/14/59rev5 methodology for the calculation of Intra-EU correction coefficients (version February 2022).

Introduction

This is the tenth intermediate report covering Intra-EU locations which is prepared under the EU Staff Regulations as amended by Regulation 1023/2013.

The Eurostat report on the 2022 annual update of remuneration and pensions was prepared and transmitted in October 2022⁽⁹⁾. In accordance with the adoption procedure in the Staff Regulations, the definitive update applicable with effect from July 2022 was published in the Official Journal⁽¹⁰⁾.

Under the Staff Regulations, an intermediate update is made where the cost of living measured in Belgium and Luxembourg (i.e. the Joint Index) or the cost of living measured in any individual duty station outside Belgium and Luxembourg (i.e. implicit index, being the combined impact of the Joint Index and the change in the local purchasing power parity relative to Brussels) exceeds a specified threshold. This threshold is set at 6% for the year, interpreted as half of that value for six months (i.e. $\pm 3\%$) by a decision of the Article 64 Working Group in April 2005. It is therefore necessary to compute the Joint Index for the period June-December and the Staff and Pensioner PPPs at December and identify whether these exceed the specified threshold. This document summarises the result of those calculations.

The Staff Regulations also provide that if the global specific indicator forecast (the movement in net remuneration of national civil servants in real terms) for the year to 1 July is negative, half of this amount has to be taken into account for the intermediate update calculation. It is therefore necessary to compile and validate these forecasts for the period July-July. This document also summarises those results.

⁽⁹⁾ See document Ares(2022)7485371 dated 28.10.2022.

⁽¹⁰⁾ See communication 2022/C 474/10 for Intra-EU staff and pensioners (and communication 2022/C 474/11 for Extra-EU staff).

Global specific indicator forecast to July 2023

Forecasts were requested by Eurostat from responsible authorities in Member States in January 2023. Comparative data was compiled from available sources during February and March. A preliminary estimate of the global indicator forecast (weighted average of individual country values in the sample of 10) was computed according to the agreed methodology and presented to the Articles 64&65 Working Group in March 2023⁽¹⁾.

The value of the forecast global specific indicator for the core sample was finalised shortly thereafter to be 96.2 (-3.8%) for the core sample, 98.4 (-1.6%) for the remaining 17 Member States, and 96.6 (-3.4%) for the EU27 as a whole. Further information can be found in *Appendix One*.

As this forecast for the core sample is negative, half of it has been taken into account for any intermediate update, i.e. -1.9% (98.1).

⁽¹⁾ Physical meeting in Luxembourg.

The Joint Index, 1 July 2022 – 1 January 2023 (i.e. June-December 2022)

The 1 July 2022 – 1 January 2023 (i.e. June 2022 - December 2022) index was computed by Eurostat according to the agreed methodology, using information about the evolution of consumer prices at detailed level provided by the relevant Belgian and Luxembourgish national authorities and information about numbers of staff in Belgium and Luxembourg provided by internal Commission services, and then applying aggregation weights from the most recent survey of household expenditure conducted by Eurostat amongst staff⁽¹²⁾.

A preliminary estimate was presented to the Articles 64&65 Working Group in March 2023. The value of the joint index was finalised shortly thereafter to be 103.7 (i.e. +3.7% for the six-month period). This variation exceeds the specified threshold ($\pm 3.0\%$). In consequence, a general intermediate update of the nominal remuneration of active European officials and pension of retired European officials in Belgium and Luxembourg is required. The updated nominal remuneration and pension will then apply for all other locations.

Further information about the calculation can be found in *Appendix Two*.

⁽¹²⁾ Solely the weights for Brussels are used.

Calculation of the Intermediate Update

Per **section 2**, for the period July 2022 – July 2023, the forecast Global Specific Indicator (GDP-weighted average of the change in real terms of the net remuneration of national civil servants in central government for each Member State in the sample of 10) is -3.8%.

$$\text{GSI} = 96.2$$

As this is negative, half of it has to be taken into account for any intermediate update, i.e. -1.9%.

$$\frac{1}{2} \text{GSI} = 98.1$$

Per **section 3**, over the period 1 July 2022 – 1 January 2023 (i.e. June 2022 to December 2022), the Joint Index (cost of living for EU officials) was +3.7%.

$$\text{JBLI} = 103.7$$

This does exceed the threshold. In consequence, a general intermediate update of the nominal net remuneration of active EU officials and pensions of retired EU officials is required **in Belgium and Luxembourg**. The update is calculated as the product of the negative GSI and the JBLI.

Calculation of the general intermediate update for the six months to 1st January 2023

$$\frac{98.1 \times 103.7}{100} = 101.7$$

The intermediate update of nominal net remuneration of EU officials **outside Brussels and Luxembourg** which would normally be necessary to maintain parallel development of purchasing power⁽¹³⁾, is therefore +1.7%, unless there is a change in the economic parities.

For active staff, the total change in nominal net remuneration of EU officials **outside Brussels and Luxembourg** is measured by the combination of the general intermediate update and the change in the bilateral economic parities with Brussels for the Intra-EU duty station concerned per **section 5**. This is equivalent to the product of the GSI and the implicit index.

⁽¹³⁾ Before taking any change in the pension contribution rate and/or the special levy into account.

Calculation of the general intermediate update for the six months to 1st January 2023, outside Brussels and Luxembourg

GSI x implicit index		Intermediate update x change in PPP
$\frac{98.1 \times \left(103.7 \times \frac{PPP^{2022-01}}{PPP^{2021-07}} \right)}{100}$	OR	$101.7 \times \frac{PPP^{2022-01}}{PPP^{2021-07}}$

For pensioners, the total change in nominal net pension of retired EU officials *outside Belgium and Luxembourg* is measured by the combination of the general intermediate update and the change in the bilateral economic parities with Belgium for the Member State concerned per section 6. This can be calculated in the same way as for active staff.

PPP for active staff at 1 January 2023

The aggregate PPP for Intra-EU staff at 1 January 2023 (i.e. December 2022) for each duty station was computed according to the agreed methodology. In other words, the individual basic heading PPPs established for 1 July 2022 (i.e. June 2022) were updated using for each basic heading the movement in relevant HICP sub index between June and December for each duty station relative to the movement of the corresponding Joint Index sub index for the same period. The results (i.e. updated parities at basic heading level) were then aggregated using the weights from the most recent Family Budget Survey amongst staff (same structure as used to establish the 1 July 2022 results). The results were presented to the Articles 64&65 Working Group in March 2023.

Further information about these aggregate PPP for Intra-EU staff can be found in [Appendix Three](#).

When comparing the 1 January 2023 PPP values to the 1 July 2022 values, the simple average change in the duty station PPPs is +0.3%. This masks a variation between -3.6% (for EL-Athens) and +8.6% (for HU-Budapest). The PPP change for fourteen locations is negative, and for the remaining fourteen locations, it is zero or positive. Brussels = Luxembourg = zero.

If there is no general intermediate update, then when the ‘implicit index’ (i.e. combination of the JBLI evolution and the change in the PPP) exceeds the threshold specified in the Staff Regulations ($\pm 3.0\%$), a specific intermediate update is applied to the nominal remuneration of EU officials in the duty stations concerned, by adjusting the CC as follows:

$$\begin{aligned} \text{CC}_{\text{intermediate}} &= \text{CC}_{\text{January}} \times [\text{JBLI}_{\text{Jun-Dec}} \times \frac{1}{2} \text{GSI (if negative)}] \\ &= ??? \times [103.7 \times 0.981] / 100 \\ &= ??? \times 1.017 \end{aligned}$$

There are nineteen Intra-EU duty stations outside Brussels and Luxembourg, which have an implicit price index exceeding the specified threshold for the period. In consequence, a specific intermediate update would normally be required for these places.

However, this year there will be a general intermediate update, thus the CC presented in the Appendix will apply directly for all locations.

The combined total impact of the general intermediate update and the change in the PPPs is shown in [Appendix Four](#).

PPP for pensioners at 1 January 2023

The aggregate PPP for pensioners at 1 January 2023 (i.e. December 2022) for each Member State was also computed according to the agreed methodology, taking the updated individual basic heading PPPs established for Intra-EU Staff at 1 January 2023 (i.e. December 2022) for the capital city, and applying the same adjustment to convert rents from capital city price level to national average price level as was used for the 1 July 2022 (i.e. June 2022) calculation. The updated parities are then aggregated using the weights from the most recent Family Budget Survey amongst pensioners (same structure as used to establish the 1 July 2022 results). The results were presented to the Articles 64&65 Working Group in March 2023.

Further information about these aggregate PPP for pensioners can be found in *Appendix Three*.

When comparing the 1 January 2023 PPP values to the 1 July 2022 values, the simple average change in the country PPPs is +0.5%. This masks a variation between -3.1% (for Spain) and +9.1% (for Hungary). The PPP change for thirteen countries is positive or no change, and for the remaining twelve countries, it is negative. Belgium = Luxembourg = zero.

If there is no general intermediate update, but the ‘implicit index’ (i.e. combination of the JBLI evolution and the change in the PPP) exceeds the threshold specified in the Staff Regulations ($\pm 3.0\%$), then a specific intermediate update is applied to the nominal pensions of pensioners residing in the Member States concerned, by adjusting the CC in similar manner as for staff.

There are seventeen EU Member States outside Belgium and Luxembourg which have an implicit price index exceeding the threshold for the period. In consequence, a specific intermediate update would normally be required for these places.

However, this year there will be a general intermediate update, thus the CC presented in the Appendix will apply directly for all locations.

The combined total impact of the general intermediate update and the change in the PPPs is shown in *Appendix Four*.

Application of the high inflation clause

In accordance with Article 8 of Annex XI to the Staff Regulations, the effective dates for the intermediate update of remuneration and pensions shall be:

- (a) 16 November for places of employment having an inflation rate higher than 6 %, and
- (b) 1 November for places of employment having an inflation rate higher than 10 %.

Table: Application of the high inflation clause on the basis of implicit indices

The mini-table below summarises the implicit indices for Intra-EU staff in duty stations outside Brussels, for the six-month period to 1st January 2023 (see [Appendix Three](#) for details):

Range	No.	
$0\% \leq x < 3\%$	8	DK, EL, ES, FR, CY, LV, MT, PT
$3\% \leq x < 6\%$	17	BG, CZ, DE ^{Ber} , DE ^{Kar} , DE ^{Mun} , EE, IE, HR, IT ^{Rom} , IT ^{Var} , NL, AT, RO, SI, SK, FI, SE
$6\% \leq x < 10\%$	2	LT, PL
$10\% \leq x$	1	HU
	28	Excluding BE and LU

The mini-table below summarises the implicit indices for Pensioners residing in EU Member States (+ United Kingdom) outside Belgium, for the six-month period to 1st January 2023 (see [Appendix Three](#) for details):

Range	No.	
$0\% \leq x < 3\%$	8	DK, EL, ES, FR, CY, LV, MT, PT
$3\% \leq x < 6\%$	14	BG, CZ, DE, EE, IE, HR, IT, NL, AT, SI, SK, FI, SE, [UK]
$6\% \leq x < 10\%$	3	LT, PL, RO
$10\% \leq x$	1	HU
	26	Excluding BE and LU

Note: CC for pensioners are only applied if the CC value is below 100.

Joint Index forecast to July 2023 and preliminary estimate of the Annual Update

An advance forecast of the movement in Joint Index can be estimated in various ways (see [Appendix Five](#)), Thus there are various advance forecasts of the six-month movement in the JBLI, with values ranging between 0.0%-0.8% and 1.9%-2.5%. All of these estimates should be interpreted with caution as none of them measures the evolution of the JBLI in accordance with the approved methodology.

The current best estimate is considered to be the one which reflects the inflation forecasts validated by Belgium and Luxembourg for the twelve-month reference period (see [Appendix One](#)) and the measured JBLI calculation for the first six-month period (see [Appendix Two](#)). This gives a twelve-month movement in the JBLI of +3.7%.

The foregoing advance forecast of the JBLI movement for the twelve months to July 2023 can be combined with the global specific indicator forecast from [section 3](#), to produce an advance forecast of the annual update as follows:

Preliminary estimate of the annual update for the twelve months to 1st July 2023

$$\frac{96.2 \times 103.7}{100} = 99.8 \text{ } (-0.2\%)$$

The foregoing advance forecast should be interpreted with caution as precise remuneration values will only be established via the definitive annual data collection exercise and the precise calculation of the JBLI. These will only be possible with availability of statistics later in the year. The definitive values compiled subsequently may legitimately differ from initial forecasts if new information becomes available. In particular, (i) some Member States may be considering pay adjustments for national civil servants which, because of uncertainties about their timing and/or magnitude, are for reasons of prudence not included in the current forecasting exercise, and (ii) the uncertain economic environment may mean that measured inflation differs from forecast inflation.

By combining the advance forecast for the twelve months and the calculated intermediate adjustment, it is possible to identify an advance forecast of the residual annual update for the second six-month period to July 2023, as summarised in the following table.

Table: Summary of interim adjustment and advance forecast of annual and residual updates

	[1]		[2]		[3] = [2] / [1]	
	Interim		Annual (total)		Annual (residual)	
GSI forecast	98.1	-1.9%	96.2	-3.8%	98.1	-1.9%
		(50%)				
JBLI	103.7	+3.7%	:	:	:	:
JBLI forecast	:	:	103.7	+3.7%	100.0	+0.0%
=> total update	101.7	+1.7%	99.8	-0.2%	98.1	-1.9%

An advance forecast of the values of the economic parities and correction coefficients has been made for staff and for pensioners, by extrapolating the values established at 1 January 2023 to 1 July 2023, using the available HICP forecasts and JBLI forecast. The results are presented in **Appendix Six**.

These results should be interpreted with caution, as the precise calculation will only be possible with availability of statistics later in the year.

Potential application of Exception clause for next Annual Report

In accordance with Article 11 of Annex XI to the Staff Regulations, if the value of the specific indicator is positive, but there is a decrease in the EU total gross domestic product for the current year according to the latest available forecast produced by the Commission, then only part of the specific indicator shall be used to calculate the annual update at 1 July and the remainder shall be delayed.

Four scenarios are therefore possible:

GDP evolution	1 July	1 April	Cumulative*
$0\% \leq X$	100%	0%	0%
$-1.0\% \leq X < 0\%$	33%	67%	0%
$-3.0\% \leq X < -1.0\%$	0%	100%	0%
$X < -3.0\%$	0%	0%	100%
* 1 July in year when cumulative GDP is again positive			

The Winter European Economic Forecast issued by DG ECFIN on 10 February 2023⁽¹⁴⁾ projected that, the EU was set to avoid recession, but that headwinds persist. According to the Winter Forecast, the estimated GDP growth for the EU27 as a whole in real terms is expected to be positive (+0.8%) for 2023, and again positive (+1.6%) in 2024.

At the time of drafting this report, the Spring European Economic Forecast has not yet been issued by DG ECFIN: this is expected during May 2023.

Consequently, on the basis of the Winter Forecast, it currently seems unlikely that the Exception Clause will apply for the 2023 exercise.

⁽¹⁴⁾ https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/economic-forecasts/winter-2023-economic-forecast-eu-economy-set-avoid-recession-headwinds-persist_en

Review application of Exception Clause from previous Annual Report

In accordance with Article 11 of Annex XI to the Staff regulations, if there is a gap between the forecast of GDP growth used in the annual report for the previous year and the final GDP data for that calendar year, which would modify the original assessment whether the exception clause should have applied, a retroactive adjustment should take place.

In the 2022 annual report⁽¹⁵⁾, the assessment was made that the exception clause did not apply for the 2022 exercise. The basis for that assessment was the summer forecast issued by DG ECFIN on 14 July 2022, which predicted that GDP for the EU as a whole would increase by +2.7% for 2022 and by +1.5% in 2023.

A first estimate of the real GDP growth rate (percentage change on previous year) for the EU27 as a whole for calendar year 2022 was published in February 2023 ('T+2') ⁽¹⁶⁾. This indicates positive growth of +3.5%. This preliminary statistic will be confirmed by Eurostat when preparing the annual report, using information available in October 2023 ('T+9'). **It currently seems likely that the (non-application of the) Exception Clause was correctly implemented for the 2022 exercise, and that no retroactive correction is required to the annual update which was established for the 2022 exercise.**

⁽¹⁵⁾ Annual report for July 2022 exercise Ares(2022)7485371

⁽¹⁶⁾ Eurobase table TEC00115 'Real GDP growth rate' (using data from table NAMA_10_GDP 'GDP and main components')

Unwinding of the application of the Exception Clause for the July 2020 exercise

The specific indicator component calculated for the July 2020 annual adjustment was suspended due to the significant ex ante forecast decrease in GDP for 2020⁽¹⁷⁾. The appropriate application of the clause was subsequently confirmed by the ex post statistic on GDP for 2020 reported alongside the July 2021 annual adjustment⁽¹⁸⁾.

At the March 2021 meeting of the A6465WG, a methodology was approved for assessing how and when suspension should be lifted. On that basis, because forecast cumulative GDP in real-terms for 2021 had not reached the pre-2020 level it was confirmed that the 2020 suspension should continue to apply and should not be lifted as part of the 2021 annual adjustment⁽¹⁹⁾. The appropriateness of continued suspension was subsequently confirmed by the ex post statistic on GDP for 2021 reported alongside the July 2022 annual adjustment⁽²⁰⁾. Ex ante forecast cumulative GDP in real-terms for 2022 exceeded the pre-2020 level, thus the 2020 suspension was lifted as part of the 2022 annual adjustment⁽²¹⁾.

The preliminary ('T+2') GDP statistic for calendar year 2022 was published in February 2023. The definitive value will be reported in autumn 2023 and will be the basis for ex post confirmation of the appropriateness of that lifting of the suspension, in the report on the July 2023 annual adjustment. The table below summarises the evolution in nominal GDP.

⁽¹⁷⁾ Annual report for July 2020 exercise Ares(2020)6334499

⁽¹⁸⁾ Annual report for July 2021 exercise Ares(2021)6803678

⁽¹⁹⁾ Annual report for July 2021 exercise Ares(2021)6803678

⁽²⁰⁾ Annual report for July 2022 exercise Ares(2022)7485371

⁽²¹⁾ Annual report for July 2022 exercise Ares(2022)7485371

Table: Cumulative GDP growth in real terms 2019-2022

GDP	2019	2020	2021	2022
EU27 total current prices, million euro ⁽¹⁾	14,018,762	13,461,664	14,532,191	15,806,899
EU27 total, implicit price deflator, 2015=100 ⁽¹⁾	105.32	107.19	109.75	115.31
→ at constant prices, 2019=100	14,018,762	13,226,813	13,945,220	14,437,065
Difference (%)	-	-5.6%	+5.4%	+3.5%
Difference	-	-791,949	+718,407	+491.845
→ cumulative difference	-	-791,949	-73,542	+418,303
⁽¹⁾ Source: Eurobase, February 2023, NAMA_10_GDP				

From the foregoing table it is apparent that cumulative GDP expressed in constant prices did not yet recover to former level in 2021, but this did happen in 2022.

Potential application of Moderation Clause for next Annual Report

In accordance with Article 10 of Annex XI to the Staff Regulations, if the value of the specific indicator exceeds an upper limit of +2% or is below a lower limit of -2%, then the value of the limit shall instead be used to establish the annual update which applies with effect from 1 July – and the remainder of the annual update shall be applied with effect from 1 April.

To assess whether the Moderation Clause will be applicable for the 2023 Annual Report to be published later this year, the preliminary estimate of the annual update is used (see **section 8** of this report).

The residual forecast global specific indicator value for the current exercise (-1.9%) falls within the $\pm 2\%$ boundaries for application of the Moderation Clause. **The moderation clause is therefore unlikely to apply and, other things being equal, the full calculated value of the residual annual update should be used with effect from 1 July 2023.**

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Appendix ONE:

Global specific indicator forecast (details)

1. STEPS TO PRODUCE GSI FORECAST

Article 1.4 of the Annex XI says that to establish a global specific indicator for the European Union, Eurostat shall use a sample composed of the following 11 Member States: Belgium, Germany, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Poland, Sweden and the United Kingdom. The United Kingdom left the EU with effect 1 February 2020 and is now a ‘third country’. The transition period introduced by the ‘withdrawal agreement’ expired with effect 31 December 2020. Consequently, the UK is no longer included in the core sample of Member States for specific indicator calculation purposes. The remaining sample represents at least 75 % of the remaining EU27 gross domestic product (GDP).

For the intermediate update, data was requested in January 2023⁽²²⁾ from the above-mentioned 10 Member States about the expected changes in net remuneration in nominal terms, between 1 July 2022 and 1 July 2023, together with similar information for the remaining 17 Member States. Where these forecasts are not available, Eurostat or DG ECFIN estimates are used instead: for the current exercise that is the case for 1 Member State (Greece).

National estimates of expected movements in the harmonized consumer price indices (inflation rates) during the period June 2022 to June 2023 have been used to transform nominal changes in the remunerations into movements in real terms. Where these forecasts are not available, Eurostat or DG ECFIN estimates are used instead: for the current exercise that is the case for 7 Member States (Ireland, Greece, Spain, Malta, the Netherlands, Austria and Slovenia).

In order to calculate the global specific indicator the results per country have been weighted in proportion to their national GDP for the latest available calendar year expressed in purchasing power parities⁽²³⁾. Following the adoption and implementation of ESA2010, figures established on this basis are used as the weights.

A preliminary estimate of the forecast was presented to the Article 65 Working Group in March 2023. Following bilateral confirmation of data with Member States, and extraction of the latest available GDP weights, the value of the global specific indicator forecast was finalised shortly thereafter.

The forecast global specific indicator (average change in real net remuneration) for the year to 1 July 2023 is 96.2 (-3.8%) for the core sample, and 98.4 (-1.6%) for the remaining 17 Member States, i.e. 96.6 (-3.4%) for the EU27 as a whole.

As this figure for the core sample is negative, half of it has to be taken into account for any intermediate update, i.e. -1.9% (98.1).

⁽²²⁾ Request letter reference Ares(2023)143122 dated 10.01.2023.

⁽²³⁾ The initial estimate used percentages of EU27 total GDP in purchasing power standards for the calendar year 2020, as this was the latest available at the time of calculation and drafting. Preliminary (‘T+2’) values for calendar year 2021 became available during March. Definitive (‘T+9’) GDP values for 2021 are due in September 2022 and will be used for the annual report. Covid-19 pandemic and policy responses have had variable impact on 2021 GDP in Member States: consequently, their weight in the sample may change.

2. RESULTS TABLE (VALUES AFTER MARCH 2023 MEETING OF ARTICLES 64&65 WORKING GROUP)

The following tables show the values presented to, and confirmed by, Member State delegates in March 2023, or shortly thereafter, for the core sample of 10 countries, and for the remaining 17 countries:

Table 1.1: Forecast of changes in the net remuneration of national civil servants (core sample of 10 countries)

*Forecast of changes in the net remuneration of national civil servants*¹
July 2022 - July 2023

Country	Weight ⁴ EU27=100 (%)	Weight in sample (%)	Nominal net ² specific indicator (%)	Consumer price indices ³ (%)	Real net ² specific indicator (%)
BE	3.5	4.3	4.6	4.3	0.3
DE	24.5	29.8	2.8	7.8	-4.6
ES	8.4	10.2	3.8	4.1	-0.3
FR	16.7	20.3	1.4	5.5	-3.9
IT	12.1	14.7	1.5	10.9	-8.5
LU	0.5	0.6	5.1	1.5	3.5
NL	6.0	7.3	6.7	4.3	2.3
AT	2.8	3.4	7.3	6.4	0.8
PL	4.2	5.1	7.8	17.2	-8.0
SE	3.5	4.3	1.8	5.9	-3.9
Global (EU10)	82.2	100.0	3.2	7.3	-3.8

(1) The figures presented in this table are Eurostat estimates based on information supplied by country delegates and other sources and do not prejudice the outcomes of any current or future pay negotiations

(2) Forecast of net remuneration (= gross remuneration less statutory deductions) (MS estimate)

(3) All-items HICP (estimated by MS, except ES, AT, NL= ECFIN)

(4) GDP 2022 (ESA 2010) in PPS at current prices (website enquiry 04.05.23)

Table 1.2: Forecast of changes in the net remuneration of national civil servants (17 remaining countries)

**Forecast of changes in the net remuneration of national civil servants ¹
July 2022 - July 2023**

Country	Weight ⁴ EU27=100 (%)	Weight in sample (%)	Nominal net ² specific indicator (%)	Consumer price indices ³ (%)	Real net ² specific indicator (%)
BG	0.5	2.8	10.0	6.2	3.6
CZ	1.7	9.6	5.0	10.0	-4.5
DK	2.4	13.5	2.4	3.9	-1.4
EE	0.2	1.1	9.6	17.8	-7.0
IE	3.2	18.0	12.9	4.1	8.5
EL	1.3	7.3	2.4	3.6	-1.2
HR	0.4	2.2	8.3	12.5	-3.7
CY	0.2	1.1	5.1	6.1	-0.9
LV	0.2	1.1	6.7	10.0	-3.0
LT	0.4	2.2	3.1	17.0	-11.9
HU	1.1	6.2	0.0	17.0	-14.5
MT	0.1	0.6	3.8	4.3	-0.5
PT	1.5	8.4	4.0	8.6	-4.2
RO	1.8	10.1	7.4	10.2	-2.5
SI	0.4	2.2	10.1	5.7	4.2
SK	0.7	3.9	8.0	14.8	-5.9
FI	1.7	9.6	4.4	8.8	-4.0
Global (EU17)	17.8	100.0	6.1	8.1	-1.6

(1) The figures presented in this table are Eurostat estimates based on information supplied by country and other sources and do not prejudice the outcomes of any current or future pay negotiations

(2) Forecast of net remuneration (= gross remuneration less statutory deductions) (MS estimate, except

(3) All-items HICP (estimated by MS, except IE, EL, MT, SI = ECFIN)

(4) GDP 2022 (ESA 2010) in PPS at current prices (website enquiry 04.05.23)

3. FORECASTS MAY DIFFER FROM ACTUAL MEASURED MOVEMENT

The information presented about the evolution of remuneration of national civil servants (the nominal net specific indicator) is a best estimate based on available information at the time. Definitive values compiled subsequently may legitimately differ from those values if new information becomes available.

However, as an indicator of the quality of such forecasts, the following tables illustrate the degree to which for three recent annual exercises the forecast in the intermediate report varied from the eventual definitive value for the annual report. In this table, a negative value indicates that the forecast value is lower than the definitive value.

Table 1.3: Differences between the net specific indicator and the forecast in nominal terms and in real terms (core sample of 10 countries)

Country	Twelve months ended 1st July 2020		Twelve months ended 1st July 2021		Twelve months ended 1st July 2022	
	Nominal	Real	Nominal	Real	Nominal	Real
BE	-1.2	-1.2	-0.1	+0.9	-3.9	-0.3
DE	-0.1	-0.9	+0.1	+0.5	-0.5	+5.1
ES	0.0	-1.2	0.0	+1.5	-0.1	+4.7
FR	+1.1	+0.2	0.0	+1.0	-5.1	-1.2
IT	-1.8	-2.3	0.0	+0.3	-5.2	-3.2
LU	+0.8	-2.0	0.0	+1.0	+0.5	+4.6
NL	-0.2	+0.1	+0.1	+0.5	-3.3	-1.1
AT	-4.3	-4.7	-0.4	+0.6	+0.7	+6.6
PL	-4.8	-3.5	-7.5	-7.0	-1.7	+3.8
SE	+0.2	-0.3	0.0	+0.8	-2.3	+3.3
UK	-1.4	-2.5	:	:	:	:
Global (EU10)	-0.9	-1.4	-0.6	+0.1	-2.6	+1.7

Negative number signifies actual higher than forecast

From the foregoing table it is apparent that for the core sample, for the 2020 exercise, the difference between the forecast and the definitive value is relatively similar when expressed in nominal terms and in real terms. By contrast, for the 2021 exercise, the difference in real terms is positive for most countries which suggests that actual consumer price inflation was higher than initial forecasts. For the 2022 exercise, there are clear differences between the forecast and definitive values when expressed in nominal and in real terms which suggests that economic uncertainty (rising inflation) made it difficult to supply initial forecasts.

Table 1.4: Difference between the net specific indicator and the forecast in nominal terms and in real terms (remaining 17 countries)

Country	Twelve months ended 1st July 2020		Twelve months ended 1st July 2021		Twelve months ended 1st July 2022	
	Nominal	Real	Nominal	Real	Nominal	Real
BG	+4.2	+2.8	-2.7	-2.9	+6.0	+14.4
CZ	+3.0	+3.4	-5.4	-4.7	-0.9	+3.2
DK	-0.1	-1.1	-0.6	+0.1	-0.2	+3.2
EE	+5.4	+1.9	-11.8	-8.7	+2.2	+14.0
IE	-0.1	-0.1	-0.6	+0.6	-5.7	-0.2
EL	+0.9	-1.9	+0.2	+0.9	+2.3	+10.6
HR	+0.2	-1.3	+5.1	+6.2	-2.8	+6.2
CY	-0.3	-3.5	-0.1	+3.3	-0.3	+3.4
LV	+3.1	+1.5	-2.2	-0.7	-3.3	+5.3
LT	-4.0	-4.5	+0.2	+2.7	-1.0	+6.7
HU	-4.9	-6.5	-6.6	-4.4	-1.7	+2.7
MT	+0.7	+0.2	-2.7	-3.8	-0.5	+1.0
PT	0.0	-0.6	0.0	-0.8	-1.2	+3.1
RO	0.0	-0.8	-0.5	+0.3	-1.7	-0.4
SI	-0.4	-3.1	-0.4	+2.0	-1.9	+5.6
SK	-5.2	-6.1	-7.3	-6.0	-4.1	+1.2
FI	+0.1	-1.0	+0.4	+1.9	-0.2	+5.1
Global (EU17)	-0.1	-1.0	-1.9	-0.9	-1.3	+3.3

Negative number signifies actual higher than forecast

From this table it is apparent that, for the remaining Member States, for both the 2020 exercise and the 2021 exercise, there are some differences between the initial forecast and the definitive value, both in nominal terms and in real terms. For the 2023 exercise, there are clear differences between the forecast and definitive values when expressed in nominal and in real terms which suggests that economic uncertainty (rising inflation) made it difficult to supply initial forecasts.

Appendix TWO:
Joint Index (details)

1. JOINT INDEX 1 JULY 2022 – 1 JANUARY 2023 (I.E. JUNE-DECEMBER 2022)

The Joint Index represents a weighted average of the available national indices for Belgium and Luxembourg, and may not reflect the specific price evolution in the reference cities (Brussels and Luxembourg).

The Joint Index is a weighted average of the HICP for Belgium and the CPI for Luxembourg, using the number of EU staff in Brussels and Luxembourg as weights (see section 2 hereafter). The detailed sub-indices for the 80 basic headings are used, aggregated using weights derived from the latest of the periodic “Family Budget Surveys” conducted amongst EU staff in Brussels (2017). The following table presents the calculation of the Joint Index for the period June 2022 – December 2022, with the final figure in the right-hand column showing the variation for the period, +3.7% (103.7).

Table 2.1: Change in the Joint Belgium-Luxembourg Index for the period June 2022 - December 2022

Joint BELU Index FBS weights 2017		2022m12/2022m6	
		WEIGHTS	VARIATION
1	FOOD AND NON-ALCOHOLIC BEVERAGES	125.9	106.4
2	ALCOHOLIC BEVERAGES AND TOBACCO	13.9	102.1
3	CLOTHING AND FOOTWEAR	43.1	107.4
4	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	344.2	103.4
5	FURNISHINGS, HOUSEHOLD EQUIPMENT AND MAINTENANCE OF HOUSE	64.5	103.0
6	HEALTH	12.7	100.9
7	TRANSPORT	130.0	104.2
8	COMMUNICATIONS	19.8	98.8
9	RECREATION AND CULTURE	79.6	103.5
10	EDUCATION	26.7	101.4
11	HOTELS, CAFES AND RESTAURANTS	81.1	102.2
12	MISCELLANEOUS GOODS AND SERVICES	58.6	101.9
TOTAL WITHOUT RENTS		721.4	104.1
RENTS		278.5	102.5
TOTAL		1000.0	103.7

2. STAFF RATIO BRUSSELS : LUXEMBOURG

In accordance with the agreed methodology, the staff weights available for the index base period are used, and applied at the level of the detailed sub-indices for the 80 basic headings. The information is obtained from Commission internal services and summarised in the table below⁽²⁴⁾.

Table 2.2: Number of permanent officials and other servants in active service at July 2022 (i.e. December 2021)

Duty station	No.	%
Brussels	38,650	80.4
Luxembourg	9,409	19.6
Total	48,059	100.0

Source: Eurostat, from PMO and PSEO databases

⁽²⁴⁾ The available staff numbers information is for December 2021, i.e. applicable at July 2022.

1. BELGIUM HICP

The following table presents the published HICP values for June 2022 and December 2022, base 2015=100, and the final figure in the right-hand column shows the variation for the period, +4.3% (104.3).

Table 2.3: Change in the Belgium HICP for the period June 2022 - December 2022, national weights excluding owner-occupiers

Belgian HICP index, 2015=100						
HICP weights						
Rents from HICP						
		WEIGHTS	INDICES	WEIGHTS	INDICES	
		from HICP 2022	30/06/2022	from HICP 2022	31/12/2022	VARIATION
1	FOOD AND NON-ALCOHOLIC BEVERAGES	168.6	117.5	168.6	125.7	106.9
2	ALCOHOLIC BEVERAGES AND TOBACCO	53.5	137.4	53.5	141.2	102.8
3	CLOTHING AND FOOTWEAR	58.8	105.2	58.8	114.7	109.1
4	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	171.8	151.6	171.8	163.4	109.0
5	FURNISHINGS, HOUSEHOLD EQUIPMENT AND MAINTENANCE OF HOUSE	83.6	110.0	83.6	114.1	103.7
6	HEALTH	77.0	107.5	77.0	108.6	101.0
7	TRANSPORT	107.4	132.2	107.4	127.8	97.6
8	COMMUNICATIONS	40.0	108.2	40.0	106.8	98.7
9	RECREATION AND CULTURE	82.9	112.2	82.9	116.6	103.9
10	EDUCATION	5.2	127.6	5.2	129.6	101.6
11	HOTELS, CAFES AND RESTAURANTS	67.3	121.3	67.3	126.7	104.5
12	MISCELLANEOUS GOODS AND SERVICES	84.0	114.4	84.0	117.3	102.3
TOTAL WITHOUT RENTS		926.4	123.6	926.4	128.7	104.4
RENTS		73.6	113.0	73.6	116.3	102.9
TOTAL		1000.0	122.8	1000.0	127.8	104.3

This information is provided by the Belgian authorities "Service public fédéral, Economie, P.M.E., Classes moyennes et Energie, division des prix" (Federal Public Service, Economy, Small and medium-sized enterprises, Middle classes and Energy, Price indices department), and reformatted by Eurostat. The weights do not include rents data for owner-occupiers.

Replacing with weights which include owner-occupiers gives the following variation for the period: +4.5% (104.5), as shown in the table below.

Table 2.4: Change in the Belgium HICP for the period June 2022 - December 2022, staff weights including owner-occupiers

Belgian HICP index, 2015=100						
FBS weights						
Rents from HICP						
		FBS	INDICES	INDICES		
		WEIGHTS	30/06/2022	31/12/2022	VARIATION	
1	FOOD AND NON-ALCOHOLIC BEVERAGES	125.9	117.6	125.7	106.8	
2	ALCOHOLIC BEVERAGES AND TOBACCO	13.9	127.2	129.7	101.9	
3	CLOTHING AND FOOTWEAR	43.1	106.4	114.9	108.2	
4	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	344.2	125.9	131.8	104.0	
5	FURNISHINGS, HOUSEHOLD EQUIPMENT AND MAINTENANCE OF HOUSE	64.5	110.3	113.4	102.8	
6	HEALTH	12.7	107.5	108.6	101.0	
7	TRANSPORT	130.0	121.2	125.0	105.1	
8	COMMUNICATIONS	19.8	109.4	108.0	98.7	
9	RECREATION AND CULTURE	79.6	112.8	118.6	104.9	
10	EDUCATION	26.7	127.6	129.6	101.6	
11	HOTELS, CAFES AND RESTAURANTS	81.1	118.9	125.4	105.4	
12	MISCELLANEOUS GOODS AND SERVICES	58.6	115.2	117.5	102.0	
TOTAL WITHOUT RENTS		721.4	122.3	128.3	105.0	
RENTS		278.5	113.0	116.3	102.9	
TOTAL		1000.0	119.7	125.0	104.5	

2. LUXEMBOURG CPI

The following table presents the published CPI values for June 2022 and December 2022, base 2015 = 100, and the final figure in the right-hand column shows the variation for the period, +1.4% (101.4).

Table 2.5: Change in the Luxembourg CPI for the period June 2022 - December 2022, national weights excluding owner-occupiers

Luxembourg CPI index, 2015=100						
CPI weights						
Rents from CPI						
		WEIGHTS	INDICES	WEIGHTS	INDICES	
		from CPI 2022	30/06/2022	from CPI 2022	31/12/2022	VARIATION
1	FOOD AND NON-ALCOHOLIC BEVERAGES	127.5	119.7	127.5	125.4	104.8
2	ALCOHOLIC BEVERAGES AND TOBACCO	37.3	113.6	37.3	116.8	102.9
3	CLOTHING AND FOOTWEAR	66.5	109.6	66.5	114.1	104.0
4	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	184.5	119.2	184.5	119.7	101.2
5	FURNISHINGS, HOUSEHOLD EQUIPMENT AND MAINTENANCE OF HOUSE	87.6	113.6	87.6	118.0	104.4
6	HEALTH	32.2	108.3	32.2	108.9	100.5
7	TRANSPORT	146.4	123.1	146.4	117.8	97.0
8	COMMUNICATIONS	23.1	91.5	23.1	90.7	99.0
9	RECREATION AND CULTURE	56.8	115.8	56.8	116.0	100.2
10	EDUCATION	16.4	120.5	16.4	121.2	100.6
11	HOTELS, CAFES AND RESTAURANTS	51.2	120.9	51.2	119.0	98.4
12	MISCELLANEOUS GOODS AND SERVICES	170.5	115.5	170.5	112.8	101.3
TOTAL WITHOUT RENTS		921.8	117.4	921.8	117.7	101.4
RENTS		78.2	109.0	78.2	110.1	100.9
TOTAL		1000.0	116.8	1000.0	117.1	101.4

This information is provided by the Luxembourg authorities "Institut national de la statistique et des études économiques, STATEC, unité SOC4-Prix" (National Institute for Statistics and Economic Analysis, STATEC, Unit SOC4-Prices), and reformatted by Eurostat. The weights do not include rents data for owner-occupiers.

The only distinction between the Luxembourg CPI and the Luxembourg HICP is that for the CPI the weights used for aggregation purposes exclude expenditures by non-residents on the Luxembourg territory, whereas these are included for the HICP.

Replacing with weights which include owner-occupiers gives the following variation for the period: +0.4% (100.4), as shown in the table below.

Table 2.6: Change in the Luxembourg CPI for the period June 2022 - December 2022, staff weights including owner-occupiers

Luxembourg CPI index, 2015=100					
FBS weights					
Rents from CPI					
		FBS	INDICES	INDICES	
		WEIGHTS	30/06/2022	31/12/2022	VARIATION
1	FOOD AND NON-ALCOHOLIC BEVERAGES	125.9	120.1	125.6	104.8
2	ALCOHOLIC BEVERAGES AND TOBACCO	13.9	113.8	116.7	102.5
3	CLOTHING AND FOOTWEAR	43.1	110.0	114.3	103.9
4	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	344.2	115.7	115.7	100.7
5	FURNISHINGS, HOUSEHOLD EQUIPMENT AND MAINTENANCE OF HOUSE	64.5	113.1	117.5	103.7
6	HEALTH	12.7	108.3	108.9	100.5
7	TRANSPORT	130.0	122.0	121.5	100.8
8	COMMUNICATIONS	19.8	92.7	92.4	99.3
9	RECREATION AND CULTURE	79.6	114.1	111.2	97.7
10	EDUCATION	26.7	120.5	121.2	100.6
11	HOTELS, CAFES AND RESTAURANTS	81.1	121.7	108.5	89.0
12	MISCELLANEOUS GOODS AND SERVICES	58.6	111.3	112.9	101.4
TOTAL WITHOUT RENTS		721.4	119.1	118.6	100.2
RENTS		278.5	109.0	110.1	100.9
TOTAL		1000.0	116.3	116.3	100.4

Appendix THREE:

Intra-EU Staff PPPs and Pensioner PPPs (details)

1. CALCULATION OF CORRECTION COEFFICIENTS

The correction coefficients (CC) applicable to the salaries of the European institution officials working in the capitals and places of employment other than Brussels and Luxembourg are determined on the basis of the relationships between the economic parities (PPP) and the exchange rates at a given point in time. The correction coefficient operates as a percentage adjustment to remuneration to take account of the cost of living differences between Brussels and the various duty stations.

For pensioners, similar calculation and adjustment principles apply⁽²⁵⁾. The difference is that instead of being based on capital city price comparisons they relate to national comparisons, with Belgium as the base country.

Since 1 January 2023, Croatia adopted the euro and the designated rate is 7.53450 kuna per 1 euro. Therefore the PPPs for Croatia presented in the 2023 intermediate report have been converted into euros using the designated rate. In consequence, the opening values for PPP and ER presented for July 2022 do not match the values presented in the Annual Report. Note: this does not affect the CC value because both the numerator and the denominator are adjusted by the same value.

The United Kingdom left the EU with effect since 1 February 2020 and is now a ‘third country’. The transition period introduced by the ‘withdrawal agreement’ expired with effect since 31 December 2020. Consequently, the UK is no longer included for the calculation of correction coefficient values for active Intra-EU staff (it is included in separate intermediate report for active Extra-EU staff). By contrast, the UK continues to be included for the calculation of correction coefficient values for pensioners residing in the UK.

⁽²⁵⁾ Note: only relevant for pension rights acquired prior to May 2004; the correction coefficient being 100% for the pension rights acquired from that date. The correction coefficient applies in full for transfers into, or out of, the pension scheme of European Officials.

2. STEPS TO PRODUCE PPPs FOR INTERMEDIATE UPDATE

2.1 PPPs for Intra-EU staff

The object of the economic parities is to compare the relative costs of living of EU officials in Brussels (reference city) with each of the European capitals and other places of employment for which a correction coefficient has been set. The method used is to compare the price of a "basket" of goods and services in Brussels with the prices of the same goods and services in each of the other places of employment. The weighted average of all the price ratios is the overall ('global') "economic parity". The average consumption expenditure pattern of EU officials is used as weights, identified by means of periodic surveys of household expenditure. In places of employment outside Brussels with very few officials, a common structure pooling all the questionnaires from similar locations is derived instead.

The starting point is the parities for the 80 basic headings, as established for the annual update of the year in question (i.e. 1 July 2022).

For each duty station, the individual basic heading parities are then updated using the movement in official HICP between June and December, relative to the movement of the Joint Index for the same period.

Finally, the updated basic heading parities are aggregated using the same expenditure weighting structure as was used to establish the 1 July overall parity. These weights were derived from the most recently validated Family Budget Surveys conducted amongst active staff: the dates of the survey in each location are different⁽²⁶⁾.

2.2 PPPs for Pensioners

In accordance with the agreed methodology, the approach to calculate PPPs for Pensioners for the intermediate update is the same as the approach to establish those for the annual update.

In this case, the parities for all basic headings, except rents, are set equal to the updated parities established for Staff. A specific adjustment is then made to rent parities to convert them from capital city price level to national average price level. The same adjustment factor is applied for the intermediate update as was applied for the July calculation.

The updated parities for all basic headings are then aggregated using consumption expenditure weights derived from the wide scale Family Budget Survey amongst pensioners which was last conducted in 2013.

⁽²⁶⁾ Family budget surveys were conducted since 2016 in 24 duty stations, including Brussels, and have been validated and integrated for the calculation of parities. Structures for the remaining locations (DE^{Berlin}, DE^{Karlsruhe}, DE^{Munich}, LU, FR, NL) were conducted in 2022 and 2023 and results are currently being processed and validated for use.

3. CALCULATED CC VALUES AT 1 JANUARY 2023 (I.E. DECEMBER 2022)

In the tables, parities are shown rounded to 3 decimal places (Euro zone) or 4 significant figures; exchange rates are shown with the same format; correction coefficients are shown rounded to 1 decimal place; percentage movements are shown rounded to 1 decimal place.

3.1 PPPs for Intra-EU Staff

The following **Table 3.1** presents the calculated values of the economic parities and correction coefficients for staff as at 1 January 2023 (i.e. December 2022). Exchange rates for 1 July 2022 are used, for consistency with the annual update⁽²⁷⁾.

Nine duty station locations have a correction coefficient higher than 100; the remaining nineteen have a correction coefficient equal to or below 100. Brussels = Luxembourg = 100. The highest value is for IE-Dublin (135.4). The lowest value is for BG-Sofia (65.6).

3.2 PPPs for Pensioners

Similarly, the following **Table 3.2** presents the calculated values of the economic parities and correction coefficients for pensioners as at 1 January 2023 (i.e. December 2022). Exchange rates for 1 July 2022 are again used⁽²⁸⁾.

Eight countries have a CC greater than 100; the remaining seventeen have a coefficient equal to or below 100. Belgium = Luxembourg = 100. The highest value is for Denmark (134.8). The lowest value is for Romania (60.5).

⁽²⁷⁾ This is in accordance with Article 63 of the Staff Regulations.

⁽²⁸⁾ This is in accordance with Article 20(3) of Annex XIII to the Staff Regulations.

Table 3.1: Calculation of correction coefficients at December 2022 for Intra-EU staff

			31-Dec-22		
			Final		
			PPP	Ex. Rate	CC
1	BE	Brussels	1	1	100.0
2	BG	Sofia	1.283	1.956	65.6
3	CZ	Prague	23.71	24.74	95.9
4	DK	Copenhagen	9.825	7.439	132.1
5	DE	Berlin	1.003	1	100.3
6		Karlsruhe	0.953	1	95.3
7		Munich	1.119	1	111.9
8	EE	Tallinn	0.941	1	94.1
9	IE	Dublin	1.354	1	135.4
10	EL	Athens	0.862	1	86.2
11	ES	Madrid	0.942	1	94.2
12	FR	Paris	1.156	1	115.6
13	HR	Zagreb	0.803	1	80.3
14	IT	Rome	0.952	1	95.2
15		Varese	0.927	1	92.7
16	CY	Nicosia	0.809	1	80.9
17	LV	Riga	0.850	1	85.0
18	LT	Vilnius	0.907	1	90.7
19	LU	Luxembourg	1	1	100.0
20	HU	Budapest	297.9	394.3	75.6
21	MT	Valletta	0.905	1	90.5
22	NL	The Hague	1.118	1	111.8
23	AT	Vienna	1.097	1	109.7
24	PL	Warsaw	3.542	4.687	75.6
25	PT	Lisbon	0.942	1	94.2
26	RO	Bucharest	3.533	4.942	71.5
27	SI	Ljubljana	0.874	1	87.4
28	SK	Bratislava	0.809	1	80.9
29	FI	Helsinki	1.179	1	117.9
30	SE	Stockholm	13.31	10.68	124.5

Table 3.2: Calculation of correction coefficients at December 2022 for Pensioners

		31-Dec-22			
		Final			
		PPP	Ex. Rate	CC	
1	BE	Belgium	1	1	100.0
2	BG	Bulgaria	1.212	1.956	62.0
3	CZ	Czech Rep.	20.52	24.74	82.9
4	DK	Denmark	10.03	7.439	134.8
5	DE	Germany	1.003	1	100.3
6	EE	Estonia	0.979	1	97.9
7	IE	Ireland	1.286	1	128.6
8	EL	Greece	0.827	1	82.7
9	ES	Spain	0.905	1	90.5
10	FR	France	1.066	1	106.6
11	HR	Croatia	0.699	1	69.9
12	IT	Italy	0.957	1	95.7
13	CY	Cyprus	0.814	1	81.4
14	LV	Latvia	0.800	1	80.0
15	LT	Lithuania	0.796	1	79.6
16	LU	Luxembourg	1	1	100.0
17	HU	Hungary	253.0	394.3	64.2
18	MT	Malta	0.934	1	93.4
19	NL	Netherlands	1.116	1	111.6
20	AT	Austria	1.124	1	112.4
21	PL	Poland	3.026	4.687	64.6
22	PT	Portugal	0.888	1	88.8
23	RO	Romania	2.988	4.942	60.5
24	SI	Slovenia	0.833	1	83.3
25	SK	Slovak Rep.	0.811	1	81.1
26	FI	Finland	1.190	1	119.0
27	SE	Sweden	12.22	10.68	114.3
28	UK	United Kingdom	1.102	0.8646	127.5

4. COMPARISON OF CC FOR INTRA-EU STAFF WITH CC FOR PENSIONERS

The following **Table 3.3** compares calculated correction coefficients at 1 January 2023 (i.e. December 2022) for pensioners and Intra-EU staff. Some quite large differences are apparent for rents; the difference is smaller when rents are excluded. The variations are due to the rent price adjustment to produce pensioner PPPs and to the use of a different consumption weighting structure for pensioners.

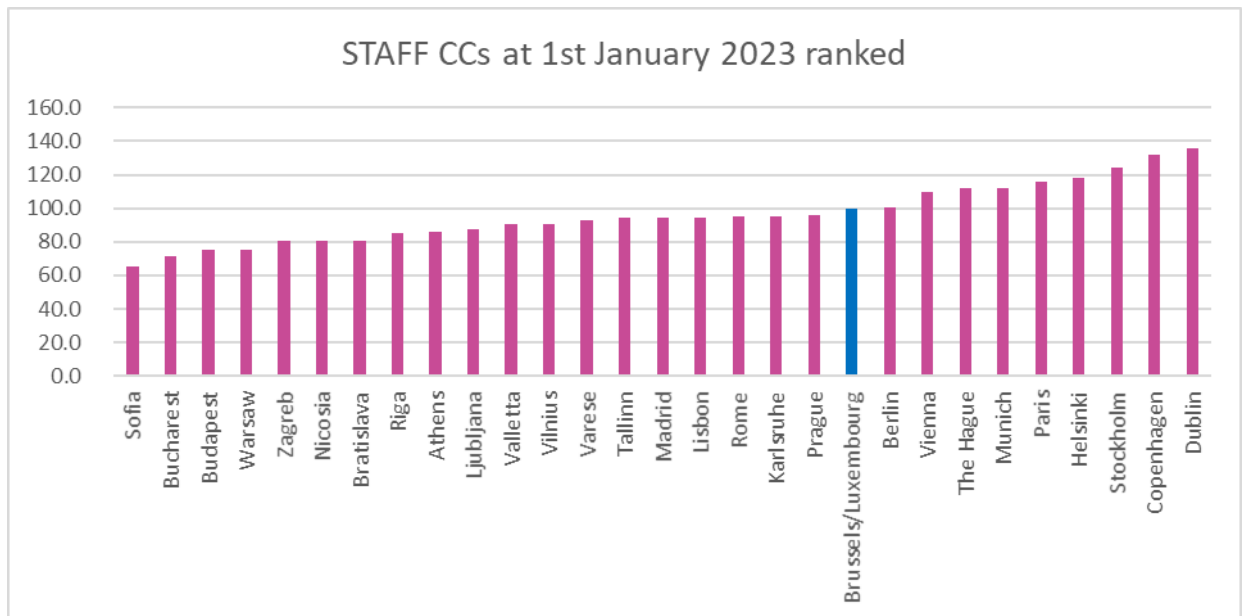
Graph 3.4 shows the CC for staff ranked by order of magnitude. **Graph 3.5** shows the CC for pensioners ranked by order of magnitude.

Table 3.3: Comparison of correction coefficients at December 2022 for Intra-EU staff and Pensioners

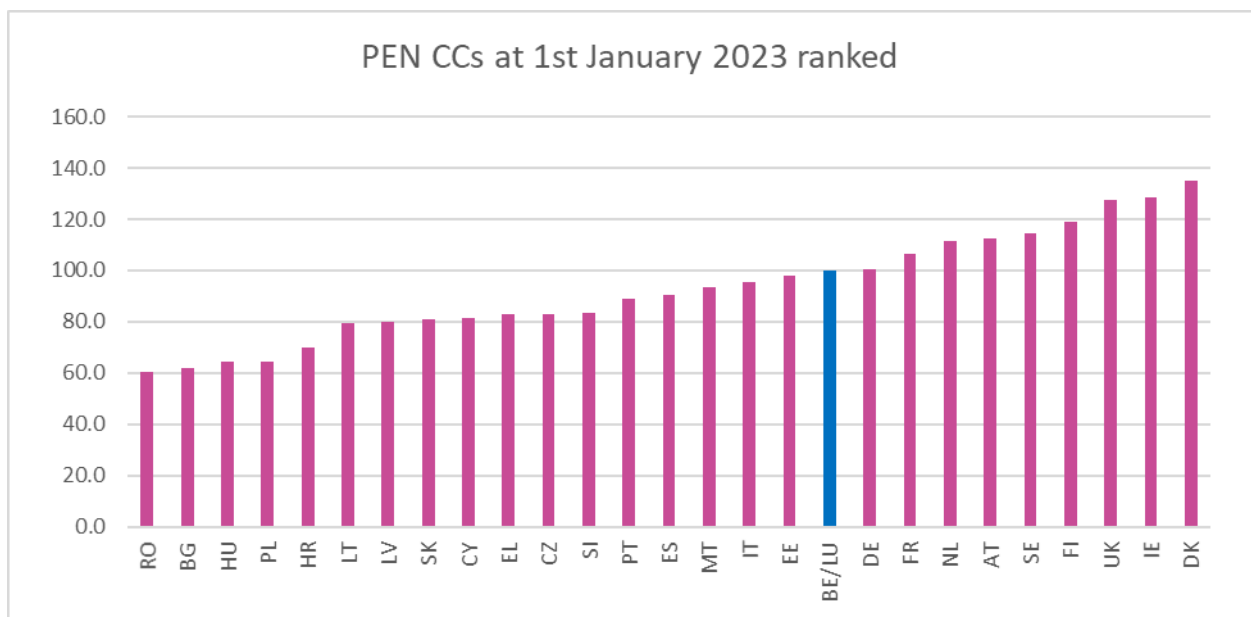
INTERMEDIATE ADJUSTMENT :
- December 2022
pensioner CCs compared to staff CCs

Correction coefficients for pensioners				Correction coefficients for staff			
Country	without rent	rents	Total	Capital	without rent	rents	Total
BE	100.0	100.0	100.0	Brussels	100.0	100.0	100.0
BG	68.2	37.2	62.0	Sofia	69.3	54.8	65.6
CZ	83.6	81.1	82.9	Prague	85.0	124.6	95.9
DK	122.7	173.2	134.8	Copenhagen	119.0	178.1	132.1
DE	96.0	115.7	100.3	Berlin	95.5	117.2	100.3
EE	92.1	119.5	97.9	Tallinn	93.4	97.0	94.1
IE	110.3	199.9	128.6	Dublin	109.0	224.8	135.4
EL	83.5	80.1	82.7	Athens	84.8	92.9	86.2
ES	86.2	107.9	90.5	Madrid	85.5	124.3	94.2
FR	101.3	125.3	106.6	Paris	101.1	168.7	115.6
HR	75.4	51.3	69.9	Zagreb	76.3	95.8	80.3
IT	95.3	97.2	95.7	Rome	94.5	97.8	95.2
CY	84.1	72.5	81.4	Nicosia	87.2	64.0	80.9
LV	84.8	66.7	80.0	Riga	86.4	80.8	85.0
LT	83.2	61.7	79.6	Vilnius	85.0	112.9	90.7
HU	67.4	53.3	64.2	Budapest	69.3	96.3	75.6
MT	84.2	130.2	93.4	Valletta	85.6	105.7	90.5
NL	102.6	144.2	111.6	The Hague	104.3	136.6	111.8
AT	101.9	151.7	112.4	Vienna	103.5	130.6	109.7
PL	70.9	41.3	64.6	Warsaw	72.1	87.0	75.6
PT	88.3	90.8	88.8	Lisbon	85.4	128.4	94.2
RO	64.3	45.9	60.5	Bucharest	66.7	84.2	71.5
SI	83.8	82.1	83.3	Ljubljana	85.1	96.0	87.4
SK	77.5	98.3	81.1	Bratislava	76.6	92.2	80.9
FI	109.9	146.9	119.0	Helsinki	109.6	144.1	117.9
SE	111.3	122.6	114.3	Stockholm	110.7	170.5	124.5
UK	106.9	200.0	127.5	London	;	;	;

Graph 3.4: Correction coefficients for Intra-EU staff at 1st January 2023, ranked



Graph 3.5: Correction coefficients for Pensioners at 1st January 2023, ranked



3. CHANGES IN THE AGGREGATE PPPS

3.1. PPPs for Intra-EU Staff

The following **Table 3.6** shows the changes in the economic parities for Intra-EU staff between 1 July 2022 (i.e. June 2022) and 1 January 2023 (i.e. December 2022), and the associated implicit price index (which also takes the Joint Index into account). **Map 3.7** shows the implicit index for Intra-EU staff, distinguishing movements above/below the $\pm 3\%$ threshold.

Since 1 January 2023, Croatia adopted the euro and the designated rate is 7.53450 kuna per 1 euro. Therefore the PPPs for Croatia presented in the 2023 intermediate report have been converted into euros using the designated rate. In consequence, the opening values for PPP presented for July 2022 do not match the values presented in the Annual Report.

The simple average change in the PPPs is $+0.3\%$. This masks a variation between -3.6% (for EL-Athens) and $+8.6\%$ (for HU-Budapest). The PPP change for fourteen locations is negative, and for the remaining fourteen locations it is zero or positive. Brussels = Luxembourg = zero.

Nineteen Intra-EU duty stations have an implicit price index which exceeds the threshold ($\pm 3.0\%$) for the six-months period. In consequence, a specific intermediate update would normally be required for these places. However, this year there will be a general intermediate update, thus the CC presented in the Appendix will apply directly for all locations.

3.2. PPPs for Pensioners

The following **Table 3.8** shows the changes in the economic parities for pensioners between 1 July 2022 (i.e. June 2022) and 1 January 2023 (i.e. December 2022), and the associated implicit price index (which also takes the Joint Index into account). **Map 3.9** shows the implicit index for pensioners, distinguishing movements above/below the $\pm 3\%$ threshold.

Since 1 January 2023, Croatia adopted the euro and the designated rate is 7.53450 kuna per 1 euro. Therefore the PPPs for Croatia presented in the 2023 intermediate report have been converted into euros using the designated rate. In consequence, the opening values for PPP presented for July 2022 do not match the values presented in the Annual Report.

The simple average change in the PPPs is $+0.5\%$. This masks a variation between -3.1% (for Spain) and $+9.1\%$ (for Hungary). The PPP change for twelve countries is negative, and for the remaining thirteen countries it is zero or positive. Belgium = Luxembourg = zero.

Seventeen EU Member States have an implicit price index which exceeds the threshold ($\pm 3.0\%$) for the six months. In consequence, a specific intermediate update would normally be required for these places. However, this year there will be a general intermediate update, thus the CC presented in the Appendix will apply directly for all locations.

Table 3.6: Change in purchasing power parities for six months ended 31 December 2022, for Intra-EU staff

		Final				
		01-Jul-22	31-Dec-22	Change	Implicit	
		PPP	PPP			
1	BE	Brussels	1	1	0	3.7
2	BG	Sofia	1.271	1.283	0.9	4.7
3	CZ	Prague	23.62	23.71	0.4	4.1
4	DK	Copenhagen	10.02	9.825	-1.9	1.7
5	DE	Berlin	1.006	1.003	-0.3	3.4
6		Karlsruhe	0.956	0.953	-0.3	3.4
7		Munich	1.122	1.119	-0.3	3.4
8	EE	Tallinn	0.941	0.941	0.0	3.7
9	IE	Dublin	1.363	1.354	-0.6	3.0
10	EL	Athens	0.894	0.862	-3.6	0.0
11	ES	Madrid	0.974	0.942	-3.3	0.3
12	FR	Paris	1.168	1.156	-1.0	2.6
13	HR	Zagreb	0.800	0.803	0.4	4.1
14	IT	Rome	0.947	0.952	0.5	4.3
15		Varese	0.920	0.927	0.7	4.4
16	CY	Nicosia	0.826	0.809	-2.1	1.6
17	LV	Riga	0.859	0.850	-1.1	2.6
18	LT	Vilnius	0.874	0.907	3.7	7.6
19	LU	Luxembourg	1	1	0	3.7
20	HU	Budapest	274.4	297.9	8.6	12.6
21	MT	Valletta	0.921	0.905	-1.8	1.8
22	NL	The Hague	1.098	1.118	1.8	5.6
23	AT	Vienna	1.088	1.097	0.8	4.6
24	PL	Warsaw	3.359	3.542	5.5	9.4
25	PT	Lisbon	0.955	0.942	-1.3	2.3
26	RO	Bucharest	3.465	3.533	2.0	5.7
27	SI	Ljubljana	0.871	0.874	0.3	4.0
28	SK	Bratislava	0.813	0.809	-0.5	3.2
29	FI	Helsinki	1.173	1.179	0.5	4.2
30	SE	Stockholm	13.35	13.31	-0.3	3.4

Note: The opening PPP value for Croatia is adjusted to reflect switch from Kuna to Euro (does not affect the CC)

Map 3.7: Changes in the economic parities in the six months to 1st January 2023 (implicit index) for Intra-EU staff

Implicit Index – STAFF
2022m06-2022m12

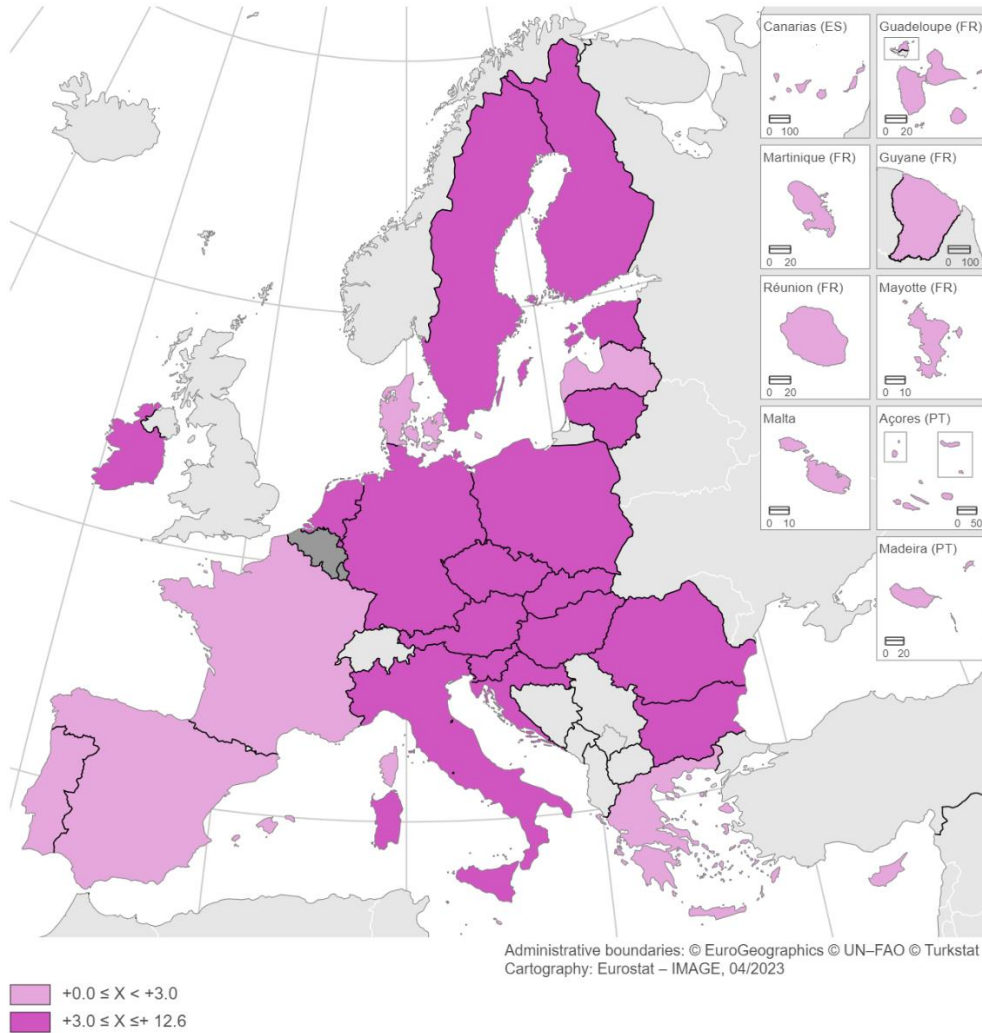


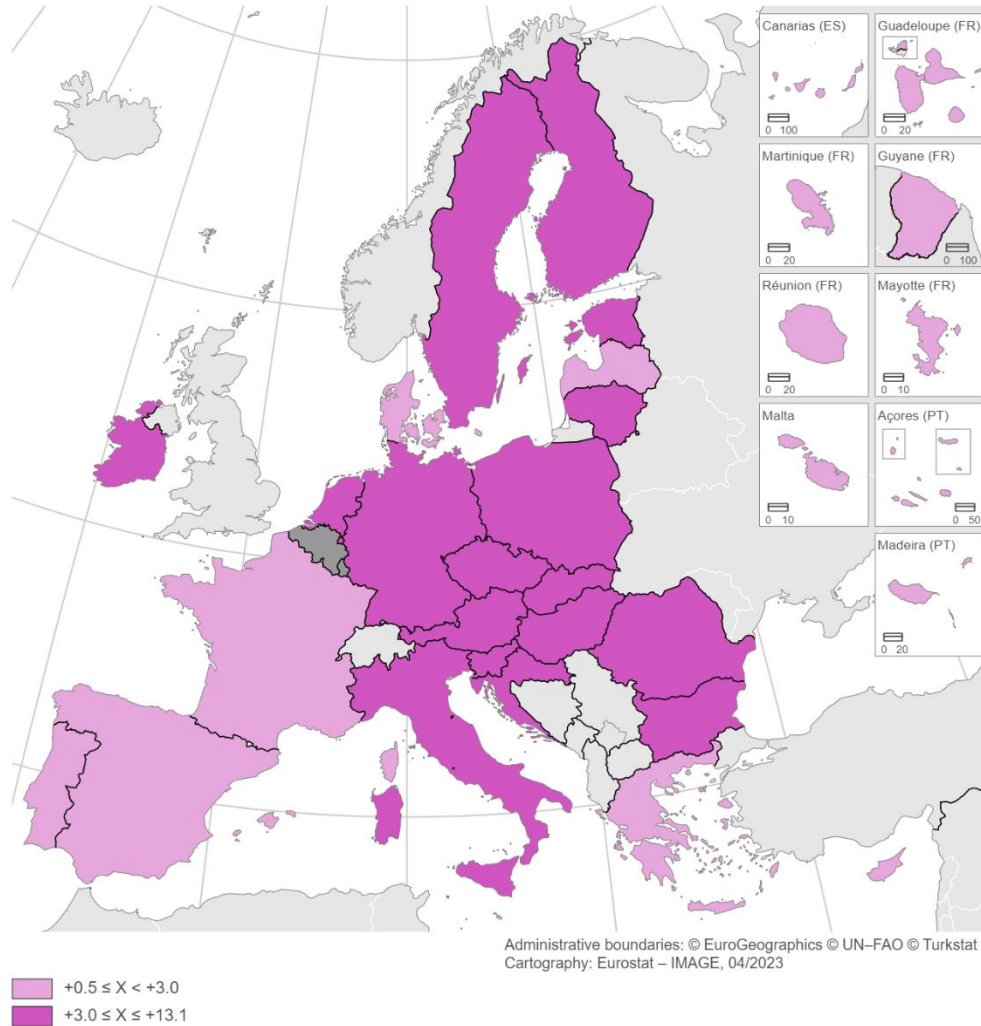
Table 3.8: Change in purchasing power parities for six months ending 31 December 2022, for Pensioners

		Final			
		01-Jul-22	31-Dec-22	Change	Implicit
		PPP	PPP		
1	BE Belgium	1	1	0	3.7
2	BG Bulgaria	1.192	1.212	1.7	5.4
3	CZ Czech Rep.	20.48	20.52	0.2	3.9
4	DK Denmark	10.16	10.03	-1.3	2.4
5	DE Germany	1.006	1.003	-0.2	3.5
6	EE Estonia	0.981	0.979	-0.2	3.5
7	IE Ireland	1.290	1.286	-0.3	3.4
8	EL Greece	0.848	0.827	-2.5	1.1
9	ES Spain	0.934	0.905	-3.1	0.5
10	FR France	1.077	1.066	-1.0	2.7
11	HR Croatia	0.699	0.699	0.1	3.8
12	IT Italy	0.941	0.957	1.7	5.5
13	CY Cyprus	0.829	0.814	-1.8	1.8
14	LV Latvia	0.809	0.800	-1.1	2.6
15	LT Lithuania	0.766	0.796	3.9	7.8
16	LU Luxembourg	1	1	0	3.7
17	HU Hungary	232.0	253.0	9.1	13.1
18	MT Malta	0.947	0.934	-1.4	2.3
19	NL Netherlands	1.107	1.116	0.8	4.6
20	AT Austria	1.106	1.124	1.6	5.4
21	PL Poland	2.907	3.026	4.1	8.0
22	PT Portugal	0.897	0.888	-1.1	2.6
23	RO Romania	2.921	2.988	2.3	6.1
24	SI Slovenia	0.836	0.833	-0.3	3.4
25	SK Slovak Rep.	0.809	0.811	0.3	4.1
26	FI Finland	1.189	1.190	0.1	3.8
27	SE Sweden	12.21	12.22	0.0	3.7
28	UK United Kingdom	1.084	1.102	1.7	5.4

Note: The opening PPP value for Croatia is adjusted to reflect switch from Kuna to Euro (does not affect the CC)

Map 3.9: Changes in the economic parities in the six months to 1st January 2023 (implicit index) for Pensioners

Implicit Index – PEN
2022m06-2022m12



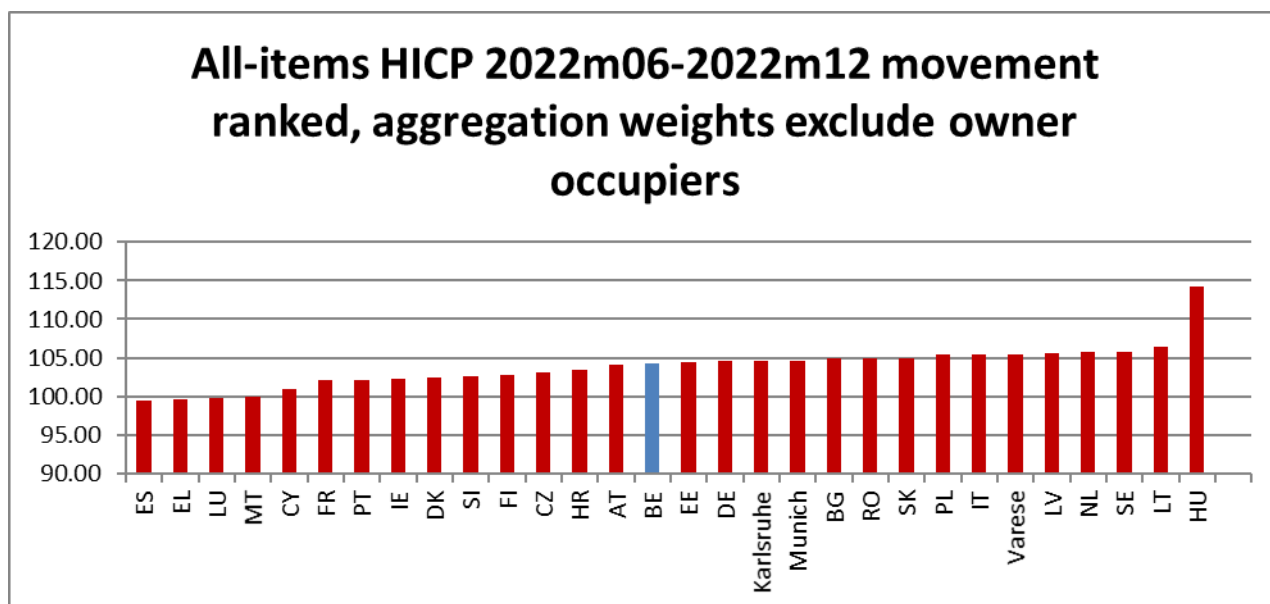
4. REASONS FOR THE CHANGES IN THE AGGREGATE PPPs

Changes in the PPPs for 1 January 2023 (i.e. December 2022), by comparison to those for 1 July 2022 (i.e. June 2022), can solely arise from indexation (local HICP relative to Joint Index). There has been no new price survey data introduced, no new expenditure weighting data and no change in methodology.

However, it is important to note that the updating is done at basic heading level, and then aggregated. The expenditure patterns of EU officials/EU pensioners (used to establish the aggregate PPPs) typically differ from the expenditure patterns of national population (used to aggregate the HICP sub-indices)⁽²⁹⁾. For this reason alone, there may be a difference between the change in the overall PPP and the evolution of the all-items HICP. In this context it is also important to remember that it is the movement relative to Brussels which is important. Local prices may well have changed, but prices in Brussels may have changed too, and by a different amount.

For information purposes, **Graph 3.10** shows the changes in the all-items HICP with aggregation weights, excluding owner-occupiers., ranked in order of magnitude.

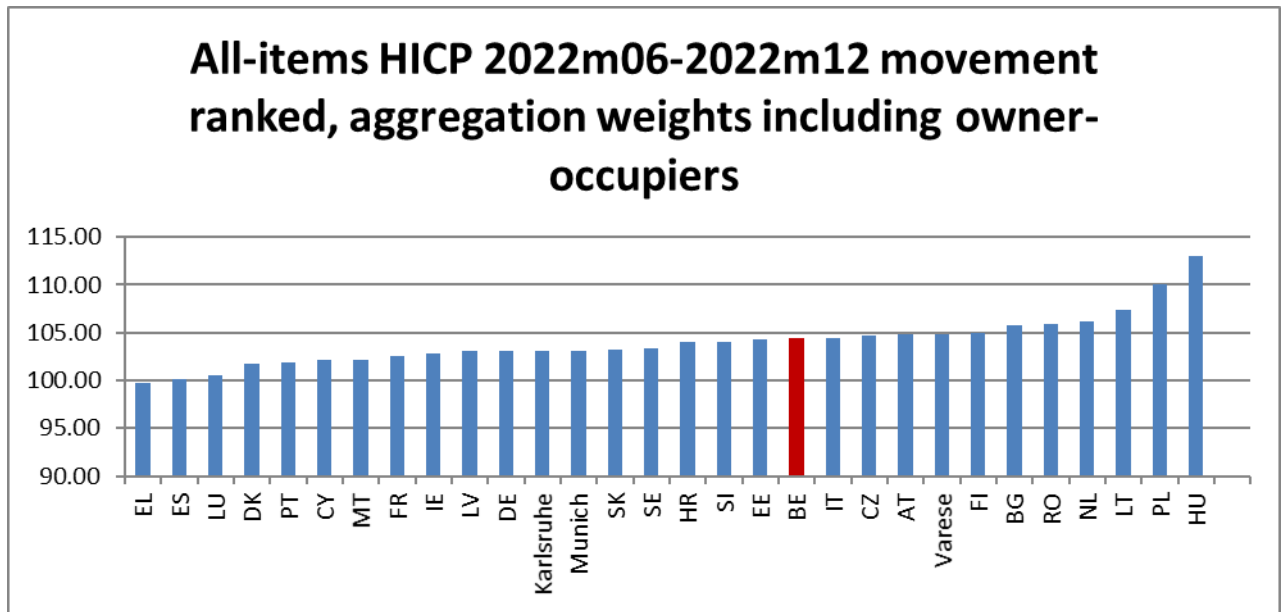
Graph 3.10: Changes in the HICP, six months June 2022-December 2022, national weights excluding owner-occupiers



Graph 3.11 shows the changes in the all-items HICP with aggregation weights including owner-occupiers, ranked in order of magnitude.

⁽²⁹⁾ One important explanatory reason for this difference is expatriate status.

Graph 3.11: Changes in the HICP, six months June 2022-December 2022, staff weights including owner-occupiers



Note: Various private sector and public sector organisations produce their own cost of living comparisons. Methodological differences – for example in the quantity and quality of price information, in the pertinence of weightings data and the appropriateness of the calculation formulae, in the choice of reference basis, in the validation process – explain why the official statistics produced for EU purposes by Eurostat represent a 'gold standard' which may not necessarily indicate similar levels or follow similar trends to those other reported figures.

Appendix FOUR:

Computing the intermediate update for locations outside Belgium/Brussels (details)

1. STEPS TO COMPUTE THE INTERMEDIATE UPDATE OUTSIDE BRUSSELS/BELGIUM

An intermediate update of the standard salary grid applicable to all duty stations is only required where the cost of living evolution recorded in Brussels and Luxembourg is greater than the threshold (i.e. six-month Joint Index exceeds $\pm 3.0\%$).

For the 1 January 2023 (i.e. December 2022) exercise, there is a general intermediate update calculation. Thus the CC for staff and for pensioners which are presented in *Appendix Three* apply directly, for all locations.

The following **Table 4.1** shows the total combined impact of the general intermediate update and the change in the economic parities for Intra-EU duty stations, for the six months to 1st January 2023, applicable for Intra-EU staff. The following **Table 4.2** shows the corresponding information for pensioners.

Table 4.1: Total combined impact of the general intermediate update and the changes in purchasing power parities, for the six months ended 1 January 2023, for Intra-EU staff

	Place		Change in PPP	General intermediate update	Total impact
			[a]	[b]	$[c] = \left(\frac{(100 + [a]) \times (100 + [b])}{100} \right)$
1	BE	Brussels	na	+1.7	+1.7
2	BG	Sofia	+0.9		+2.7
3	CZ	Prague	+0.4		+2.1
4	DK	Copenhagen	-1.9		-0.3
5	DE	Berlin	-0.3		+1.4
6	DE	Karlsruhe	-0.3		+1.4
7	DE	Munich	-0.3		+1.4
8	EE	Tallinn	0.0		+1.7
9	IE	Dublin	-0.6		+1.0
10	EL	Athens	-3.6		-2.0
11	ES	Madrid	-3.3		-1.7
12	FR	Paris	-1.0		+0.6
13	HR	Zagreb	+0.4		+2.2
14	IT	Rome	+0.5		+2.2
15	IT	Varese	+0.7		+2.4
16	CY	Nicosia	-2.1		-0.4
17	LV	Riga	-1.1		+0.6
18	LT	Vilnius	+3.7		+5.5
19	LU	Luxembourg	na		+1.7
20	HU	Budapest	+8.6		+10.4
21	MT	Valetta	-1.8		-0.1
22	NL	The Hague	+1.8		+3.5
23	AT	Vienna	+0.8		+2.6
24	PL	Warsaw	+5.5		+7.3
25	PT	Lisbon	-1.3		+0.4
26	RO	Bucharest	+2.0		+3.7
27	SI	Ljubljana	+0.3		+2.0
28	SK	Bratislava	-0.5		+1.2
29	FI	Helsinki	+0.5		+2.2
30	SE	Stockholm	-0.3		+1.4

Note: PPP for Luxembourg is set equal to PPP for Brussels (=1.000)

Table 4.2: Total combined impact of the general intermediate update and the changes in purchasing power parities, for the six months ended 1 January 2023, for Pensioners

Place		Change in PPP	General intermediate update	Total impact	
		<i>[a]</i>	<i>[b]</i>	$[c] = \left(\frac{(100 + [a]) \times (100 + [b])}{100} \right)$	
1	BE	Belgium	na	+ 1.7	+1.7
2	BG	Bulgaria	+1.7	+ 1.7	+3.4
3	CZ	Czechia	+0.2		+1.9
4	DK	Denmark	-1.3		+0.4
5	DE	Germany	-0.2		+1.5
6	EE	Estonia	-0.2		+1.5
7	IE	Ireland	-0.3		+1.4
8	EL	Greece	-2.5		-0.9
9	ES	Spain	-3.1		-1.4
10	FR	France	-1.0		+0.7
11	HR	Croatia	+0.1		+1.8
12	IT	Italy	+1.7		+3.4
13	CY	Cyprus	-1.8		-0.2
14	LV	Latvia	-1.1		+0.6
15	LT	Lithuania	+3.9		+5.7
16	LU	Luxembourg	na		+1.7
17	HU	Hungary	+9.1		+10.9
18	MT	Malta	-1.4		+0.3
19	NL	Netherlands	+0.8		+2.6
20	AT	Austria	+1.6		+3.4
21	PL	Poland	+4.1		+5.9
22	PT	Portugal	-1.1		+0.6
23	RO	Romania	+2.3		+4.0
24	SI	Slovenia	-0.3		+1.4
25	SK	Slovakia	+0.3		+2.1
26	FI	Finland	+0.1		+1.8
27	SE	Sweden	0.0		+1.7
28	UK	United Kingdom	+1.7		

Note: PPP for Luxembourg is set equal to PPP for Belgium (=1.000)

Appendix FIVE:

**Advance forecast of the Joint Index for
the twelve months to July 2023**

1. ADVANCE FORECAST OF THE JOINT INDEX

An advance forecast of the Joint Index can be estimated in various ways, including the 7 calculations presented in the tables hereafter. In all these estimates, the staff ratio Brussels : Luxembourg is held constant - and for reasons of simplification, it is set at 80:20 instead of the actual values presented in *Appendix Two*.

Table 5.1: Advance forecast of the Joint Index, six months January 2023 - July 2023

- (1) Using the information presented in the DG.ECFIN Winter Forecast, published in February 2023, which includes estimates of the HICP movements for all Member States for calendar year 2023:

Forecast of the HICP for Belgium for calendar year 2023	+4.3%	104.3
Forecast of the HICP for Luxembourg for calendar year 2023	+3.1%	103.1
• Forecast JBLI for calendar year 2023	+4.0%	104.0

Forecast of the HICP for BE for six months January-June 2023 (linear)	+2.15%	102.15
Forecast of the HICP for LU for six months January-June 2023 (linear)	+1.55%	101.55
• Forecast JBLI for six months January-June 2023	+2.0%	102.0

- (2) Using the information presented in the DG.ECFIN Winter Forecast, published in February 2023, which includes estimates of the HICP movements for all Member States for calendar year 2023, with quarterly breakdowns:

Forecast of the HICP for Belgium, twelve months ended Q2/2023	+5.4%	105.4
Forecast of the HICP for Luxembourg, twelve months ended Q2/2023	+2.9%	102.9
• Forecast JBLI for twelve months ended Q2/2023	+4.9%	104.9

Forecast of the HICP for BE for six months ended Q2/2023 (linear)	+2.70%	102.70
Forecast of the HICP for LU for six months ended Q2/2023 (linear)	+1.45%	101.45
• Forecast JBLI for six months January-June 2023	+2.5%	102.5

- (3) Using the information provided by Member States about estimated HICP movements for twelve months July 2022 – July 2023 to establish country specific indicators:

Forecast of the HICP for Belgium, twelve months to July 2023	+4.3%	104.3
Forecast of the HICP for Luxembourg, twelve months to July 2023	+1.5%	101.5
• Forecast JBLI for twelve months to July 2023	+3.7%	103.7

Forecast of the HICP for BE, six months to July 2023 (linear)	+2.15%	102.15
Forecast of the HICP for LU, six months to July 2023 (linear)	+0.75%	100.75
• Forecast JBLI for six months to July 2023	+1.9%	101.9

- (4) Using the latest published information about the HICP movements for all Member States ('nowcasts')(30):

Nowcast of the HICP for Belgium, twelve months to March 2023	+4.9%	104.9
Forecast of the HICP for Luxembourg, twelve months to March 2023	+2.9%	102.9
• Forecast JBLI for twelve months to July 2023	+4.5%	104.5

Forecast of the HICP for BE, six months to July 2023 (linear)	+2.45%	102.45
Forecast of the HICP for LU, six months to July 2023 (linear)	+1.45%	101.45
• Forecast JBLI for six months to July 2023	+2.3%	102.3

Table 5.2: Advance forecast of the residual Joint Index, six months January 2023 - July 2023

- (5) Combining the estimate in (1.) above, combined with the measured JBLI movement:

Forecast JBLI for twelve months to July 2023	+4.0%	104.0
Measured JBLI for six months to January 2023	+3.7%	103.7
• residual JBLI for six months to July 2023	+0.3%	100.3

- (6) Combining the estimate in (3.) above, combined with the measured JBLI movement:

Forecast JBLI for twelve months to July 2023	+3.7%	103.7
Measured JBLI for six months to January 2023	+3.7%	103.7
• residual JBLI for six months to July 2023	+0.0%	100.0

- (7) Combining the estimate in (4.) above, combined with the measured JBLI movement:

Forecast JBLI for twelve months to July 2023	+4.5%	104.5
Measured JBLI for six months to January 2023	+3.7%	103.7
• residual JBLI for six months to July 2023	+0.8%	100.8

(30) Eurobase table PRC_HICP_MANR

Amongst the calculations in the foregoing tables, the information in approach number (6.) is considered to represent the current best estimate, as it is consistent with the inflation forecasts validated by Member States for the twelve-month reference period which are used in the calculation of the global specific indicator (see *Appendix One*) and the measured JBLI calculation for the first six-month period (see *Appendix Two*). The remaining estimates are included in this report to emphasise the uncertain nature of advance forecasts.

The foregoing advance forecast of the JBLI should be interpreted with caution as the precise calculation will only be possible with availability of statistics later in the year.

Appendix SIX:

Advance forecast of PPPs at July 2023 for staff and pensioners (extrapolation)

1. ADVANCE FORECAST OF PPPs AT JULY 2023

An advance forecast of the PPPs for staff and for pensioners at 1st July 2023 has been made, by extrapolating the values established at 1st January 2023.

For each Member State outside Brussels, half of the forecasted annual inflation (general index) for calendar year 2023 per DG ECFIN winter forecast 2023 was used as inflation for the 6-month period January-June 2023 (i.e. assume linear evolution). The results are presented in **Table 6.1** hereafter.

For Brussels, the forecast movement of the JBLI for the same time period was used (see **Appendix Five**).

The forecast movement of the general index for each Member State was expressed relative to the forecast movement of the JBLI and applied to the preliminary PPPs calculated for January 2023 (i.e. December 2022) (see **Appendix Three**). The extrapolated results for Intra-EU staff are presented in **Table 6.2** and the extrapolated results for pensioners are presented in **Table 6.3** hereafter.

Here are the extrapolation formulae:

$$PPP_{2023m06} = PPP_{2022m12} \times \frac{HICP_{2022m12-2023m06}}{JBLI_{2022m12-2023m06}}$$

The changes in the economic parities for Intra-EU staff between 1 January 2023 and 1 July 2023, and the associated implicit price index (which also takes the Joint Index into account) are shown in **Table 6.4**. The corresponding information for pensioners is shown in **Table 6.5**.

The extrapolated economic parities and the resulting implicit indices should be interpreted with caution as the precise calculation will only be possible with availability of statistics later in the year.

Table 6.1: Advance forecast of HICP movement (all-items index) for six-month period January 2023 – June 2023

		All-items HICP forecast Jan 2023 – Jun 2023	
1	BE	Belgium	102.15
2	BG	Bulgaria	103.90
3	CZ	Czech Rep.	104.65
4	DK	Denmark	102.20
5	DE	Germany	103.15
6	EE	Estonia	103.10
7	IE	Ireland	102.20
8	EL	Greece	102.25
9	ES	Spain	102.20
10	FR	France	102.60
11	HR	Croatia	103.25
12	IT	Italy	103.05
13	CY	Cyprus	102.00
14	LV	Latvia	103.95
15	LT	Lithuania	104.35
16	LU	Luxembourg	101.55
17	HU	Hungary	108.20
18	MT	Malta	102.15
19	NL	Netherlands	102.25
20	AT	Austria	103.30
21	PL	Poland	105.85
22	PT	Portugal	102.70
23	RO	Romania	104.85
24	SI	Slovenia	103.05
25	SK	Slovak Rep.	104.85
26	FI	Finland	102.10
27	SE	Sweden	103.15

Note: source: DG.ECFIN Winter F/C (50%)

Table 6.2: Advance forecast (extrapolation) of correction coefficients at July 2023 for Intra-EU staff

		30/06/2023			
		FORECAST			
		PPP	Ex. Rate	CC	
1	BE	Brussels	1	1	100.0
2	BG	Sofia	1.333	1.956	68.1
3	CZ	Prague	24.82	24.74	100.3
4	DK	Copenhagen	10.04	7.439	135.0
5	DE	Berlin	1.035	1	103.5
6	DE	Karlsruhe	0.983	1	98.3
7	DE	Munich	1.154	1	115.4
8	EE	Tallinn	0.971	1	97.1
9	IE	Dublin	1.384	1	138.4
10	EL	Athens	0.882	1	88.2
11	ES	Madrid	0.963	1	96.3
12	FR	Paris	1.186	1	118.6
13	HR	Zagreb	0.829	1	82.9
14	IT	Rome	0.981	1	98.1
15	IT	Varese	0.955	1	95.5
16	CY	Nicosia	0.825	1	82.5
17	LV	Riga	0.883	1	88.3
18	LT	Vilnius	0.947	1	94.7
19	LU	Luxembourg	1	1	100.0
20	HU	Budapest	322.3	394.3	81.8
21	MT	Valletta	0.924	1	92.4
22	NL	The Hague	1.143	1	114.3
23	AT	Vienna	1.133	1	113.3
24	PL	Warsaw	3.749	4.687	80.0
25	PT	Lisbon	0.967	1	96.7
26	RO	Bucharest	3.704	4.942	75.0
27	SI	Ljubljana	0.901	1	90.1
28	SK	Bratislava	0.849	1	84.9
29	FI	Helsinki	1.204	1	120.4
30	SE	Stockholm	13.73	10.68	128.5

Note: exchange rate as at June 2022

Table 6.3: Advance forecast (extrapolation) of correction coefficients at July 2023 for Pensioners

			30-Jun-23		
			FORECAST		
			PPP	Ex. Rate	CC
1	BE	Belgium	1	1	100.0
2	BG	Bulgaria	1.259	1.956	64.4
3	CZ	Czech Rep.	21.47	24.74	86.8
4	DK	Denmark	10.25	7.439	137.7
5	DE	Germany	1.035	1	103.5
6	EE	Estonia	1.010	1	101.0
7	IE	Ireland	1.315	1	131.5
8	EL	Greece	0.845	1	84.5
9	ES	Spain	0.925	1	92.5
10	FR	France	1.094	1	109.4
11	HR	Croatia	0.722	1	72.2
12	IT	Italy	0.986	1	98.6
13	CY	Cyprus	0.830	1	83.0
14	LV	Latvia	0.832	1	83.2
15	LT	Lithuania	0.831	1	83.1
16	LU	Luxembourg	1	1	100.0
17	HU	Hungary	273.7	394.3	69.4
18	MT	Malta	0.954	1	95.4
19	NL	Netherlands	1.141	1	114.1
20	AT	Austria	1.161	1	116.1
21	PL	Poland	3.203	4.687	68.3
22	PT	Portugal	0.912	1	91.2
23	RO	Romania	3.133	4.942	63.4
24	SI	Slovenia	0.858	1	85.8
25	SK	Slovak Rep.	0.851	1	85.1
26	FI	Finland	1.215	1	121.5
27	SE	Sweden	12.60	10.68	117.9

Note: exchange rate as at June 2022

Table 6.4: Advance forecast (extrapolation) of change in purchasing power parities for six months ended 1st July 2023, for Intra-EU staff

		Final	Extrapolation			
		31-Dec-22	30-Jun-23			
		PPP	PPP	change	Implicit	
1	BE	Brussels	1	1	0	0.0
2	BG	Sofia	1.283	1.333	3.9	3.9
3	CZ	Prague	23.71	24.82	4.7	4.7
4	DK	Copenhagen	9.825	10.04	2.2	2.2
5	DE	Berlin	1.003	1.035	3.1	3.2
6		Karlsruhe	0.953	0.983	3.2	3.2
7		Munich	1.119	1.154	3.2	3.2
8	EE	Tallinn	0.941	0.971	3.1	3.1
9	IE	Dublin	1.354	1.384	2.2	2.2
10	EL	Athens	0.862	0.882	2.3	2.3
11	ES	Madrid	0.942	0.963	2.2	2.2
12	FR	Paris	1.156	1.186	2.6	2.6
13	HR	Zagreb	0.803	0.829	3.3	3.3
14	IT	Rome	0.952	0.981	3.1	3.1
15		Varese	0.927	0.955	3.1	3.1
16	CY	Nicosia	0.809	0.825	2.0	2.0
17	LV	Riga	0.850	0.883	4.0	4.0
18	LT	Vilnius	0.907	0.947	4.3	4.3
19	LU	Luxembourg	1	1	0.0	0.0
20	HU	Budapest	297.9	322.3	8.2	8.2
21	MT	Valletta	0.905	0.924	2.2	2.2
22	NL	The Hague	1.118	1.143	2.3	2.3
23	AT	Vienna	1.097	1.133	3.3	3.3
24	PL	Warsaw	3.542	3.749	5.8	5.8
25	PT	Lisbon	0.942	0.967	2.7	2.7
26	RO	Bucharest	3.533	3.704	4.8	4.8
27	SI	Ljubljana	0.874	0.901	3.1	3.1
28	SK	Bratislava	0.809	0.849	4.8	4.8
29	FI	Helsinki	1.179	1.204	2.1	2.1
30	SE	Stockholm	13.31	13.73	3.2	3.2

Table 6.5: Advance forecast (extrapolation) of change in purchasing power parities for six months ended 1st July 2023, for Pensioners

		Final	Extrapolation			
		31-Dec-22	30-Jun-23			
		PPP	PPP	change	Implicit	
1	BE	Belgium	1	1	0	0.0
2	BG	Bulgaria	1.212	1.259	3.9	3.9
3	CZ	Czech Rep.	20.52	21.47	4.7	4.7
4	DK	Denmark	10.03	10.25	2.2	2.2
5	DE	Germany	1.003	1.035	3.1	3.2
6	EE	Estonia	0.979	1.010	3.1	3.1
7	IE	Ireland	1.286	1.315	2.2	2.2
8	EL	Greece	0.827	0.845	2.3	2.3
9	ES	Spain	0.905	0.925	2.2	2.2
10	FR	France	1.066	1.094	2.6	2.6
11	HR	Croatia	0.699	0.722	3.3	3.3
12	IT	Italy	0.957	0.986	3.1	3.1
13	CY	Cyprus	0.814	0.830	2.0	2.0
14	LV	Latvia	0.800	0.832	4.0	4.0
15	LT	Lithuania	0.796	0.831	4.3	4.3
16	LU	Luxembourg	1	1	0.0	0.0
17	HU	Hungary	253.0	273.7	8.2	8.2
18	MT	Malta	0.934	0.954	2.2	2.2
19	NL	Netherlands	1.116	1.141	2.3	2.3
20	AT	Austria	1.124	1.161	3.3	3.3
21	PL	Poland	3.026	3.203	5.8	5.8
22	PT	Portugal	0.888	0.912	2.7	2.7
23	RO	Romania	2.988	3.133	4.8	4.8
24	SI	Slovenia	0.833	0.858	3.1	3.1
25	SK	Slovak Rep.	0.811	0.851	4.8	4.8
26	FI	Finland	1.190	1.215	2.1	2.1
27	SE	Sweden	12.22	12.60	3.1	3.2