

Change in the methodology for calculating the indices WIG20TRsht, WIG20TRlev, mWIG40TRsh, and mWIG40TRlv

Consultation document

Warsaw, 25th August, 2025

The Administrator publicly announces a document regarding consultations on the amendment of the Method for constructing certain Indices from the GPW Index Family (hereinafter the "Method") and related changes to the documentation of the GPW Indices.

The Administrator plans to introduce an additional provision to the Rules of the GPW Index Family – in the chapter concerning the detailed rules for the construction, calculation, and publication of strategy indices – relating to the WIG20TRsht, WIG20TRlev, mWIG40TRsh, and mWIG40TRLv indices. This provision will concern the materiality threshold for events impacting the calculation of these indices, which determines the Administrator's actions. The provision will state that:

- "In the event of a re-calculation and publication of the interest rate index value during the trading session¹, if the correction of the interest rate index does not exceed X bps [interest rate index materiality threshold], the Administrator shall not recalculate the opening value, minimum or maximum value, or closing value of the Stock Exchange Index, as referred to in point 4.3.9."

It is important to note that the above situations refer to cases in which, in accordance with the Rules of the WIRON Interest Rate Index and the POLSTR Interest Rate Index, the value of these indices is re-determined during a trading session. The Administrator has conducted an analysis to determine the appropriate materiality threshold level for the strategy indices mentioned above, based on publicly available information regarding the average impact of qualifying errors as described in the WIRON data revision reports² during the development of this benchmark. The Administrator uses information on statistics regarding the average and maximum deviation of WIRON from the value corrected for input data adjustments – such average or maximum deviation is treated as a theoretical value of the possible observable scale of a one-day correction to the interest rate index value.

Accordingly, the Administrator adopted a research method based on time series analysis of the strategy indices, considering the impact of an interest rate index correction under three scenarios. The analysis evaluated the absolute impact of a correction at the levels of:

- a) 2 bps
- b) 8.3 bps
- c) 24.6 bps

Option a) reflects the threshold for triggering the Re-determination and Re-distribution Procedure that is part of the WIRON and POLSTR methodologies. Values b) and c) directly refer to the descriptive statistics presented in the document *Information on the impact of corrections of error on WIRON index – Q4 2023 – Cyclical Disclosure* from January 2024. The value indicated in option b), 8.3 bps, is the average absolute impact of input data corrections on WIRON, while 24.6 bps is the maximum recorded deviation observed in 2023. It should be emphasized that the above values represent historical deviations in WIRON prior to the update of processes related to input data reporting and are not reflected in current statistics. The reclassification process of input data carried out by data providers resulted in the percentage of days with an absolute change in the WIRON index exceeding 2 bps – due to input data revisions – reaching nearly 81%. As a result, a comprehensive database of potential WIRON index deviations was obtained.

To determine the materiality threshold for empirically measuring the impact of a single change in the interest rate index designation on the level of a given strategy index, it is proposed to identify the maximum empirical relative deviation of each strategy index (in

¹ In case of POLSTR and WIRON

² <https://gpwbenchmark.pl/report-on-data-revision>

the period from January 2023 to the end of June 2025) caused by a unit theoretical revision of the interest rate index on each subsequent day within the analysis period, increased by the standard deviation of the levels of these relative deviations.

This document presents a summary of empirical analyses based on the above assumptions, aimed at enabling comparison of the impact scale of the materiality threshold level "x" proposed in the questionnaire.

In the Administrator's assessment, the proposed provision in the Regulations, in each of the three variants, does not significantly affect the values of the strategy indices. However, to ensure transparency in decision-making regarding the strategy index methodology, consultations are conducted with entities active in the domestic financial market.

The variants tested by the Administrator are based on historical observations and reflect extreme scenarios from the perspective of interest rate index developments. Users should note that reports on input data revisions indicate a significant decrease in the likelihood of adjustments at levels observed in 2023. It is also noted that the level of volatility and dispersion in the input data set for the POLSTR index—which will be the interest rate index used in the aforementioned strategy indices starting from September 1, 2025—is significantly lower.

Taking the above into account, the Administrator presents two levels of the materiality threshold for daily interest rate index adjustments for consultation³:

- (1) 8 bps
- (2) 24 bps

The planned effective date for the methodology changes is the beginning of November 2025.

Consultations begin on August 26, 2025, and will last until September 7, 2025.

To avoid any doubt, the proposed provision is intended to apply collectively to strategy indices, i.e., WIG20TRsht, WIG20TRlev, mWIG40TRsh and mWIG40TRlv.

³ The 2 bp level is excluded from the consultation option, as it constitutes the implementation of the assumption regarding the procedure for re-determining and re-distribution the interest rate index – i.e. it means that each correction of such an index leads to a re-calculation of the indices in accordance with point 4.3.9.

Appendix 1

Description of analytical activities undertaken by the Administrator to determine the impact of unit changes in current WIRON designations on the level of strategy indices, whose current value is calculated based on WIRON values.

Analysis methodology:

For each day in the period January 2023 – June 2025, three scenarios were adopted for the materiality threshold of the interest rate index adjustment:

- a) ± 2 bps
- b) ± 8.3 bps
- c) ± 24.6 bps

relative to the actual WIRON reading.

With all other factors unchanged, alternative trajectories of the WIG20TRsht, WIG20TRlev, mWIG40TRsh, and mWIG40TRlv indices were calculated for the analysis period following each day on which a unit change to the WIRON index was made.

Then, for each scenario, the maximum relative deviation (in bps) between the simulated and actual index values was calculated. From the resulting deviation vector for each index, the maximum was selected and increased by one standard deviation of the relative deviations, serving as a buffer. The purpose of this exercise is to estimate the maximum expected impact based on the empirical trajectory of WIRON and each capital index, whose combinations form the strategy indices.

The table below presents the results of these simulations.

Table 1. **Simulation results** – maximum impact on indices from a single unupdated/erroneous WIRON value in the period 01.2023 – 06.2025

Index	WIRON	Max - relative deviation	Standard deviation	Max + σ^*
		in bps		
WIG20TRsht	± 2 bps	0,0568	0,0099	0,0667
mWIG40TRsh	± 2 bps	0,0565	0,0099	0,0664
WIG20TRlev	± 2 bps	0,0278	0,0049	0,0327
mWIG40TRlv	± 2 bps	0,0280	0,0049	0,0329
WIG20TRsht	$\pm 8,3$ bps	0,2356	0,0412	0,2768
mWIG40TRsh	$\pm 8,3$ bps	0,2345	0,0411	0,2757
WIG20TRlev	$\pm 8,3$ bps	0,1155	0,0204	0,1359
mWIG40TRlv	$\pm 8,3$ bps	0,1161	0,0204	0,1364
WIG20TRsht	$\pm 24,6$ bps	0,6982	0,1220	0,8203
mWIG40TRsh	$\pm 24,6$ bps	0,6951	0,1219	0,8171
WIG20TRlev	$\pm 24,6$ bps	0,3422	0,0604	0,4026
mWIG40TRlv	$\pm 24,6$ bps	0,3440	0,0604	0,4044

Max + σ – a measure proposed by the Administrator to assess the impact of an unupdated WIRON correction on the trajectory of individual strategy indices.

6 – the standard deviation of the relative deviations between the historical value of the strategy index and the simulated strategy index, taking into account the effect of a unit change in WIRON on a given day (i.e., a buffer).

Example of interpretation:

The maximum identified impact of a ± 8.3 bp change in WIRON on the mWIG40TRlv index is 0.1161 bp. After adding the buffer, the estimated impact value for this index is 0.1364 bps. At an index level of 20,000 points, this corresponds to a change of approximately 0.27 points⁴.

The Administrator considers that the impact of each scenario on the level of the strategy index can be regarded as limited.

⁴ To verify the frequency of such events, the Administrator refers, for example, to the document: Information on the impact of corrections of error on WIRON - Q4 2024 - Cyclic Disclosure, published in January 2025 and made available on the Administrator's website. The document shows that in 2024, the absolute value of the impact of input data corrections on WIRON's value only once exceeded 2 basis points.

Appendix 2

Following the summary of the public consultation on changes to the methods for developing certain GPW Indices dated July 29, 2025, and the decision to change the reference in the strategy's index method from WIRON to POLSTR, the Administrator conducted a similar analysis of the sensitivity of the strategy's indexes to a single change in the POLSTR reference indicator. The summary is presented below.

Description of analytical activities undertaken by the Administrator to determine the impact of unit changes in current POLSTR designations on the level of strategy indices, whose current value is calculated based on POLSTR values.

Analysis methodology:

For each day in the period January 2023 – June 2025, three scenarios were adopted for the materiality threshold of the interest rate index adjustment:

- a) ± 2 bps
- b) ± 8.3 bps
- c) ± 24.6 bps

relative to the actual POLSTR reading.

With all other factors unchanged, alternative trajectories of the WIG20TRsht, WIG20TRlev, mWIG40TRsh, and mWIG40TRlv indices were calculated for the analysis period following each day on which a unit change to the POLSTR index was made.

Then, for each scenario, the maximum relative deviation (in bps) between the simulated and actual index values was calculated. From the resulting deviation vector for each index, the maximum was selected and increased by one standard deviation of the relative deviations, serving as a buffer. The purpose of this exercise is to estimate the maximum expected impact based on the empirical trajectory of POLSTR and each capital index, whose combinations form the strategy indices.

The table below presents the results of these simulations.

Table 2. **Simulation results** – maximum impact on indices from a single unupdated/erroneous POLSTR value in the period 01.2023 – 06.2025

Indeks	POLSTR	Max - relative deviation	Standard deviation	Max + 6*
		in bps		
WIG20TRsht	± 2 bps	0,0568	0,0099	0,0667
mWIG40TRsh	± 2 bps	0,0565	0,0099	0,0664
WIG20TRlev	± 2 bps	0,0279	0,0049	0,0328
mWIG40TRlv	± 2 bps	0,0280	0,0049	0,0329
WIG20TRsht	$\pm 8,3$ bps	0,2356	0,0412	0,2767
mWIG40TRsh	$\pm 8,3$ bps	0,2345	0,0411	0,2757
WIG20TRlev	$\pm 8,3$ bps	0,1155	0,0204	0,1359
mWIG40TRlv	$\pm 8,3$ bps	0,1161	0,0204	0,1364
WIG20TRsht	$\pm 24,6$ bps	0,6981	0,1220	0,8202
mWIG40TRsh	$\pm 24,6$ bps	0,6951	0,1219	0,8170

WIG20TRlev	± 24,6 bps	0,3423	0,0604	0,4027
mWIG40TRlv	± 24,6 bps	0,3440	0,0604	0,4044

Max + 6 – a measure proposed by the Administrator to assess the impact of an unupdated POLSTR correction on the trajectory of individual strategy indices.

Example of interpretation:

The maximum identified impact of a ± 8.3 bp change in POLSTR on the mWIG40TRlv index is 0.1161 bp. After adding the buffer, the estimated impact value for this index is 0.136 bps. At an index level of 20,000 points, this corresponds to a change of approximately 0.27 points.

To verify **the frequency** of such events, the Administrator refers, for example, to the document "*Information on the impact of corrections of errors on POLSTR – Q2 2025 – Cyclical Disclosure*" published in July 2025. The document indicates that during the period from May 30 to June 30, 2025, no deviation from the published value exceeded 0.1 bp.

The Administrator considers that the impact of each scenario on the level of the strategy index can be regarded as limited. It is also noted that the outcome statistics of the analysis performed for WIRON and POLSTR do not differ significantly.

QUESTIONNAIRE

Question 1

Considering the research conducted by the Administrator regarding the introduction of a materiality threshold for changes in the interest rate index value within strategy indices, in connection with the application of its Re-determination and Re-distribution Procedure, I recommend introducing such a threshold at the level of:

- ☐ 8
- ☐ 24
- ☐ other

Explanation

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- ☐ not introducing such a threshold