

Transaction-based Interest Rate Benchmarks



Information about the impact of correction of errors on WIRON index Extraordinary report on reported data revisions

Warsaw, February 2023

In order to ensure the transparency of provision and determination of WIRON index, the Administrator presents this extraordinary report on reported data revisions regarding the impact of the revisions of errors hitherto identified in the input data on the index' history. Presented set of information is not a cyclical document linked to the corrections of input data being held on the daily basis during an ongoing process of index provision according to the Rules of WIRON Interest Rate Index.

In February 2023 GPW Benchmark has been informed by one data contributor about the errors in the previously delivered input data. These errors regarded transactions data from 3.1.5 and 3.1.10 data sets and concerned periods of 2018 and 2019. The data contributor informed about the operational errors that affected the data base delivered to the administrator for that period.

The incident was being brought by the Administrator to the Oversight Committee of Interest Rate Benchmarks during an extraordinary meeting. Following the recommendation of the Oversight Committee the Administrator has decided to publicly disclose the information on the impact of corrected data for 2019, as the official pre-production history of the values of WIRON index as well as of the indices from the WIRON Compound indices Family, is provided starting from 2 January 2019.

The extraordinary report on reported data revisions is of informational character and does not constitute the revision of the historical WIRON data. In order to avoid any doubts the recalculation and redistribution of the WIRON index data could take place only when the conditions set out by the Rules are met¹.

Tables 1 and 2 present the differences of the hypothetical WIRON values in relation to the historical WIRON values broken down by scale of the differences.

Quater	Absolute value of difference of the impact of correction of the input data on the index value (in p.p.)			
	$0.001 \leq \text{impact} \leq 0.005$	$0.005 < \text{impact} \leq 0.010$	$0.010 < \text{impact} \leq 0.020$	$0.020 < \text{impact}$
Q1 2019	16	-	-	-
Q2 2019	13	-	-	-
Q3 2019	1	-	-	-
Q4 2019	-	-	-	-
SUMA	30	-	-	-

Table 1 Data aggregated on the quarterly basis. Period from 2 January 2019

L.p.	Date	Absolute value of difference of the impact of correction of the input data on the index value (in p.p.)			
		$0.001 \leq \text{impact} \leq 0.005$	$0.005 < \text{impact} \leq 0.010$	$0.010 < \text{impact} \leq 0.020$	$0.020 < \text{impact}$
1	2019-01-11	✓			
2	2019-01-14	✓			
3	2019-01-18	✓			
4	2019-01-23	✓			
5	2019-01-28	✓			
6	2019-01-29	✓			
7	2019-01-31	✓			
8	2019-02-08	✓			
9	2019-02-20	✓			

¹ See point 4 of [the Rules of the WIRON Interest Rate Index](#)

10	2019-02-26	✓			
11	2019-02-28	✓			
12	2019-03-01	✓			
13	2019-03-11	✓			
14	2019-03-14	✓			
15	2019-03-20	✓			
16	2019-03-29	✓			
17	2019-04-01	✓			
18	2019-04-30	✓			
19	2019-05-06	✓			
20	2019-05-07	✓			
21	2019-05-08	✓			
22	2019-05-20	✓			
23	2019-05-21	✓			
24	2019-05-30	✓			
25	2019-06-14	✓			
26	2019-06-17	✓			
27	2019-06-25	✓			
28	2019-06-27	✓			
29	2019-06-28	✓			
30	2019-07-03	✓			

Table 2 Disaggregated data – impact presented on the daily basis; period from 2 January 2019

The average level of the relative differences between simulated, hypothetical WIRON values and the published ones, rounded to 3 places was zero. The changes were identified in the case of 12% observations in 2019, while 1,6% of differences were greater than 0,001 p.p., but not greater 0.005p.p. (i.e. 0,5 bp)². Median and average of relative (and absolute) impact value in the days when the differences were detected, after the rounding, amounted to 0,001 p.p. (0,1 bp) in 2019.

² It means that 13% of all detected differences were greater than 0,001 p.p.



Figure 3 Hypothetical impact of the input data revision on the historical WIRON index value with different comparison scale.

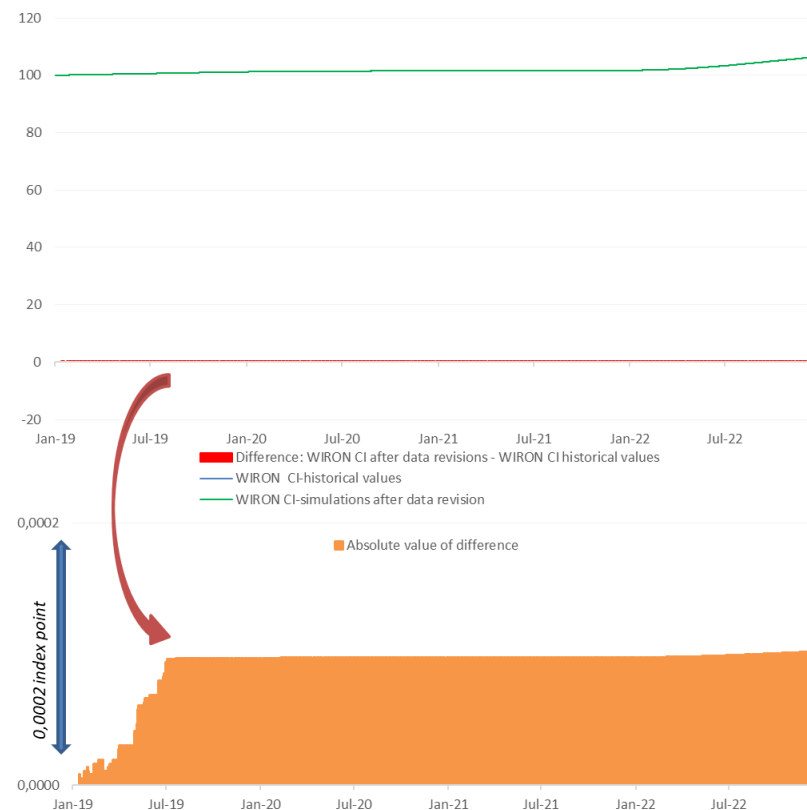
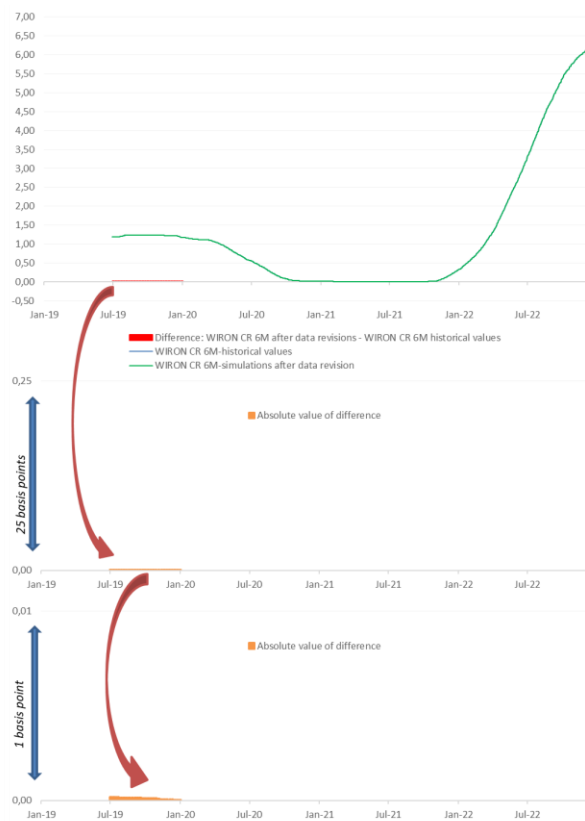
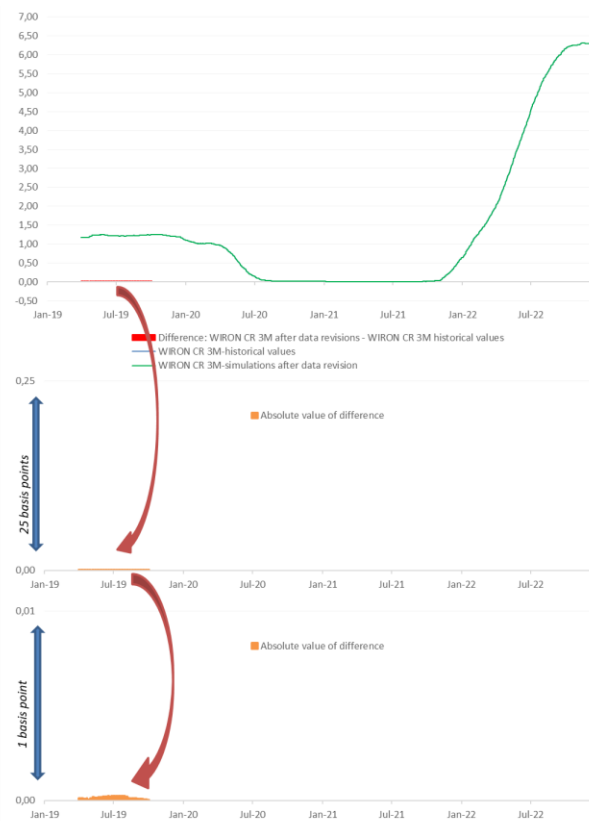
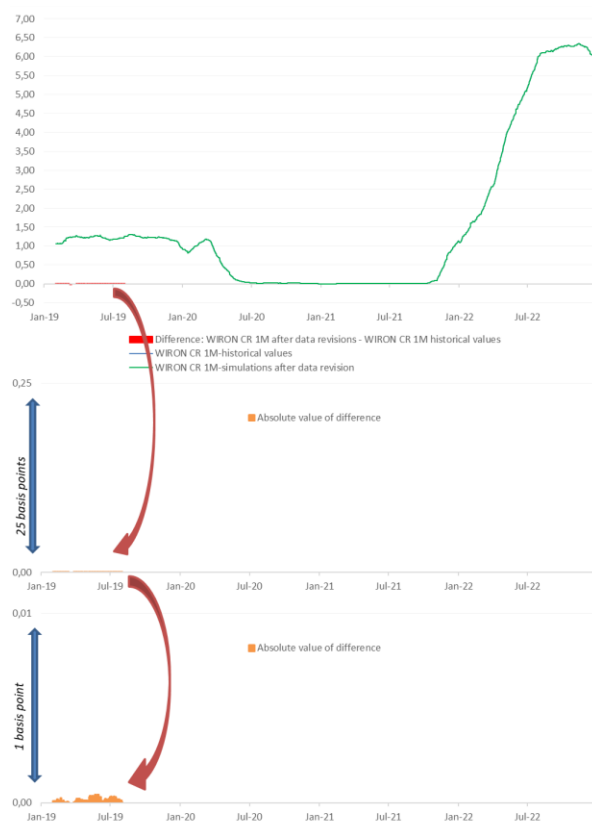


Figure 4 Hypothetical impact of the input data revision on the historical WIRON Compound Index value with adjusted comparison scale.

The changes in WIRON Compound Index values have a constant impact on its history, while if a historical impact of data revision was detected (like for instance a data revision for 2019, the impact on the theoretical index value would not impact on the current determination of the compound interest rate as set out in point 3.4.3 e) of the Rules.



The average difference between WIRON 1M Compound Rate and its hypothetical values calculated after data revisions in the impacted period from February to August 2019, amounted to 0,00018pp, with maximum at 0,00045pp (0,045bp).

The average difference between WIRON 3M Compound Rate and its hypothetical values calculated after data revisions in the impacted period from April to October 2019, amounted to 0,00017pp, with maximum at 0,00027pp (0,027bp).

The average difference between WIRON 6M Compound Rate and its hypothetical values calculated after data revisions in the impacted period from July 2019 to January 2020, amounted to 0,00013pp, with maximum at 0,00020pp (0,020bp).

Appendix 1

The administrator does not present a detailed information on data revisions for 2018. The reason is that 2018 is not considered as a part of the pre-production history of the index

For 2017 and 2018 the administrator has carried a simulation of the history of the index (*proxy-data*), on the basis of the data delivered by the data contributors, which could be distributed to the service providers calculating the adjustment spread, used in case of the replacement of the IBOR rates to the RFR rates. This adjustment spread is calculated on the basis of comparison and measurement of the *old* index and the *new* index in the reference period. The example is 5-year median of the spread values recommended by ISDA and determined by Bloomberg (Bloomberg Index Services Limited).

In 2018, the average and median difference between WIRON index values and simulated, hypothetical WIRON values amounted to 0,000 pp. In 2018, in 19% of cases when the differences were detected, they average impact amounted to 0,000 p.p and median amounted to -0,001 pp, while 80% of the observations were at the level of 0,001pp.

The summary for 2018, is presented only in order to show the actual scale of impact of this specific, single data set revision.

Appendix 2 – Adjustment spread after input data revisions as set out in this document. . See Appendix 1 Table 11 of [the Analytical supplement](#) to the to the public consultation results regarding transaction-based interest rate indices.

		Aug 31, 2022				Sep 30, 2022				Oct 31, 2022				Nov 30, 2022				Dec 30, 2022		
	Measure	Period	SPR.ADJ.1M	SPR.ADJ.3M	SPR.ADJ.6M	SPR.ADJ.1M	SPR.ADJ.3M	SPR.ADJ.6M	SPR.ADJ.1M	SPR.ADJ.3M	SPR.ADJ.6M	SPR.ADJ.1M	SPR.ADJ.3M	SPR.ADJ.6M	SPR.ADJ.1M	SPR.ADJ.3M	SPR.ADJ.6M			
WIRON (history)	median	1 year	0,58110	0,19789	-0,29901	0,60961	0,25678	-0,37472	0,63002	0,30762	-0,37079	0,64871	0,47576	-0,37079	0,67287	0,60876	-0,37079			
		3 years	0,38175	0,24869	0,25800	0,40773	0,24736	0,24999	0,41297	0,24736	0,24427	0,44356	0,24869	0,24427	0,44513	0,24736	0,24427			
		5 years	0,41314	0,46727	0,54639	0,41789	0,47138	0,54639	0,42169	0,47506	0,54639	0,42304	0,47866	0,55222	0,42395	0,48110	0,55486			
		10 years*	0,37668	0,45113	0,53035	0,37909	0,45105	0,52999	0,38188	0,45105	0,52999	0,38232	0,45113	0,53091	0,38474	0,45115	0,53091			
		10 years**	0,38250	0,45522	0,53360	0,38519	0,45515	0,53338	0,38824	0,45515	0,53338	0,38865	0,45522	0,53475	0,39091	0,45515	0,53475			
	mean	1 year	0,48623	0,24475	-0,27672	0,52575	0,29669	-0,34216	0,57926	0,34743	-0,35738	0,62691	0,40088	-0,32191	0,67911	0,49396	-0,24985			
		3 years	0,39287	0,39048	0,32339	0,39946	0,39982	0,29263	0,40922	0,40918	0,27776	0,41859	0,41640	0,28049	0,42987	0,42656	0,28910			
		5 years	0,40254	0,42924	0,41850	0,40678	0,43572	0,40092	0,41521	0,44253	0,39308	0,42061	0,44772	0,39525	0,42824	0,45533	0,40151			
		10 years*	0,38652	0,44792	0,49602	0,38939	0,45029	0,48737	0,39335	0,45247	0,48391	0,39637	0,45425	0,48516	0,40103	0,45761	0,48775			
		10 years**	0,39047	0,45197	0,50021	0,39327	0,45426	0,49147	0,39715	0,45637	0,48794	0,40010	0,45807	0,48912	0,40468	0,46135	0,49163			
WIRON (simulation after revision)	median	1 year	0,58110	0,19789	-0,29901	0,60961	0,25678	-0,37472	0,63002	0,30762	-0,37079	0,64871	0,47576	-0,37079	0,67287	0,60876	-0,37079			
		3 years	0,38175	0,24869	0,25800	0,40773	0,24736	0,24999	0,41297	0,24736	0,24427	0,44356	0,24869	0,24427	0,44513	0,24736	0,24427			
		5 years	0,41314	0,46727	0,54639	0,41789	0,47138	0,54639	0,42163	0,47506	0,54639	0,42304	0,47866	0,55214	0,42377	0,48105	0,55476			
		10 years*	0,37660	0,45113	0,53035	0,37909	0,45105	0,52999	0,38188	0,45105	0,52999	0,38232	0,45113	0,53091	0,38474	0,45115	0,53091			
		10 years**	0,38250	0,45522	0,53360	0,38518	0,45515	0,53338	0,38824	0,45515	0,53338	0,38865	0,45522	0,53475	0,39091	0,45515	0,53475			
	mean	1 year	0,48623	0,24475	-0,27672	0,52575	0,29669	-0,34216	0,57926	0,34743	-0,35738	0,62691	0,40088	-0,32191	0,67911	0,49396	-0,24985			
		3 years	0,39287	0,39048	0,32338	0,39946	0,39982	0,29263	0,40922	0,40918	0,27776	0,41859	0,41640	0,28049	0,42987	0,42656	0,28910			
		5 years	0,40253	0,42922	0,41848	0,40676	0,43570	0,40090	0,41520	0,44251	0,39306	0,42059	0,44771	0,39524	0,42822	0,45533	0,40149			
		10 years*	0,38651	0,44791	0,49602	0,38938	0,45028	0,48736	0,39334	0,45247	0,48390	0,39636	0,45424	0,48516	0,40102	0,45760	0,48775			
		10 years**	0,39046	0,45196	0,50020	0,39326	0,45425	0,49146	0,39714	0,45636	0,48793	0,40009	0,45806	0,48911	0,40467	0,46134	0,49162			
difference	median	1 year	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		3 years	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		5 years	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		10 years*	-0,00008	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		10 years**	0,00000	0,00000	0,00000	-0,00001	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
	mean	1 year	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		3 years	0,00000	0,00000	-0,00001	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000			
		5 years	-0,00001	-0,00002	-0,00002	-0,00002	-0,00002	-0,00002	-0,00001	-0,00002	-0,00002	-0,00002	-0,00001	-0,00001	-0,00002	-0,00002	-0,00002			
		10 years*	-0,00001	-0,00001	0,00000	-0,00001	-0,00001	-0,00001	-0,00001	0,00000	-0,00001	-0,00001	-0,00001	0,00000	-0,00001	-0,00001	0,00000			
		10 years**	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001			

* - for the years 2012-2016: WIRON = POLONIA rate + avg. spread WIRON-POLONIA in the period Jan'17-Dec'22

** - for the years 2012-2016: WIRON = POLONIA rate + avg. spread WIRON-POLONIA in the period Jan'17-Dec'19

Figure 5 Comparison of the adjustment spread values determined on the basis of the "backward approach" method – 5 year median of the differences between WIBOR for a defined Fixing Term and WIRON compounded for the corresponding reference period.

As set out above in this document, the Administrator does not present a detailed information on the impact of the data revision on the *proxy data*, i.e. data for 2017 and 2018. Nevertheless the administrator points out, for the informational purposes, that the estimations of the impact of the data revision would modify the structure of the differences, if revisions for 2018 were included into the analysis, but the greatest difference would not exceed 0,00032.