

GPW Indices

Change of Method

Consultation Document

Warsaw, 6 April 2023

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I. SCOPE OF THE PROPOSED CHANGES TO THE METHOD

The Administrator publishes this Consultation Document regarding the proposal to change the Method of provision of indices from the GPW Indices Family (hereinafter "Indices") and other changes in the documentation of GPW Indices that do not constitute a material change in the Method or do not constitute a change in the Method at all. The submitted proposals and changes result from the review of the GPW Indices Method, recommendations or consultations within the Index Committee (hereinafter "IC") or the Oversight Committee of Capital Market Benchmarks (hereinafter "Oversight Committee") and were discussed or consulted with them in accordance with applicable rules.

- A. Three significant changes are proposed to the GPW Indices Method, which, in accordance with the *Cyclical Review of the Definitions and Methods for GPW Indices, changes to the GPW Indices Method, the consultation process and the suspension and cessation of the determination of GPW Indices* (hereinafter "the Review Procedure") require public consultation:
 1. a change in the rules regarding the extraordinary adjustment of the Index portfolios in the event of exclusion of the company from trading at the request of the KNF (the Polish FSA) or the BFG (the Bank Guarantee Fund), without providing for payment to the investor;
 2. change in the qualification thresholds of companies in the rankings of mWIG40 and sWIG80 indices during revisions and periodic adjustments;
 3. changes in the rules of qualification of companies from the reserve list to the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 Indices as part of an extraordinary adjustment.
- B. Moreover, the Administrator submits to public consultations the elements of the Method of provision of GPW Indices concerning the verification of companies in parallel listing ("dual-listed") in terms of the legitimacy of their presence in the portfolios of GPW Indices in the event of significant differences in the company's prices on the GPW (Warsaw Stock Exchange) compared to another market on which the company is also listed.
- C. At the same time, in order to ensure transparency and a complete description of the planned changes in the Method, the Administrator informs that changes not subject to the public consultation procedure will also be implemented. The first of these changes has not met the materiality thresholds for the application of the adopted statistical tests and has therefore not been qualified as a material change to the Method and consequently is not subject to public consultation.

Other changes serve to clarify the rules of provision of GPW Indices currently applied by the Administrator and therefore do not constitute changes to the Method. In view of the above, the following will be introduced in the Rules of GPW Indices Family (hereinafter "the Rules"):

1. change in the frequency of setting the monthly turnover ratio (MTR, PL. MWO) thresholds for the WIG20, mWIG40, sWIG80 WIG30 indices, from annual to quarterly;
2. clarification of the provisions regarding the rules of procedure with regard to the indices in case of a process of merger of companies listed on the GPW, which will provide that the acquired company is excluded from the Indices after the issuer submits the report on the registration of the merger of companies by the relevant court;
3. clarification of the provisions regarding the so-called fast track of introducing a company into the Index, i.e. the introduction of a provision that the inclusion of a company as part of the fast track in the WIG20, mWIG40, sWIG80 and WIG30 indices takes place at the same moment for all Indices, i.e. after 9 sessions from the company's debut (7 sessions after the debut + 2 sessions from the moment of publication of the extraordinary adjustment message), although the company's qualification process itself is carried out as of the end of the session on the debut day.
4. enumerative indication of the grounds for removing a company from the Indices under the extraordinary adjustment. It will be stated that this occurs when:
 - the number of shares in free float falls below 10%,

- the company has been specifically designated¹,
- the company was excluded from trading on the GPW market,
- other important circumstances occur that jeopardise the security of trading and the interests of participants.

The current provisions allow the Administrator to exclude a company from the Indices as part of an extraordinary adjustment, without indicating the grounds on the basis of which the Administrator carries out such action.

- clarification of the provisions regarding inclusion of debuting companies in NCIndex. Currently, the description of the Method in the Rules stipulates that a company's shares are entered into the list of participants after twenty sessions from the date of the first listing of these shares on NewConnect market. Following the introduction of a rule of two-day advance notice for extraordinary adjustments, the qualification process of a company should take place 18 sessions after the debut. In order to maintain the 20-session period after the debut for the qualification of the company to NCIndex, GPW Benchmark is going to replace the words "are entered" with "are qualified" in the Index rules.

D. The Administrator informs about planned cessation of provision of the WIG.MS-PET index.

The Questionnaire is attached as Appendix no. 1 hereto.

¹ in accordance with Section 3 (1) of Section VII of the GPW's Detailed Rules for Exchange Trading or in accordance with Section 150 (1) of Annex No. 2 to the Regulations of the Alternative Trading System

II. DESCRIPTION OF THE ELEMENTS OF THE METHOD SUBJECT TO PUBLIC CONSULTATION

1. Amendment of the rules on extraordinary adjustment of indices portfolios in the event of exclusion of a company from trading at the request of KNF or BFG, without providing for payment to the investor

Taking into account the case of exclusion of Getin Noble Bank (GNB) from exchange trading the 30th September 2022 by the GPW at the request of the Bank Guarantee Fund during the exchange session, and comments submitted to the Administrator of the GPW Indices Family by market participants regarding the expected mode and timeline of the operation of exclusion of the above-mentioned company from Indices portfolios, the Administrator submits for public consultation the rules proposed below, governing the case described-above to be introduced into the Method.

In the abovementioned case, the Administrator, acting in extraordinary circumstances taking into account the best interest of the market, decided to extraordinarily adjust 6 of the GPW Indices and withdraw the company from their portfolios, taking into account the last available price for the company, during the same session, taking actions in a manner different from the usual practice of making such adjustments solely between exchange sessions.

These extraordinary actions resulted from an extraordinary event exceptionally taking place during the business day and the lack of unambiguous provisions applicable to the situation in the Rules, directly applicable to such market events. Currently, the Method does not indicate at what price the shares of a company included in the Indices portfolios should be removed from a portfolio when the company has been excluded from trading on the GPW.

The Administrator proposes to clarify the provisions of the Rules of the GPW Indices Family in this regard and supplement them, which is necessary to increase the transparency and completeness of the Method. According to the proposal, positively reviewed by IC and Oversight Committee, in the case of a market event consisting in the suspension and consequently exclusion of a given company from trading at the request of KNF or BFG, in a situation where the holder of shares of an excluded company cannot count on monetary settlement of this market event, the company will be **removed** from index portfolios **after the trading session**.

The subject of the consultation on the proposed change in this point is both the moment and the price at which the company should be excluded from the Indices.

In the case of Indices in which the excluded company participated and which are characterized by a constant number of participants, the Administrator will publish a communiqué indicating the list of companies that will supplement the portfolios of Indices **immediately after the end of the session**, while the operation of supplementing the above portfolios will take place after 2 sessions from the publication of the communiqué, i.e. according to the procedure provided for in point 4.4.1 of the Rules.

At the same time, the Administrator notes the consequences of introducing the above provisions regarding the removal from the Indices of a company at a price equal to zero if they were applied to a company with a large share in the Index, bearing in mind that the introduced rules must apply uniformly to all listed companies and Indices. Such an operation **significantly lowers the value** of a given Index, which investors must take into account. In particular, it should be borne in mind that this operation may concern Indices, which are the underlying assets for derivatives. A simulation of such situation is presented below:

Before operation:

Company	Price	No of shares	Marcet cap	Share (%)
BBB	150.0000	63 420 000	9 513 000 000.00	35.8918
DDD	131.5600	68 412 000	9 000 282 720.00	33.9574
AAA	59.6000	51 636 000	3 077 505 600.00	11.6112
FFF	2.2180	1 077 300 000	2 389 451 400.00	9.0152
EEE	7.0240	282 417 000	1 983 697 008.00	7.4843
CCC	48.8400	11 071 000	540 707 640.00	2.0400
			26 504 644 368.00	100.0000

Index base value	1000.00
Index base cap	1 504 644 368.00
Adjustment coefficient	1.00000000
Index closing value	17 615.22

After operation:

Company	Price	No of shares	Marcet cap	Share (%)
BBB	150.0000	63 420 000	9 513 000 000.00	54.3465
DDD	0.0000	68 412 000	0.00	0.0000
AAA	59.6000	51 636 000	3 077 505 600.00	17.5814
FFF	2.2180	1 077 300 000	2 389 451 400.00	13.6506
EEE	7.0240	282 417 000	1 983 697 008.00	11.3326
CCC	48.8400	11 071 000	540 707 640.00	3.0890
			17 504 361 648.00	100.0000

Index base value	1000.00
Index base cap	1 504 644 368.00
Adjustment coefficient	1.00000000
Index closing value	11 633.55

Change in pts.	-5981.67
Change in %	-33.96%

Table 1 Scenario simulations regarding the example of bringing a DDD company price to the "zero" value and the impact of this value on the Index parameters

Given that the proposed provisions may cause an above-average decrease in the value of the Index, the above change in the Method is a significant change. A case such as the one described above may have a different (positive or negative) impact on the investments of individual groups of stakeholders, which requires the opinion of the widest and most diverse range of potential investors. Consultations on the proposed change of the Method result from expectations of some market participants. The aim is to verify the possibility of harmonisation of standards. The Administrator is counting on participants of the public consultation to deliver justifications of their opinions.

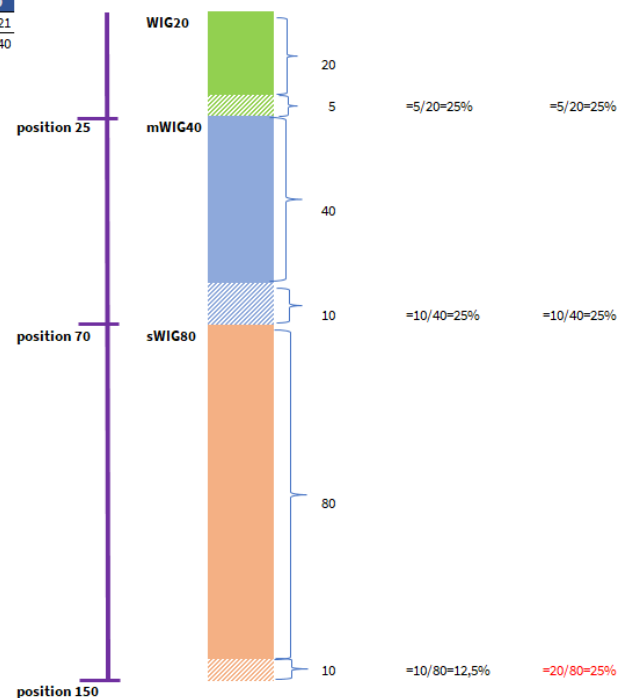
2. Change of the qualification thresholds of companies in the rankings of mWIG40 and sWIG80 Indices during revisions and periodic adjustments

The Administrator proposes to **adjust the thresholds of qualification of companies** for the mWIG40 and sWIG80 indices resulting from the positions of companies in the ranking for adjustments and periodic revisions, respectively, based **on the principles of proportionality**. These changes would consist in the following:

- in case of a revision, change of position from 150 to 160 in the ranking for sWIG80;
- in the case of an adjustment, a change in the position from 75 to 80 in the ranking for mWIG40 and a change in the position from 160 to 180 in the ranking for sWIG80;
- introducing specific rules regarding the application of the lower qualification thresholds to the portfolio of the Index for companies previously participating in it. The lower qualification thresholds within the rankings would be a condition for the possibility of remaining in the portfolio of the Index of the previously participating companies. According to the proposed solution, in the event that there are not enough companies in the portfolio after adjustment or revision due to statutory exclusions (e.g. based on the MTR ratio), the lower ranking threshold should be disregarded, and companies (meeting all other criteria of the Index) in the ranking below the above-mentioned threshold should be qualified for the Index in order to complete the portfolio in accordance with the prescribed number of participants determined in the Method of that particular Index.

Revision

	WIG20	mWIG40	sWIG80	WIG30
upper limit of the range	16	51	121	21
lower limit of the range	25	70	150	40



Revision

	WIG20	mWIG40	sWIG80	WIG30
upper limit of the range	16	51	121	21
lower limit of the range	25	70	160	40

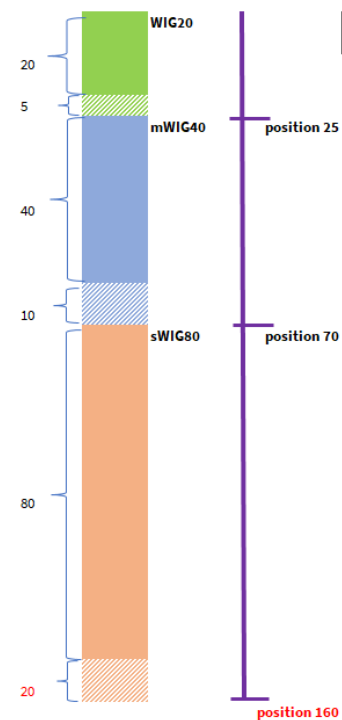
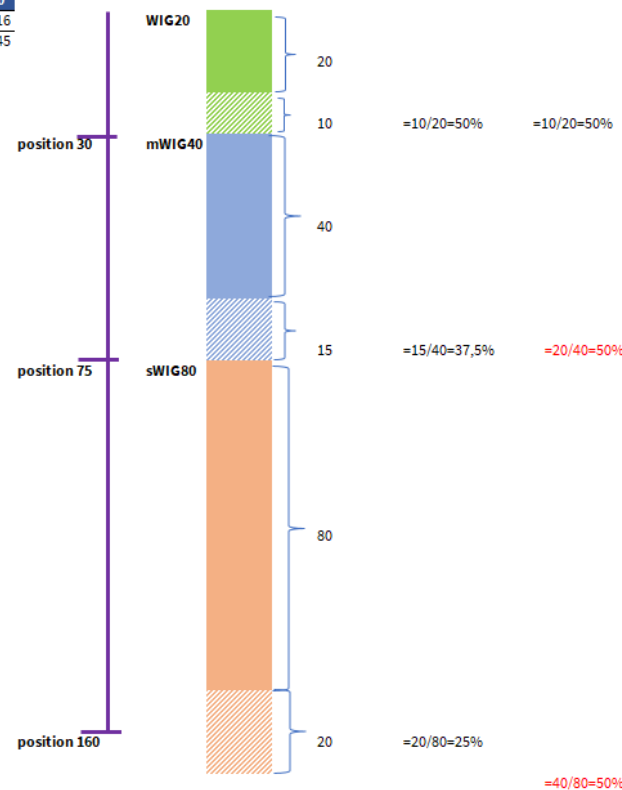


Figure 1 The principle of the proportionality of the thresholds presented in the simulation for the Revision of GPW Indices

Adjustment

	WIG20	mWIG40	sWIG80	WIG30
upper limit of the range	11	46	111	16
lower limit of the range	30	75	160	45



Adjustment

	WIG20	mWIG40	sWIG80	WIG30
upper limit of the range	11	46	111	16
lower limit of the range	30	80	180	45

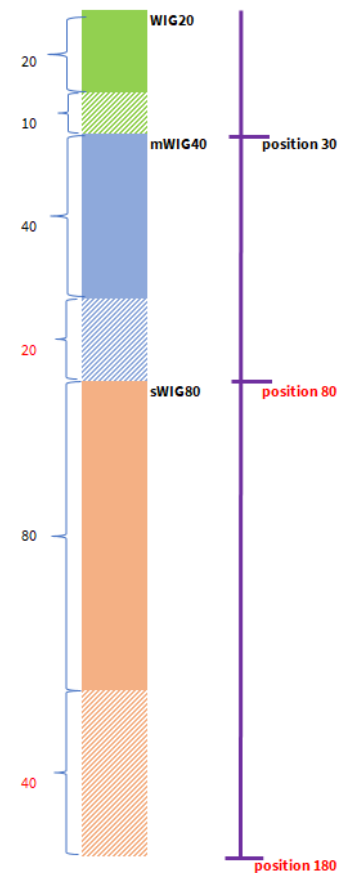
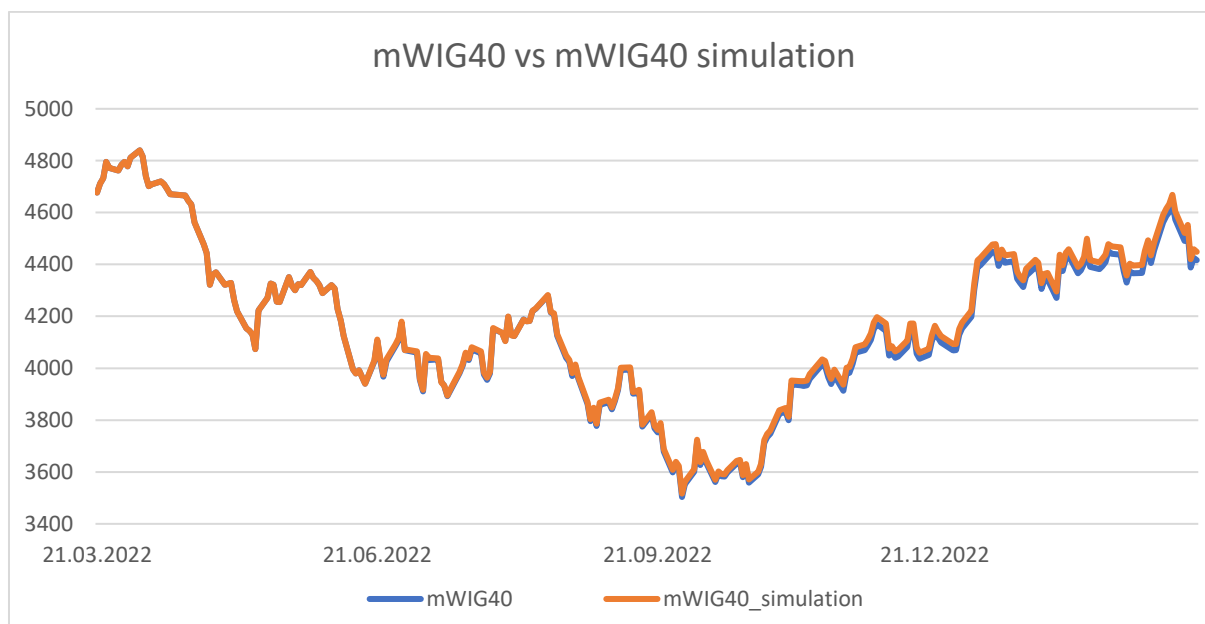
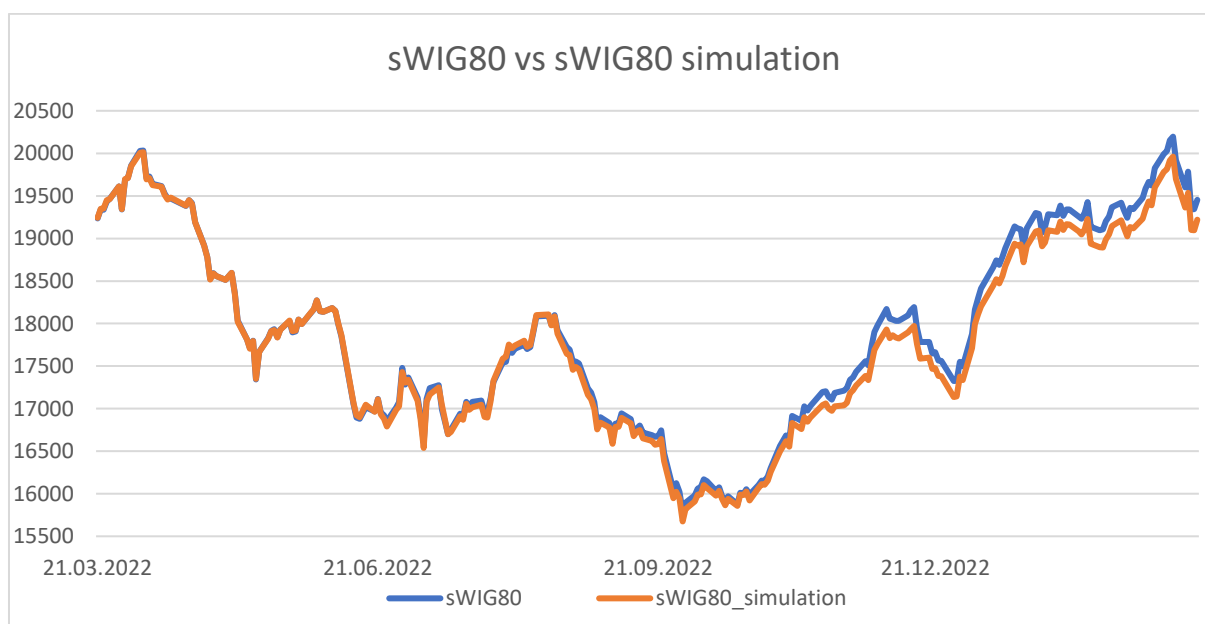


Figure 2 Proportionality of the thresholds presented in the simulation for the Adjustment of GPW Indices

The change affects the compositions of the mWIG40 and sWIG80 index portfolios. The graphs below show the their historical values in the last 12 months:



Graph 1 The mWIG40 historical values in comparison to hypothetical values of mWIG40 taking into account the proposed changes to the rules on adjustments and revisions



Graph 2 The sWIG80 historical values in comparison to hypothetical values of sWIG80 taking into account the proposed changes to the rules on adjustments and revisions

3. Changes in the qualification rules of companies from the reserve list for the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 Indices in the case of extraordinary adjustment

The Administrator proposes to add in the Indices Method a provision concerning verification of meeting the current threshold of the Monthly Turnover Ratio (MTR) by the company which is at the highest position on the reserve list of a given index and which is to be added to this index as part of an extraordinary adjustment. The verification would concern the value of the MTR ratio in the last calendar month before the extraordinary adjustment.

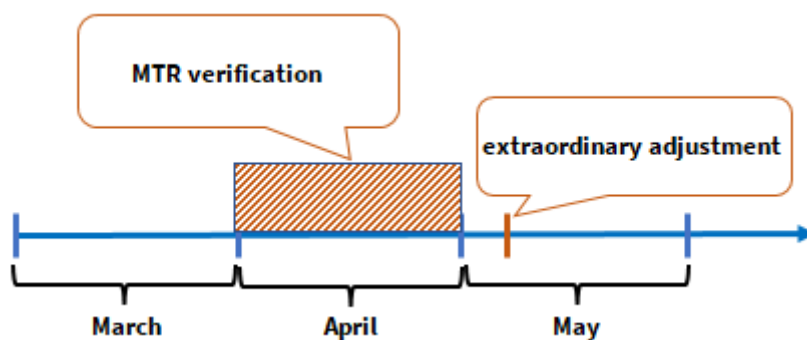
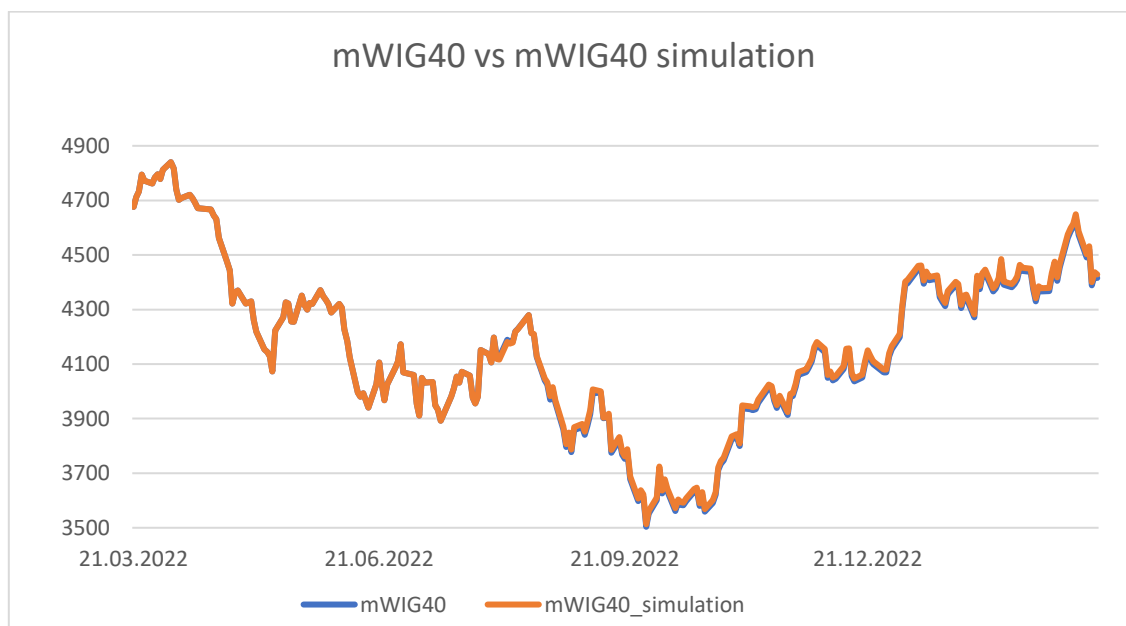


Figure 3 Mode of verification of the MTR ratio in the last calendar month before the extraordinary adjustment

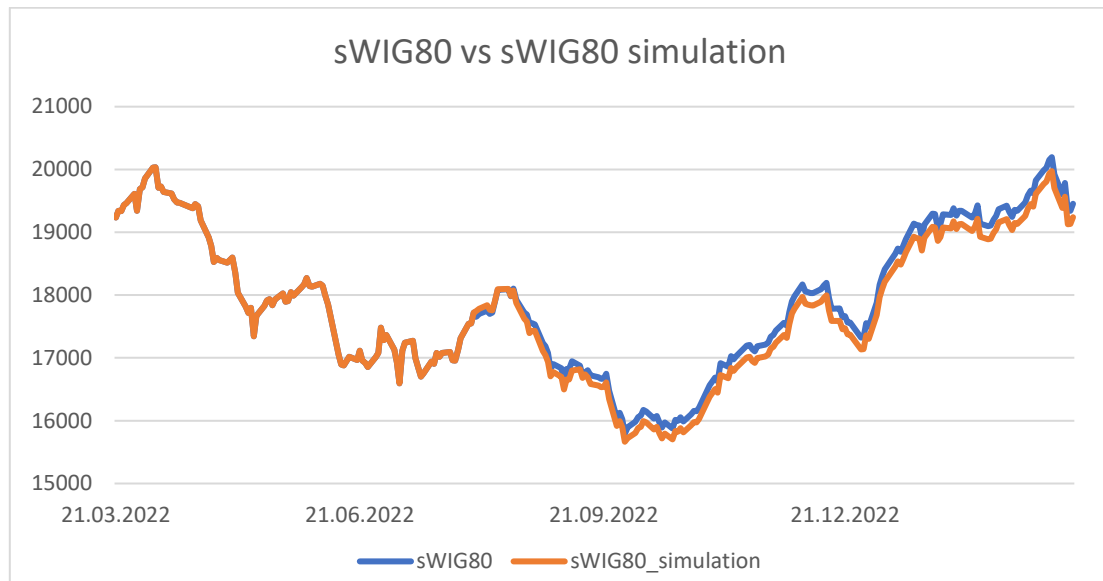
The change proposal was dictated by the Administrator's experience with significant changes in the structure of the Index portfolios during the extraordinary adjustment and the periodic adjustment that followed in a short period of time.

The Administrator proposes to introduce the above change because **frequent changes in Indices do not positively affect the stability of portfolios and may negatively affect the effects of investment decisions of Index users.**

The change affects the compositions of the mWIG40 and sWIG80 index portfolios. The graphs below indicate their historical values in the last 12 months:



Graph 3 The mWIG40 historical values compared to the hypothetical values of mWIG40 taking into account the proposed qualification rules from the reserve list



Graph 4 The sWIG80 historical values compared to hypothetical values of sWIG80 taking into account the proposed qualification rules from the reserve list

4. New rules on the qualification of dual-listed companies for GPW Indices portfolios

In accordance with the information provided in point B of the description of the scope of this consultation document, the Administrator presents a proposal to change the GPW Indices Method regarding the verification of dual-listed companies in terms of the legitimacy of their presence in the portfolios of GPW Indices in case of significant differences in the price of stock (company) listed on the GPW compared to the price of the same stock on another market on which it is listed (non-GPW), if there is a difference in the level of trading between these exchanges. In connection with the above proposal, the Administrator proposes a two-stage verification of the company in terms of its inclusion into the portfolios of the Indices:

Stage I

Comparison of the average volume of turnover over the reference period on the GPW and the other market on which the non-GPW company is listed. It is assumed that companies whose turnover volume on the GPW is greater than the turnover volume on the non-GPW market are **not subject to verification and are automatically qualified for Indices**. If the agreed acceptable X threshold is exceeded at the level of the turnover, the difference between the company's prices on GPW and non-GPW markets is verified. The Administrator recommends a strict approach to determining the threshold and recommends that the X threshold be set at 5% of turnover. The level of the threshold is subject to consultation.

Stage II

The share of the difference between the company's prices in relation to the company's price on the GPW is verified. It is assumed that in the absence of trading in the reference period, the analyzed **company does not qualify for participation in Indices**. In addition, it is assumed that in the case of dual-listed companies operating for the most part in Poland and classified as domestic companies, the **verification does not apply, which means that the company is automatically qualified for Indices**. For the remaining dual-listed companies, the acceptable threshold for the difference in turnover volumes in the reference period is proposed to be at the level of 5%. For dual-listed companies, the level of the acceptable difference threshold in the company's prices in the reference period is recommended at 2%. The level of the threshold is subject to this consultation.

In the case of qualification of companies, it is recommended to use the qualification of dual-listed companies, i.e. removing companies from the index portfolio on a quarterly basis, in accordance with the calendar of periodic Index adjustments. The Administrator submits for consultation the list of Indices/Groups of Indices in which the above principle should be followed.

The following are the next stages of the analysis of dual-listed companies in terms of differences in price for GPW and non-GPW markets, taking into account the exceptions and proposals of the Administrator regarding the recommended threshold levels:

A	B	C	D	E	F	G	H	I	J	K	L	M
	GPW Price	GPW volume	Non-GPW Price	Non-GPW volume	Check if the trading volume on non-GPW is greater than the volume on GPW	Check if the share of the turnover difference is greater than n% of the turnover on GPW	Check if the difference in liquidity is greater than the accepted threshold	If the difference is greater - You get information about entering phase 2 - Price check	the share or the difference between the prices (GPW and non-GPW) in a value of the prices on GPW	Check the value of the share of difference in the GPW Price in PLN	Confirm the value of the difference in PLN - comparative test	Decision on the qualification of the Company
					E>C	MODULE.NUM (((C-E)/(C))*100	If G>n% (e.g. 5%) check the prices difference	If true check prices difference (column J)	(MODULE.NUM(B-D))/(B)*100	J*B/100	B-D	If J>n % (e.g. 2%) remove the Company from Indices
COMPANY 1	6.7967	455 412	0.842	2 233 133	TRUE	390	TRUE	CHECK THE PRICE	87.61	5.95	5.95	REMOVE COMPANY FROM INDICES
COMPANY 2	0.4256	5 773	0.1613	40 038	TRUE	594	TRUE	CHECK THE PRICE	62.1	0.26	0.26	REMOVE COMPANY FROM INDICES
COMPANY 3	1.4831	2 733 6	2.7336	3 003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
COMPANY 4	1.3699	293	2.339	26 532	TRUE	8955	TRUE	CHECK THE PRICE	70.74	0.97	-0.97	REMOVE COMPANY FROM INDICES
COMPANY 5	7.1842	3 312	5.1476	99 423	TRUE	2902	TRUE	CHECK THE PRICE	28.35	2.04	2.04	REMOVE COMPANY FROM INDICES
COMPANY 6	159.6894	62	121.7253	694	TRUE	1019	TRUE	CHECK THE PRICE	23.77	37.96	37.96	REMOVE COMPANY FROM INDICES
COMPANY 7	2.165	9 156	3.12	360	FALSE	n/a	n/a	n/a	n/a	n/a	n/a	n/a
COMPANY 8	2.747	1 968	2.3246	10 753	TRUE	446	TRUE	CHECK THE PRICE	15.38	0.42	0.42	REMOVE COMPANY FROM INDICES
COMPANY 9	9.7323	303	10.7236	17 396	TRUE	5641	TRUE	CHECK THE PRICE	10.19	0.99	-0.99	REMOVE COMPANY FROM INDICES
COMPANY 10	3.7238	348	4.042	22 189	TRUE	6276	TRUE	CHECK THE PRICE	8.55	0.32	-0.32	REMOVE COMPANY FROM INDICES
COMPANY 11	0.8168	750 976	0.8624	96 526	FALSE	n/a	n/a	n/a	n/a	n/a	n/a	n/a
COMPANY 12	84.4106	18	81.9853	208 348	TRUE	1157389	TRUE	CHECK THE PRICE	2.87	2.43	2.43	REMOVE COMPANY FROM INDICES *
COMPANY 13	15.7189	57	16.0198	5 790	TRUE	10058	TRUE	CHECK THE PRICE	1.91	0.3	-0.3	INCLUDE A COMPANY IN INDICES
COMPANY 14	20.0483	70 051	20.2329	7 759	FALSE	n/a	n/a	n/a	n/a	n/a	n/a	n/a
COMPANY 15	452.2629	278	449.3234	7 213	TRUE	2495	TRUE	CHECK THE PRICE	0.65	2.94	2.94	INCLUDE COMPANY IN INDICES
COMPANY 16	4.9575	1 042	4.9791	24 101	TRUE	2213	TRUE	CHECK THE PRICE	0.44	0.02	-0.02	INCLUDE COMPANY IN INDICES
COMPANY 17	32.8182	4 920	32.6996	1 165 978	TRUE	23599	TRUE	CHECK THE PRICE	0.36	0.12	0.12	INCLUDE COMPANY IN INDICES
COMPANY 18	51.9095	458	51.8351	21 132 404	TRUE	4613962	TRUE	CHECK THE PRICE	0.14	0.07	0.07	INCLUDE COMPANY IN INDICES
COMPANY 19	177.2215	6 563	177.052	304 538	TRUE	4540	TRUE	CHECK THE PRICE	0.1	0.17	0.17	INCLUDE COMPANY IN INDICES
COMPANY 20	13.1018	8 432	13.0899	43 223 208	TRUE	512509	TRUE	CHECK THE PRICE	0.09	0.01	0.01	INCLUDE COMPANY IN INDICES
COMPANY 21	8.3184	668	8.3148	23 104	TRUE	3359	TRUE	CHECK THE PRICE	0.04	0.00	0.00	INCLUDE COMPANY IN INDICES
								NO REASONS FOR REJECTION OF COMPANY FROM INDICES				
COMPANY 22	6.7967	455 412	7.136535	477 727	TRUE	5	FALSE	FROM INDICES	n/a	n/a	n/a	n/a

n/a - means that the action does not apply to a given company due to the stage of the verification process

* - if the threshold is adopted, e.g. at the level of 5% share of the exchange rate difference in the Company's price on the GPW, COMPANY No. 12 would not be removed from the Indices

Table 1 Presentation of principles and activities carried out under the new proposed element of the Method for the verification of dual-listed companies (hypothetical data based on real market data and simulations for presentation of special cases).

III. CESSATION OF THE PROVISION OF THE WIG.MS-PET INDEX

In connection with the withdrawal from trading on the GPW or the planned withdrawal of large, liquid companies from the fuel, gas and chemical industry, which are included in the WIG.MS-PET portfolio, the **Administrator plans to cease the provision of this Index as of June 16, 2023 end of day, taking into account the positive opinion expressed by the Oversight Committee during the meeting of March 28.**

The Administrator justifies that the above-mentioned changes in the structure of companies listed on the Main Market may result in the near future in the lack of appropriate companies that could be participants in the Index in terms of qualifying for the index portfolio in accordance with its method and qualitative factors that are indispensable in provision of an index which is the underlying asset for derivatives, which was the purpose of establishing the Index at the time. The above means a **change in the market and economic reality²**, the measurement of which was the benchmark's purpose, which justifies cessation of the provision thereof.

IV. RESULTS OF ANALYSES AND CONSULTATION PROCESS

The results of the analyses were presented to the Oversight Committee at its meeting on March 28, 2023. In view of the test results, the Committee endorsed the opinion that changes in the Method in the scope laid down in points 1, 2 and 3 are material and shall be therefore subject to public consultation.

V. ASSUMPTIONS OF THE CONSULTATION PROCESS REGARDING THE CHANGE OF METHOD

With regard to the consultation on GPW Indices Method change it is assumed that the answers to the questions asked in the Questionnaire will be submitted to indeksy@gpwbenchmark.pl by 23 April, 2023 at the latest. The Administrator will publish the results of the consultation on its website together with any additional information on the consultation, including the date of the final changes to the Method.

VI. THE QUESTIONNAIRE

The Questionnaire is attached as Appendix no. 1 hereto.

² in accordance with pt. 4.1.2 of the Review Procedure, <https://gpwbenchmark.pl/documentation>