

Summary of public consultations on changes to the method of provision of GPW Indices

GPW Benchmark S.A. held public consultations regarding:

1. amendments to the rules on extraordinary adjustment of Index portfolios in the event of exclusion of a company from trading at the request of the KNF or BFG without any payment to the investor;
2. changes in the qualification thresholds for companies to be included in the rankings of the mWIG40 and sWIG80 Indices during revisions and periodic adjustments;
3. changes to the qualification rules for companies from the reserve list to be included in the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 Indices during an extraordinary adjustment;
4. verification of "dual listed" companies in terms of the legitimacy of their presence in portfolios of the Indices in the case of significant differences between the company's stock prices on the Warsaw Stock Exchange ("GPW") and another market where the company is also listed.

The consultation document¹ was made available to the public on April 6, 2023. The deadline for responses was set for April 23, 2023 (this deadline was extended to April 27, 2023 due to the lack of a clear resolution for point 1 above). The document was sent to the entities using the Indices by email, in Polish and in English. Information about the public consultations was simultaneously made available on the website and on social media.

In connection with the completed public consultations on changing the methodology of compiling the Indices, GPW Benchmark S.A. (the "Administrator") provides a summary of responses submitted by interested parties. The Administrator received eleven responses, including one from a trading venue.

1. RESULTS OF THE CONSULTATIONS

Question 1: What price should be taken into account in conducting an operation excluding a company from GPW Indices at the request of the KNF (the Polish FSA) or the BFG (the Bank Guarantee Fund), if the investor cannot expect any payment in connection with the above-mentioned operation?

¹ Document available at the link:
https://gpwbenchmark.pl/news_read?cmn_id=2060&title=Public+consultation+on+changes+to+the+GPW+Indices+Method

Responses:

	Number of responses
Last known price of the stock (closing price)	4
Price equal to zero	7
No opinion	0

Question 2: At what point in time should a company be removed by the Administrator from index portfolios in the case described in question 1?

Responses:

	Number of responses
Immediately upon learning of the event (regardless of the actions of the GPW)	2
Immediately after GPW's decision to suspend the company from trading	3
Immediately after GPW's decision to exclude the company from trading	2
After the end of the session	5
No opinion	0

Question 3: Do you support the amendment of the rules on the qualification thresholds for the mWIG40 and sWIG80 indices on the basis of proportionality?

Responses:

	Number of responses
Yes	7
No	0
No opinion	2

Question 4: Do you support a change in the rules for the qualification of companies from the reserve list for the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 indices, preceded by a verification if the company met the MTR ratio in the last month before the extraordinary adjustment?

Responses:

	Number of responses
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Yes	6
No	1
No opinion	3

Question 5: What rules should apply for the verification of dual listed companies in terms of the legitimacy of their presence in the portfolios of GPW Indices in the event of significant differences in the company's stock price on the GPW compared to another (non-GPW) exchange?

Stage I

- (1) Comparison of the average trading volume over the reference period on GPW and non-GPW markets.
- (2) It is assumed that companies for which the GPW market turnover is greater than the non-GPW market turnover shall not be subject to verification and shall automatically be classified into the indices.

Responses:

	Number of responses
Yes	4
No	0
No opinion	4

Stage II

- (3) (3) If a set, acceptable X threshold is exceeded, the difference between the company's prices on the GPW and non-GPW is verified.
- (4) The share of the difference between the company's prices in relation to the company's price on the GPW is verified.
- (5) (5) It is assumed that in absence of trading in the reference period, the analyzed company does not qualify for GPW indices.

Responses:

	Number of responses
Yes	4
No	0
No opinion	3

- (6) It is assumed that in the case of dual-listed companies which operate for the most part in Poland and classified as Polish companies, the verification does not apply; this means that the company is automatically qualified for indices.

Responses:

	Number of responses
Yes	5
No	1
No opinion	2

(7) In the case of other dual listed companies, the level of the acceptable threshold for the difference in trading volume in the reference period is proposed at 5%:

Responses:

	Number of responses
Yes	1
No, higher, above 10%	1
No, higher, above 20%	1
No, lower, less than 5%	0
No opinion	4

(8) In the case of dual listed companies, the level of acceptable threshold for the difference in the company's prices in the reference period is proposed at 2%:

Responses:

	Number of responses
Yes	2
No, lower 1%	0
No, higher 10%	1
Higher, above 20%	1
Lower, less than 5%	0
No opinion	4

(9) In the case of qualification of companies, it is recommended to perform the qualification of dual listed companies, i.e. removing companies from the index portfolio ...

Responses:

	Number of responses
On a quarterly basis, according to the calendar of revisions and periodic adjustments	6
On an annual basis	0
No opinion	2

- (10) In the case of qualification of companies, it is recommended to perform the qualification of dual listed companies, i.e. removing companies, from the following indices:

Responses:

	Number of responses
All GPW Indices and CEEplus	4
WIG20, mWIG40, sWIG80 and WIG30 and in consequence: WIG140, macroindices, WIG-ESG and WIGdiv	1
WIG, and in consequence: sector indices and national indices	1
No opinion	2

The sum of responses in some tables is less than eleven because not all respondents answered all questions. In the table for question No. 2, the sum of responses is greater than eleven, because one of the entities marked two responses.

Comments regarding the responses are provided in Appendix 1 to this document.

2. DECISION ON THE PRESENTED CHANGES TO THE METHODS

Question 1: *1. What price should be taken into account in conducting an operation excluding a company from GPW Indices at the request of the KNF (the Polish FSA) or the BFG (the Bank Guarantee Fund), if the investor cannot expect any payment in connection with the above-mentioned operation?*

Participants in the consultation, after the first public consultation period, were 50% in favor of the last known price of the stock (the closing price) and 50% in favor of the price equal to zero. The above distribution may indicate the sensitivity of the issue and the various positions the Administrator had to take into account when making a general decision in the consulted area.

In view of the significant impact of the decision on the operation excluding a company in accordance with Question 1, and in light of the lack of unequivocal support for any of the proposed options, it was decided to extend the period of consultations with those who had already responded to the question. Additional consultations were held in order to clarify the confirmation of the appropriate, where it turned out to be reasonable, interpretation of the principles presented by the Administrator, as well as the positions of the entities responding to the question. Ultimately, the participants in the consultations were overwhelmingly in favor of the price of zero as the one that should be taken into account when carrying out operations to exclude a company from the indices, after a company has been excluded from trading by the GPW at the request of the KNF or the BFG, in a situation where an investor cannot count on a return of the capital invested in that company.

Taking into account the comments of the consultation participants provided throughout the consultation period, the Administrator took particular note of those who emphasized the fact

that investors who actively manage portfolios keep track of the situation of companies on an ongoing basis and, in the event that a company's situation deteriorates significantly, "underweight" it in their portfolios. Passive investors, on the other hand, have to follow the portfolio structure of a given index and keep a company in a bad market situation in the portfolio until the Administrator excludes it. In the case of the situation consulted by the Administrator in Question 1, passive investors will be more at risk, and the use of a price equal to zero provides an opportunity to minimize this risk. In addition, the Administrator takes into account the practice of foreign index administrators, who in the case described in Question No. 1 used a price equal to zero to value companies. Foreign experience and standards were pointed out by some participants in the consultation.

The Administrator decided to take into account the zero price when carrying out an operation to exclude a company from stock indices at the request of the KNF or the BGF in cases when the investor cannot expect a cash settlement of the operation.

Question 2: *At what point in time should a company be removed by the Administrator from index portfolios in the case described in question 1?*

Participants in the consultation were overwhelmingly in favor of conducting the operation after the end of the session. During the additional stage of the consultations, the Administrator asked the entities to clarify the interpretation of the aforementioned term: "after the end of the session" in relation to the term "at the end of the session".

Taking into account the comments received, the Administrator decided to carry out operations "at the end of the session", so that the value of the index at the close of the session reflects the economic situation, i.e. the economic reality, the measurement of which is the purpose of the index after the request of the KNF or BFG, and which realistically reflects the change in the conditions of the investor's business, so as not to allow the index to be artificially "overvalued".

Question 3: *Do you support the amendment of the rules on the qualification thresholds for the mWIG40 and sWIG80 indices on the basis of proportionality?*

An overwhelming majority of the participants in the consultations were in favor of changing the rules for determining thresholds in the rankings of the mWIG40 and sWIG80 indices. The Administrator decided to implement the above change.

Question 4: *Do you support a change in the rules for the qualification of companies from the reserve list for the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 indices, preceded by a verification if the company met the MTR ratio in the last month before the extraordinary adjustment?*

An overwhelming majority of the participants in the consultations were in favor of changing the rules for the qualification of companies for reserve lists for the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 indices. The Administrator decided to implement the above change.

Question 5: *What rules should apply for the verification of dual listed companies in terms of the legitimacy of their presence in the portfolios of GPW Indices in the event of significant differences in the company's stock price on the GPW compared to another (non-GPW) exchange?*

In the case of subpoints 1-6, consultation participants supported the Administrator's proposals for the next steps in qualifying a "dual listed" company for the Stock Exchange Indices in the case of significant differences in the company's prices on the GPW compared to another exchange on which the company is listed.

For subpoints 7-8, due to the wide range of responses, which seems to indicate a lack of strong support for the level of scrutiny regarding the difference in trading volume and the difference in the price of *dual listed* companies, the Administrator recommends using the most neutral and lenient approach – for both the difference in trading volume and the difference in price on the GPW and the other exchange where the dual listed company is listed. It is recommended to adopt a difference threshold of 20%. The Administrator, after implementing the above changes, will monitor the adequacy of the adopted levels for possible modification in the future. The Administrator notes that in the absence of an unequivocal recommendation from the participants of the consultations supported by responses indicating a lack of preference, the Administrator will take into account the assumption of ensuring continuity and stability in the composition of the indices when introducing this change in methodology.

In subpoint 9, participants in the consultations advocated the adoption of a quarterly verification cycle for "dual listed" companies as part of periodic adjustments to the Stock Market Indices.

In subpoint 10, the consultation participants voted overwhelmingly in favor of introducing the above-described verification of price differences for "dual listed" companies into the methodology of all GPW Indices Family and the CEEplus index.

The Administrator has decided to implement the above changes in accordance with the results of the consultation.

The Board of GPW Benchmark S.A. has presented to the Supervisory Committee of the CSF this summary of the results of the consultation process and recommendations for further action regarding the implementation of significant changes. The Supervisory Committee recommended the implementation of the proposed changes to the method of determining the Indices. The responses received from the participants of the consultations and the Committee's recommendations should be considered sufficient to implement the proposed significant changes to the method of compiling the individual Indices, in accordance with the Administrator's procedure in force².

The revised Rules of the GPW Indices Family, taking into account the adopted changes to the method of compiling the Indices, will come into effect on June 19, 2023, i.e. on the first trading

² Pursuant to Section 3.11 of the Procedure for the cyclical review of the definition and method for GPW Indices Family, change of the method for GPW Indices, consultation process, and suspension and discontinuation of determining GPW Indices. This procedure fulfills the requirements imposed on the Administrator regarding the "transparency of the method" referred to in Article 13 (1) of Regulation 2016/1011 of June 8, 2016 on indices used as benchmarks in financial instruments and financial contracts ("BMR").

day after the periodic adjustment of the Indices carried out on June 16. As part of the aforementioned adjustment of the Indices scheduled for June 16 this year, the Administrator will apply the new rules when determining the new compositions of the portfolios of the Indices.

The summary shall be communicated in a manner consistent with the release of the Consultation Document to the entities using the Indices and made available on the Administrator's website.

APPENDIX 1

1. What price should be taken into account in conducting an operation excluding a company from GPW Indices at the request of the KNF (the Polish FSA) or the BFG (the Bank Guarantee Fund), if the investor cannot expect any payment in connection with the above-mentioned operation?
 - **the last known price of the stock (closing price)**

Answer 1)

If a company is excluded from indices at the request of the KNF or the BGF, the stock's last known price, which by definition should be the closest to the stock's intrinsic value, should be used. In the case of automatic valuation at zero, there is a risk that the value of the index will be arbitrarily reduced, making it difficult, for example, to assess the effectiveness of management based on the benchmark using the index.

Answer 2)

- The company should exit the index with the available and tradable market price at the close of the session so that all investors have the opportunity to position themselves.
- If no tradable market price is available, the company should exit the index with a price of zero at the close of the session.
 - **price equal to zero**

Response 1)

The only way to reflect the economic impact of an index event. In this way, the index will reflect the identical rate of return that would be obtained by an investor physically holding index components in the same proportions in his/her investment portfolio.

- 1) A price equal to zero is the only price whose adoption will reflect the economic sense of the event taking place. This is the only price that can be obtained by the investor at the time of the relevant decision of the KNF/BFG.
- 2) Adopting a different price (here, the last available price) distorts the investment reality in the context of investors making actual transactions on the stock market. For example, in such a situation, should futures contracts on the stock of a particular company be settled at 0 or at the last known price? If the holder of a stock loses 100% on it, why shouldn't the holder of a long futures position on that stock lose 100% (exposure) and a short position holder not profit from a correct decision? Only adopting a price of zero allows for a fair settlement of futures

contracts on stocks. Index futures should be settled on the same basis – adopting a price of zero and reducing the value of the index, and consequently the contract's price, by the amount corresponding to that company's weight in the index.

- 3) Bearing in mind the example in point 2) and the risks outlined in the Trading Conditions for futures contracts, in my opinion, the adoption of a company's price other than 0 in the index creates grounds for a monetary claim by investors taking a short position in a futures contract against the issuer of the instrument (in this case, GPW SA). The reason for this is that the relevant risk is not specified in the Trading Conditions.
- 4) The distortion of investment reality and the artificial inflation of the level of an index has consequences not only for the holders of index derivatives, but affects a much broader spectrum. Actively managed funds charging success fees may lose, index funds will show worse performance compared to the inflated index, issuers of SWAP contracts on the index and arbitrageurs operating in the cash and derivatives markets taking a short position on the contracts will suffer losses (while investors holding long positions on SWAP contracts or arbitrageurs with long positions on the contracts will relatively benefit).
- 5) While in the case of a company with a small share in the index such a situation and the adoption of the last price into the index may go unnoticed, in the case of a company with a large share in the index it would lead to significant publicity in the market and a lot of confusion. Even if investors trading in the futures market and holding short positions on the market wouldn't be able to make legitimate claims against the issuer of these contracts, which is GPW in this case, GPW could face a number of other consequences. Such an approach would make the activities of arbitrageurs or SWAP issuers riskier on the Polish stock exchange. As a result, the spread in the futures market could increase, liquidity in the cash and futures market would decrease somewhat, and/or some arbitrageurs would leave GPW, or such market participants would propose the introduction of futures contracts based not on WIG20 or mWIG40, but MSCI Poland (considering it to be a more stable and pro-market index provider). I also suspect that some index funds would switch from using WIG indices to MSCI/FTSE etc. indices covering Poland. The adoption of a price other than zero could eventually marginalize the WIG index family. Although the scenario mentioned in the last two sentences is an extreme one, I believe it is realistic.

Response 2)

In our opinion, the impact on the index/benchmark will be more consistent with the behavior of investments held by the entities.

Response 3)

The operation should take into account the gain or loss on futures contracts, so that the contract price compensates for the differences in valuation after exclusion.

Response 4)

After the operation with a price equal to zero, GPW will not have the technical ability in the future to apply this price to shares in IT systems and information products, among others.

Response 5)

- The company should exit the index with the available and tradable market price at the close of the session so that all investors have the opportunity to position themselves.

- If no tradable market price is available, the company should exit the index with a price of zero at the close of the session.
2. At what point in time should a company be removed by the Administrator from index portfolios in the case described in question 1?
- **immediately after GPW's decision to suspend trading of the stock**

Response 1)

In our opinion, the company should be removed in a way that does not rigidly affect the benchmark's performance during the period when its price can no longer reflect its value due to the suspension of trading. Presumably, GPW's decision will be effective from the end of the session.

- **immediately after GPW's decision to exclude the stock from trading**

Response 1)

The operation should take into account the gain or loss on futures contracts, so that the contract price compensates for the differences in valuation after exclusion.

- **after the end of the session**

Response 1)

For greater transparency of the index, the operation should be carried out at the end of the day. Removing the company during the day could make it difficult for investors to assess events and determine the appropriate level of the index.

On the other hand, the adjustment of the company's value to zero should be reflected in the index as quickly as operationally possible (if the information became available during the session rather than before the session, in which case it should be reflected from the beginning of the day).

Response 2)

In our opinion, the company should be removed in a way that does not rigidly affect the benchmark's performance during the period when its price can no longer reflect its value due to the suspension of trading. Presumably, GPW's decision will be effective from the end of the session.

3. Do you support the amendment of the rules on the qualification thresholds for the mWIG40 and sWIG80 indices on the basis of proportionality?
- **Yes**

Response 1)

This is not, in my opinion, as crucial an issue as mentioned above. However, changing the proportionality rules will ensure greater continuity of the index component's history, and therefore less index rotation, which is generally a desirable feature for indices.

4. Do you support a change in the rules for the qualification of companies from the reserve list for the portfolios of the WIG20, mWIG40, sWIG80 and WIG30 indices, preceded by a verification if the company met the MTR ratio in the last month before the extraordinary adjustment?

○ **Yes**

Response 1)

Implementing this change will ensure greater continuity in the composition of the indices (a less liquid company that enters the index as part of an extraordinary correction will not be excluded from the index at the next extraordinary correction). It will also make index replication easier for index fund managers.

5. What rules should apply for the verification of dual listed companies in terms of the legitimacy of their presence in the portfolios of GPW Indices in the event of significant differences in the company's stock price on the GPW compared to another (non-GPW) exchange?

For other dual listed companies, the acceptable threshold for the difference in trading volumes during the reference period is proposed at 5%:

○ **no, higher, more than 20%**

Response 1)

I would omit the additional level of comparing trading volumes and leave only the one relating to points 1-2.

For dual listed companies, the acceptable threshold for the difference in stock prices during the reference period is proposed at 2%:

○ **no, higher 10%**

Response 1)

Considering the profitability of arbitrage, I think this range should be wider than 2%. 10% seems to be a reasonable proposal. Regarding arbitrageability, a value above 10% usually indicates a structural problem (as in the case of Serinus) or limited liquidity in at least one market (making arbitrage unprofitable due to fixed costs of the operation).

In the case of qualification of companies, it is recommended to perform the qualification of dual listed companies, i.e. removing companies, from the following indices:

- **All GPW Indices and CEEplus**

Response 1)

The qualification process can be applied to all indices published by GPW Benchmark or only to Polish stock indices (WIG).