

CHANGES IN COMPANY QUALIFICATION METHODS FOR THE WIG20, mWIG40, sWIG80 and WIG30 INDICES SINCE MARCH 19, 2021

GPW Benchmark S.A., in accordance with the rules defined in the applicable documentation, has introduced [changes of the methods](#) of developing Indices from the GPW Indices Family, which were made public on February 12, 2021. The purpose of the changes is to secure long-term reliability of GPW Indices as benchmarks within the meaning of the EU Benchmarks Regulation ("BMR"). Changes allow for:

- maintaining the representativeness of GPW Indices for their underlying markets, i.e. ensuring that each Index, despite significant and unexpected market changes, is a precise tool for measuring exactly the part of the equity market that a given Index aims to reflect, and at the same time
- avoiding doubts in qualification of companies for the Indices' portfolios, which could lead to a discretionary approach in qualification in special situations, e.g. related to individual, sharp changes in the level of trading in given shares of companies on the relevant market organized by the Warsaw Stock Exchange (GPW S.A.)

More information on justification for the changes and results of the public consultation is presented in the [consultation document](#) and in the [summary](#) of the above-mentioned consultation.

WHAT ARE THE KEY CHANGES?

The most important changes concern the qualification of companies to the rankings and portfolios of the WIG20, mWIG40, sWIG80 and WIG30 Indices. The changes include:

- Introduction of the monthly turnover index (MTR) as a new, additional criterion for qualifying companies to Indices
- Calibration of the rules for determining ranking points, consisting in a change in the weights from the current 0.6 for turnover on the company's shares and 0.4 for capitalization in free float, to new weights: 0.4 for turnover and 0.6 for capitalization. Correction of the qualification rules for the mWIG40 and sWIG80 indices of companies listed simultaneously on markets other than the Warsaw Stock Exchange (dual-listing). Instead of the current permanent limitation of the qualifications of companies of this type at the level of EUR 1 billion (for companies that would qualify for the mWIG40) and EUR 100 million (for companies that would qualify for the sWIG80), the median capitalization of companies for the period of 3 months before the date of ranking. For mWIG40, the median is calculated on the basis of companies included in WIG20, while for sWIG80, the median is calculated on the basis of companies included in mWIG40.

WHEN WILL THESE CHANGES BE INTRODUCED?

The content of the Rules of GPW Indices Family presented on February 12, 2021 shall apply from March 19, 2021, i.e. the date of the scheduled periodic adjustment of the Indices. Therefore, the changes described above were taken into account when creating the rankings and establishing new index portfolios for the purposes of the annual revision. After the session on March 19, new lists of participants will apply to all Indices, drawn up according to the rules summarized below.

DO CHANGES IN SELECTION METHODS CAUSE SIGNIFICANT ADJUSTMENTS IN COMPOSITION OF INDICES?

While analyzing the scope of the necessary changes, GPW Benchmark conducted numerous simulations and tests to assess the potential impact of various variants of changes on the Stock Indices portfolios in the future. The simulations confirmed that the indicated changes achieve the assumed goals in the long run, and at the same time will not cause radical changes to the lists of Index participants immediately after their introduction. The stability of the Indices is maintained, however, there will be unit changes in the composition of some Indices (compared to the method of selecting companies used so far under periodic adjustments).

The WIG20, mWIG40, sWIG80 and WIG30 rankings are compiled as of 4 weeks before the annual revision. In line with this principle, the publication of information on the new compositions took place on March 4th 2021. One should remember that by the date of the revision on March 19th 2021, the portfolios of the Indices may be changed due to extraordinary situations, e.g. a special designation of the company (bankruptcy procedure) or a decrease in number of free-float shares below 10 percent of total number of shares.

HOW ARE THE NEW LISTS OF INDEX PARTICIPANTS DETERMINED?

In order to understand the introduced changes, it should be remembered that companies are qualified to list of participants¹ of each Index from its ranking. Index ranking is an ordered list of listed companies that meet the combined criteria for qualifying for a given Index and on the basis of which its portfolio is composed. The Index ranking is drafted 4 weeks before each quarterly and annual adjustment. The list of companies participating in the ranking is established according to the detailed rules specified in the Rules.

The companies that are the highest in the latest ranking are entered into the lists of Index participants as a result of the annual revision, quarterly adjustment or extraordinary adjustment, within the available number of places in the Index. Apart from the lists of participants (portfolios), reserve lists of Indices are prepared. They are published so that, in special cases requiring the replacement of one company in the Index for another as part of an extraordinary adjustment, interested investors know in advance which company may be included in a given Index.

As part of the changes introduced in the WIG20, mWIG40, sWIG80 and WIG30 methodologies, a new liquidity criterion was introduced, i.e. the Monthly Turnover Index (MTR), on the basis of which companies are classified to individual Indices. The introduction of MTR should support changes to Index portfolios "cleansed" from companies with low liquidity or with their liquidity "disrupted" by single large-value transactions.

HOW IS MTR APPLIED IN PRACTICE?

1. The turnover ratio is calculated according to the formula:

Daily Turnover Ratio (DTR) (%) = daily trading volume / number of free float shares *

* as at the end of the month

Monthly Turnover Ratio (MTR) (%) = median [DTR (%)]

¹ "Index participant" is a company comprising the Index or Sub-Index; the terms "list of participants" and "Index portfolio" used in the Rules are synonyms of the more colloquial term "composition".

Example:

$$\text{DTR (\%)} = 20,000 / 20,000,000 = 0.1\%$$

DTR values

Session day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DTR (%)	0.10	0.45	0.12	0.12	0.01	0.11	0.12	0.25	0.01	0.02	0.20	0.15	0.13	0.12	0.08	0.06	0.00	0.01	0.01	0.22

DTR values in ascending order

Session day	17	5	9	18	19	10	16	15	1	6	4	7	3	14	13	12	11	20	8	2
DTR (%)	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.08	0.10	0.11	0.12	0.12	0.12	0.12	0.13	0.15	0.20	0.22	0.25	0.45

$$\text{MTR (\%)} = (0.11 + 0.12) / 2 = 0.1150\%$$

- The joint ranking of the WIG20, mWIG40, sWIG80 and WIG30 indices does not include companies traded on the Warsaw Stock Exchange for less than 4 months, for which it is not possible to determine monthly MTR levels and verify compliance with the MTR criterion in accordance with the Rules.
- For each Index separately, the MTR level (threshold) is calculated and published in January for the period of the previous calendar year, with the same threshold value for WIG20 and WIG30. The levels of indicators are calculated on the basis of the formula:

$$\text{MTR level (\%)} = \min_{i \in N} (\text{MTR}(\%)_i) + 0.2 * \text{average}_{i \in N} (\text{MTR}(\%)_i),$$

where:

N – portfolio of a given Index containing the i-th number of companies

Annual verification of the MTR thresholds will allow to adapt them to the prevailing market conditions.

- MTR threshold values applied in the framework of the annual revision scheduled for March 19th 2021 were published in a [press release on February 15th](#).
- Starting from the annual revision of the indices in March 2021, each company included in the Index ranking, before qualifying to the list of participants of a given Index, will be additionally verified in terms of exceeding the relevant MTR threshold value specified in the current announcement.
- As part of the verification of the MTR criterion, a company will become a participant in the Index if it meets one of the following two conditions:
 - the MTR ratio for the company will exceed the MTR level in any 8 months out of 12 full calendar months in 2020,
 - the MTR ratio will exceed the level of the MTR level in 4 of the last 6 calendar months (July - December 2020).
- If none of the above threshold conditions are met, the company will not be included in the list of Participants of a given Index, despite meeting the other criteria as the value of turnover or value of free-float shares, and therefore not qualifying to "higher tier" Index does not invalidate

the company's qualification to "lower tier" Index, i.e. not being qualified to WIG20, does not invalidate the company's qualification to mWIG40 or sWIG80.

8. The MTR criterion does not apply to companies entered into WIG20 and WIG30 through an extraordinary adjustment under the "fast track" procedure in the first 12 months after the introduction of the company's shares to exchange trading. The use of the "fast track" is only possible for companies with a free float of more than 5% of the value of Index portfolio on the IPO date.

In connection with the introduction of an additional criterion for qualifying companies to individual Indices, the ranges of ranking positions were expanded in the ranking, enabling companies to qualify for mWIG40 and sWIG80 as part of annual revisions and quarterly adjustments. In each case, these ranges have been extended by 5 positions.

So far, in order to remain on the mWIG40 list, the company had to be at least 60th in the ranking for annual revision and 70th for quarterly adjustment. In the case of sWIG80, these levels were 145 for revision and 155 for adjustment, respectively.

According to the new rules, in order to remain in mWIG40 Index, a company must be ranked at least 65th for annual revision and 75th for quarterly adjustment. In case of sWIG80, these levels are now 150 for revision and 160 for adjustment, respectively. In the case of WIG20 and WIG30, the previous levels for revisions and adjustments remain unchanged.

The extension of the ranges expands the list of companies from the ranking that will potentially be eligible for the Index, and in particular will prevent shortages in composition of Index portfolios. Without introduction of the above more liberal rules, in an extreme situation less than 40 companies could qualify to mWIG40, and less than 80 companies to sWIG80.

WHAT DOES THE CORRECTION OF THE RANKING POINTS RULES MEAN IN PRACTICE?

As part of the introduced changes, the weight of the company's size (measured by capitalization on the basis of the value of free-float shares) was increased in the ranking in exchange for a reduction in the weight of the liquidity level parameter measured by the total value of trading in the company's shares. So far, the weight of capitalization for determining ranking points was 0.4, and the weight of the turnover value for determining ranking points was 0.6. After the changes, these weights will be 0.6 and 0.4 respectively, and the formula for determining ranking points will be as follows:

$$R(i) = 0.4 * sT(i) + 0.6 * sC(i)$$

where:

R(i) - Company "i" ranking points

sT(i) - percentage share of the turnover of the Company's shares "i" in the total turnover of the shares of the Companies participating in the Ranking

sC(i) - the percentage share of the free float of the company "i" in the free float of the Companies participating in the Ranking.

WHY DO YOU LOWER THE LIQUIDITY WEIGHT IN DETERMINING INDEX RANKINGS, AT THE SAME TIME INTRODUCING A NEW LIQUIDITY CRITERION (MTR)?

Increasing the weight of the company's size with a simultaneous reduction in the weight of the total turnover is to reduce the possible impact of one-off events or short-term trends on the stability of portfolio structures of most popular GPW Indices.

It should be emphasized that liquidity has not been abandoned as a criterion for selecting companies to the Indices; The liquidity criterion, which includes MTR ratio described above, remains an important element of the method of qualifying companies for each of flagship Indices. The introduction of the new threshold in form of MTR and a simultaneous reduction in weight of the turnover value to 40% are mutually complementary decisions and do not contradict.

Ranking points will continue to be calculated taking into account the level of the total volume of trading to reflect investor needs in this regard. When designing the changes, we took into account the current changes in methodologies used by other European administrators of regulated-data benchmarks, e.g. from the DAX benchmark family, which are aimed at strengthening the capitalization criterion as a factor in qualifying companies to portfolios.

WHAT DOES THE ADJUSTMENT OF QUALIFICATION RULES OF DUAL-LISTED COMPANIES MEAN IN PRACTICE?

On the GPW Main Market, companies with high capitalization and relatively low turnover are those dual listed ones (i.e. on several markets simultaneously). This leads to a situation where companies recognized in domestic market as blue chips on the Polish market could qualify for the sWIG80 or possibly for mWIG40. In order to effectively address such cases (i.e. avoid including large companies among medium-sized or small companies), the current method introduces market capitalization thresholds, exceeding which by the company eliminates them from mWIG40 (for the market value of companies above EUR 1 billion) and from sWIG80 (for the market value of companies above EUR 100 million).

The above rigid rules of elimination from mWIG40 and sWIG80 in certain situations mean that dual-listed companies, which are popular among investors, if exceeding the above-mentioned capitalization thresholds, cannot be included in the mWIG40 or sWIG80.

Therefore, GPW Benchmark is introducing a new principle of qualifying dual-listed companies to mWIG40 and sWIG80. Qualification is based on the median market value of companies in the Index, as follows:

- mWIG40 will not include companies listed in the dual listing, with capitalization on the date of the ranking above the median market capitalization of companies from the WIG20 portfolio. The median value is calculated on the basis of the market value of WIG20 companies in the last three months prior to the ranking;
- sWIG80 will not include companies listed in the dual listing with capitalization on the date of the ranking above the median market capitalization of companies in the mWIG40 portfolio. The median value is calculated on the basis of the market value of mWIG40 companies in the last three months prior to the ranking;

The introduction of a new principle of qualifying dual-listed companies to mWIG40 and sWIG80 based on the median market value of companies will allow to follow the current market situation, while still enabling elimination from these Indices – the ones dedicated to smaller companies – of the largest dual-listed companies with limited liquidity of trading on the WSE Main Market.