



Warsaw Stock Exchange Indices

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I. Index Historical Outline

- 16.04.91 – commencement of WIG index publication (first trading session)
- 16.04.94 – commencement of WIG20 index publication
- 31.12.94 – commencement of WIRR index publication
- 03.02.97 – commencement of WIG20 index publication during continuous trading
- 12.06.97 – commencement of NIF index publication
- 04.07.97 – changes of dates and principles of periodic adjustment of WIG20 index, introduction of a principle of periodic modifications to be made on third Friday of the month ending calendar quarter.
- 21.09.98 – commencement of MIDWIG index publication
- 23.03.99 – commencement of sectoral WIG subindex publication
- 30.06.99 – introduction of the principle of weighting reduction in WIG and WIRR indices due to low value of shares in free float
- 19.05.00 – commencement of TechWIG index publication
- 13.08.01 – introduction of the principle of selecting companies for MIDWIG ranking based on capitalization in free float
- 30.04.02 – introduction of the principle of selecting companies for WIG20 ranking based on capitalization in free float
- 20.08.02 – introduction of the principle of connecting WIG index with large and medium-size listed companies, WIRR index – with small listed companies
- 22.12.03 – commencement of WIG-PL index publication
- 01.05.04 – introduction of a principle under which companies exclusively from the main market are allocated to the indices; with the exception of TechWIG index
- 31.05.04 – introduction of the principle of selecting companies for TechWIG ranking based on capitalization in free float
- 27.08.04 – introduction of a principle of increasing weighting in price WIG20, MIDWIG and TechWIG indices in specific cases
- 15.12.04 – introduction of a principle of weighting reduction in WIG, WIRR, WIG-PL indices if a company has carried out redemption of, at least, 10% of its equity
- 31.12.04 – commencement of WIG-media subindex publication
- 01.01.05 – change of principles of determining shares in free float
- 11.03.05 – introduction of the principle of determining the size of weighting in WIG, WIRR and WIG-PL indices due to low value of shares in free float
- 03.10.05 – change of index publication schedule triggered by the change of session schedule
- 31.12.05 – commencement of WIG-oil&gas subindex publication
- 31.12.05 – discontinuation of NIF index publication
- 31.01.07 – change of exchange index methodology; introduction of a principle under which the companies are allocated from all markets; for price indices introduction of a single ranking
- 05.02.07 – denomination of sectoral WIG subindices at a ratio of 1 to 10
- 19.03.07 – replacement of the name of MIDWIG name with mWIG40 and change of methodology WIRR index and renaming it into sWIG80 index
- 15.06.07 – commencement of WIG-developers subindex publication

- 23.06.08 – discontinuation of TechWIG index publication
- 19.09.08 – commencement of WIG-chemicals subindex publication
- 04.05.09 – commencement of WIG20short and WIG20lev strategy indices publication
- 19.11.09 – commencement of RESPECT Index publication
- 31.12.09 – commencement of WIG-energy subindex publication
- 31.12.10 – commencement of WIGdiv index publication
- 26.02.11 – commencement of WIG-basic materials subindex publication
- 04.04.11 – commencement of WIG-Ukraine publication, change of name WIG-PL on WIG-Poland
- 01.12.11 – commencement of WIG-Plus publication
- 30.05.12 – commencement of WIG-CEE publication
- 03.12.12 – commencement of WIG20TR publication
- 23.09.13 – commencement of WIG30 and WIG30TR publication
- 02.01.14 – commencement of WIG30short and WIG30lev publication
- 21.03.14 – discontinuation of sWIG80 and WIG-Plus indices publication
- 23.03.14 – commencement of WIG50 and WIG250 publication
- 31.12.14 – discontinuation of WIG50, WIG250, WIG30lev and WIG30short indices publication, decreasing of WIG30 frequency publication
- 02.01.15 – commencement of sWIG80 publication
- 29.01.16 – modification of terms and dates of ranking computation for WIG20, mWIG40, sWIG80 and WIG30 indices
- 16.12.16 – modification of WIGdiv qualification criteria
- 02.01.17 – commencement of WIG-pharmaceuticals, WIG-automobiles & parts and WIG-clothes; replacement of the name of WIG-basic materials and WIG-developers with WIG-mining and WIG-real estate
- 18.09.17 - commencement of mWIG40TR and sWIG80TR indices publication

II. Exchange indices

The Exchange publishes 30 indices. The values of WIG20, mWIG40, sWIG80, WIG20short, WIG20lev, WIG30, WIGdiv, RESPECT, WIG indices and sectoral subindices: WIG-automobiles&parts, WIG-banking, WIG-chemical, WIG-clothes, WIG-construction, WIG-energy, WIG-food, WIG-IT, WIG-media, WIG-mining, WIG-oil&gas, WIG-real estate, WIG-pharmaceuticals, WIG-telecom are published during continuous trading, whereas the values of other indices are published three times during trading session (following first and second fixing and at session closing) – these include WIG20TR, WIG30TR, mWIG40TR, sWIG80TR WIG-Poland and WIG-Ukraine indices.

WIG20 and mWIG40 are underlying instruments for futures, whereas WIG20 index is also underlying instrument for options and ETF's quoted on the Warsaw Stock Exchange.

The companies that meet the following base criteria may comprise all exchange indices:

- number of shares in free float higher than 10%,
- value of shares in free float higher than € 1 M,
- the company cannot be marked in any particular way,
- the company may not be eligible to ALERT LISTS segments and assigned to the Lower Liquidity Space,
- the company may not be eligible to NC Alert segment (in case of WIG-CEE index).

Weightings of all index participants are determined based on the number of shares in free float and rounded up to the nearest whole thousand. If the number of shares in free float is higher than the number of shares introduced into stock exchange trading, then the weighting is the number of shares introduced into stock exchange trading.

1. Index Profiles

1.1 WIG20 index

WIG20 index has been calculated since April 16, 1994 based on the value of portfolio with shares in 20 major and most liquid companies in the WSE Main List. The initial value of WIG20 index was 1000 points. It is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The WIG20 index may not include more than 5 companies from a single exchange sector.

1.1.1 WIG20TR index

WIG20TR index has been calculated since December 3, 2012. WIG20TR is WIG20 index calculated in total return formula and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income. The historical values were recalculated since December 31, 2004 (the base date). The initial value of WIG20TR index was 1960,57 points and is equal to the WIG20 closing value on the base date.

1.1.2 WIG20short index

WIG20short index has been calculated since May 4, 2009. Its values are computed based on the WIG20 index values, so the WIG20 is underlying index for the WIG20short. The initial value of WIG20short index was 2654,65 points and was equal to the WIG20 closing value on the base date. The movements of WIG20short index reflect the inverse of the WIG20 changes, e.g. a 10pts gain of the blue chip index translate into a 10pts loss of the WIG20short index.

1.1.3 WIG20lev index

WIG20lev index has been calculated since May 4, 2009. Its values are computed based on the WIG20 index values, so the WIG20 is underlying index for the WIG20lev. The initial value of WIG20lev index was 2654,65 points and was equal to the WIG20 closing value on the base date. WIG20lev changes in the same direction as WIG20 albeit with twice the magnitude, e.g. a 10pts rise in the blue chip index will mean a 20pts gain in WIG20lev.

1.2 mWIG40 index

mWIG40 index is successor of MIDWIG index and has been calculated since December 31, 1997 and comprises 40 medium size companies listed at WSE Main List. The initial value of index was 1000 points. mWIG40 is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The mWIG40 index excludes WIG20 and sWIG80 index participants and foreign companies listed at WSE and other markets with the market capitalization at the ranking date above € 1 billion.

1.2.1 mWIG40TR index

WIG20TR index has been calculated since September 18, 2017. mWIG40TR is mWIG40 index calculated in total return formula and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.3 sWIG80 index

sWIG80 index is successor of WIRR index that has been calculated since December 31, 1994 and comprises 80 smaller companies listed at WSE Main List. The initial value of index was 1000 points. sWIG80 is an price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The sWIG80 index excludes WIG20 and mWIG40 index participants and foreign companies listed at WSE and other markets with the market capitalization at the ranking date above € 100 M.

1.3.1 sWIG80TR index

sWIG80TR index has been calculated since September 18, 2017. sWIG80TR is sWIG80 index calculated in total return formula and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.4 WIGdiv index

WIGdiv index has been calculated since December 31, 2010 based on the value of portfolio with shares of companies with higher dividend yield belongs to WIG20, mWIG40 or sWIG80 indices. The initial value of WIGdiv index was 1000 points. It is a total return index and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.5 WIG30 index

WIG30 index has been calculated since September 23, 2013 based on the value of portfolio with shares in 30 major and most liquid companies in the WSE Main List. It is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The WIG30 index may not include more than 7 companies from a single exchange sector.

1.5.1 WIG30TR index

WIG30TR index has been calculated since September 23, 2013. WIG30TR is WIG30 index calculated in total return formula and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.6 WIG index

WIG index is the first exchange index and has been calculated since April 16, 1991. The initial value of WIG index was 1000 points. At present WIG index comprises all companies listed at WSE Main List that meet base eligibility criteria. The WIG index follows the diversification principle, aimed at the limiting the share of a single company and a single exchange sector. It is a total return index and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.7 Sectoral subindices

The WSE calculates the following WIG index sectoral subindices:

WIG-automobiles&parts (since December 31, 2016)

WIG-banking (since December 31, 1998)

WIG-chemicals (since September 19, 2008)

WIG-construction (since December 31, 1998)

WIG-clothes (since December 31, 2016)

WIG-energy (since December 31, 2009)

WIG-food (since December 31, 1998)

WIG-IT (since December 31, 1998)

WIG-media (since December 31, 2004)

WIG-mining (since December 31, 2010)

WIG-oil&gas (since December 31, 2005)

WIG-real estate (since June 15, 2007)

WIG-pharmaceuticals (since December 31, 2016)

WIG-telecom (since December 31, 1998)

At baseline date the values of all subindices were equal to the value of WIG index. The values of subindices allow to evaluate the efficiency of investments into businesses in various sectors of economy. In the subindices' portfolios there are the same weightings as in WIG index portfolio, but selected based on sectoral criterion. Sectoral subindices are based on WIG index methodology and account for income from dividend and subscription rights.

1.8 WIG-CEE index

WIG-CEE index has been calculated since May 30, 2012. The index comprises shares of companies listed at WSE Main List and NewConnect that meet base eligibility criteria. Only companies from: Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovenia, Slovakia and Ukraine can be the index members. WIG-CEE base date is December 31, 2010. The first value of WIG-CEE index was 1000 points.

1.9 WIG-Poland index

The Exchange has been calculating WIG-Poland index since December 22, 2003. The index comprises exclusively shares in domestic companies listed at WSE Main List that meet base eligibility criteria. The historical values and index principles are identical with the WIG index. This means that in the period from April 16, 1991 to December 19, 2003 the values and portfolio structure of both indices were the same. At present both values as well as WIG-Poland and WIG index participants are different.

1.10 WIG-Ukraine index

The Exchange has been calculating WIG-Ukraine index since December 31, 2010. The index comprises exclusively shares of companies considered as Ukrainian listed at WSE Main List that meet base eligibility criteria. The WIG-Ukraine index follows the diversification principle, aimed at the limiting the share of a single company. It is a total return index and thus when it is calculated it accounts for both prices of underlying shares and dividend and subscription rights' income.

1.11 RESPECT Index

RESPECT Index includes socially responsible companies listed on the WSE Main List. The social responsibility is understood as a management strategy and approach to the concept of conducting business, which involves building a good and lasting relationship based on mutual understanding and respect expectations of the wider business environment (ie. with all stakeholders: employees, suppliers, customers, community, shareholders and envisaging the care of natural environments).

RESPECT Index base date is December 31, 2008. The first value of RESPECT Index was 1000 points. It is an income-based index and thus when it is calculated it accounts for both prices of underlying shares and dividend and pre-emptive rights' income.

2. Index publication principles

Exchange indices are published on the WSE website, in the WSE Official Bulletin, through news agencies (PAP, Thomson - Reuters, Bloomberg) and on teletext (TVP1, TVP2 and Polonia TV channels).

Index	Publication mode	Opening index	Current index	Closing index
WIG20, WIG20short, WIG20lev	continuous	as long as the session transactions will allow to value at least 65% of portfolio capitalization; not earlier than after 60 s after trading session start; not later than at 10:00 a.m.	every 15 s	5:10 p.m. preliminary 5:15 p.m. final
mWIG40			every 60 s	
sWIG80			every 60 s	
WIG			every 60 s	
WIGdiv			every 60 s	
RESPECT			every 60 s	
WIG30			every 60 s	
sectoral subindices			every 60 s	
WIG20TR WIG30TR mWIG40TR sWIG80TR WIG-CEE WIG-Poland WIG-Ukraine	single auction	at 11:15 a.m. – as long as the session transactions will allow to value at least 65% of portfolio capitalization.	3:15 p.m. (following the 2 nd fixing)	

*criterion 60s. from the start of the trading does not apply to WIG20

**for the WIG-CCE index the session transactions will allow to value at least 35% of portfolio capitalization

If the cancellation of exchange transactions had impact on the value of exchange indices or subindices, then following trading session the opening and closing values of indices as well as daily maximum and minimum

of such indices and subindices will be calculated and made public. During the trading session the Exchange does not recalculate the indices.

3. Indices' calculation principles

3.1 Principles for main indices

$$\text{INDEX} = \frac{\text{Current capitalization}}{\text{Underlying capitalization} * \text{Adjustment factor}} * \text{Index underlying value}$$

or:

$$\text{INDEX} = \frac{\sum P(i)*S(i)}{\sum (P(0)*S(0))* K(t)} * I(0)$$

S(i) – Weighting of an index 'i' participant during a trading session

P(i) – Price of an index 'i' participant during a trading session

S(0) – Weighting of an index 'i' participant during a session at baseline date

P(0) – Price of an index 'i' participant during a session at baseline date

K(t) - Index adjustment factor during a trading session

I(0) – index underlying value:

WIG20 = 1 000.00 points,

mWIG40 = 1 000.00 points,

sWIG80 = 1 000.00 points,

WIG = 1 000.00 points,

WIGdiv = 1 000.00 points,

RESPECT = 1 000.00 points,

WIG30 = 2 582.98 points,

WIG-CEE = 1 000,00

WIG-Poland = 1 000.00 points,

WIG-Ukraine = 1 000.00 points,

WIG-automobiles&parts = 5 175.40

WIG-banking = 1 279.56 points,

WIG-chemicals = 3 836.10 points,

WIG-construction = 1 279.56 points,

WIG-clothes = 5 175.40

WIG-food = 1 279.56 points,

WIG-energy = 3 998.60 points,

WIG-IT = 1 279.56 points,

WIG-media = 2 663.62 points,

WIG-mining = 4 748,99 points,

WIG-oil&gas = 3 560.08 points,

WIG-real estate = 6 543.82 points,

WIG-pharmaceuticals = 5 175.40

WIG-telecom = 1 279.56 points

3.2 Principles for strategy indices

3.2.1 Principles for short indices

$$INDEXshort_t = INDEXshort_T \cdot \left(-1 \cdot \frac{INDEX_t}{INDEX_T} + 2 \right) + 2 \cdot INDEX_T \cdot \left(\frac{R}{360} \right) \cdot d$$

INDEXshort_t – current value of the INDEXshort index

INDEXshort_T – last closing value of INDEXshort index

INDEX_t – current value of the underlying index

INDEX_T – last closing value of the underlying index

R – percentage rate of PLN denominated Overnight deposits determined according to the Rules and Regulations for the Fixing of the Reference Rate "POLONIA" adopted by the Management Board of ACI Polska – Financial Markets Association

d – number of calendar days between day t and day T

3.2.2 Principles for leverage indices

$$INDEXlev_t = INDEXlev_T \cdot \left(2 \cdot \frac{INDEX_t}{INDEX_T} - 1 \right) - INDEXlev_T \cdot \left(\frac{R}{360} \right) \cdot d$$

INDEXlev_t – current value of the INDEXlev index

INDEXlev_T – last closing value of INDEXlev index

INDEX_t – current value of the underlying index

INDEX_T – last closing value of the underlying index

R – percentage rate of PLN denominated Overnight deposits determined according to the Rules and Regulations for the Fixing of the Reference Rate "POLONIA" adopted by the Management Board of ACI Polska – Financial Markets Association

d – number of calendar days between day t and day T

4. Periodic modifications

Modifications in all exchange index portfolios are made following the trading session on third Friday of March, June, September and December.

4.1 WIG20, WIG20TR, mWIG40, sWIG80, WIG30, WIG30TR, mWIG40TR and sWIG80TR

The WIG20, WIG20TR, mWIG40, sWIG80, WIG30, WIG30TR, mWIG40TR and sWIG80TR indices participants are selected based on 4 weeks before third Friday on March (annual revision) and 4 weeks before third Friday of June, September and December (quarterly adjustments).

4.1.1 Preliminary selection

In the initial phase companies that are eligible for participation in index ranking are selected. Companies that meet base criteria and are not in last quartile by free-float capitalisation are ranked.

4.1.2 Index ranking

For WIG20, WIG20TR, mWIG40, sWIG80, WIG30, WIG30TR, mWIG40TR and sWIG80TR indices one joint ranking is developed. The selected companies are ranked based on the number of ranking points scored. Ranking score is calculated using the following formula:

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

R(i) - ranking points scored by „i” company

sT(i) – share of „i” company in total traded volume of shares involved in the ranking in the last 12 months.

sC(i) – share of „i” company in the value of shares in free float of companies involved in the ranking at the date of its preparation.

4.1.3 WIG20 and WIG20TR indices participants

WIG20 and WIG20TR indices may include the companies from the highest positions in the ranking of this index.

Unconditionally the index:

- comprises the companies ranked at 15th position or higher until annual revision (10th position or higher until quarterly adjustment);
- does not comprise the companies ranked at 26th position or lower until annual revision (31st position or lower until quarterly adjustment).

Companies ranked at 16th-25th positions until annual revision and 11th –30th positions until quarterly adjustment are added to or deleted from the index, if necessary.

The companies that were ranked high in index ranking and were not put on the list of index participants are put on an index reserve list.

The size of weighting is reduced proportionally as of the ranking date, if the value of shares in a certain index company exceeds 15% of its value.

4.1.4 mWIG40 and mWIG40TR index participants

Unconditionally the index:

- comprises the companies ranked at 50th position or higher until annual revision (45th position or higher until quarterly adjustment);
- does not comprise the companies ranked at 66th position or lower until annual revision (71st position or lower until quarterly adjustment).

Companies ranked at 51st -65th positions until annual revision and 46th – 70th positions until quarterly adjustment are added to or deleted from the index, if necessary.

The companies that were ranked high in index ranking and were not put on the list of index participants are put on an index reserve list.

The size of weighting is reduced proportionally as of the ranking date, if the value of shares in a certain index company exceeds 10% of its value.

4.1.5 sWIG80 and sWIG80TR index participants

Unconditionally the index:

- comprises the companies ranked at 120th position or higher until annual revision (110th position or higher until quarterly adjustment);
- does not comprise the companies ranked at 146th position or lower until annual revision (156th position or lower until quarterly adjustment).

Companies ranked at 121st - 145th positions until annual revision and 111th – 155th positions until quarterly adjustment are added to or deleted from the index, if necessary.

The companies that were ranked high in index ranking and were not put on the list of index participants are put on an index reserve list.

The size of weighting is reduced proportionally as of the ranking date, if the value of shares in a certain index company exceeds 10% of its value.

4.1.6 WIG30 and WIG30TR indices participants

WIG30 and WIG30TR indices may include the companies from the highest positions in the ranking of this index.

Unconditionally the index:

- comprises the companies ranked at 20th position or higher until annual revision (15th position or higher until quarterly adjustment);
- does not comprise the companies ranked at 41st position or lower until annual revision (46th position or lower until quarterly adjustment).

Companies ranked at 21st-40th positions until annual revision and 16th-45th positions until quarterly adjustment are added to or deleted from the index, if necessary.

The companies that were ranked high in index ranking and were not put on the list of index participants are put on an index reserve list.

The size of weighting is reduced proportionally as of the ranking date, if the value of shares in a certain index company exceeds 10% of its value.

4.2 WIG20short and WIG20lev indices

Strategy indices values are computed based on the underlying indices values, thus there is no need to construct their portfolios. Periodic adjustments or revisions are not executed.

4.3 WIG, WIG-CEE, WIG-Poland and WIG-Ukraine indices

The WIG, WIG-Poland and WIG-Ukraine indices participants are selected based on data following the last session in February, May, August and November.

4.3.1 WIG, WIG-Poland and WIG-Ukraine indices participants

The index ranking may apply to all companies meeting base criteria, save that WIG-CEE index may comprise Central Easter Europe (CEE) region companies, WIG-Poland index may comprise exclusively domestic companies and WIG-Ukraine companies considered as Ukrainian. When evaluating the status of a certain company the Exchange takes into consideration the state in which the company is domiciled or headquartered, the state where it has most of its operations and the state in which the first IPO was carried out. When evaluating company status the Exchange requests the opinion of Index Committee.

In WIG-CEE one company could not exceed 10% or 25% of weighing (if number of companies in index portfolio is lower than 30) but companies from one country weight could not be higher than 50%. Weightings of the largest companies in other indices are limited to 40% when the index number of participants is less than 30 and 10% in other cases. The share of companies from a single exchange sector may not exceed 30% at the date of ranking indices. The weightings of the companies whose percentage shares exceed the above limits are reduced.

4.4 WIGdiv index

The WIGdiv index participants are selected based on data following the last session in November. Additionally after last session of February, May, and August packages of shares are updated.

4.4.1 WIGdiv index participants

The Index may apply to all companies from WIG20, mWIG40 and sWIG80 indices. Only companies with higher dividend yield on the last session of November are added to index participant list. Accordingly dividend must be paid regularly during last 5 years. The share of a single company in the index may not exceed 10%. The weightings of the companies whose percentage shares exceed the above limits are reduced.

4.5 WIG index sectoral subindices

The modifications of WIG index are performed in parallel to modifications of sectoral indices. The companies falling into exchange sectors, put on the list of WIG index participants, are allocated to individual indices. Weightings in sectoral indices are equal to the weightings in WIG index.

4.6 RESPECT Index

The annual revision of RESPECT Index is conducted after the third Friday of December. The RESPECT Index participants are selected based on the RESPECT ranking. Index participants become companies with the highest position in the RESPECT Rating (A, AA or AAA). Index participants' weightings are determined based on the

number of shares in free float and rounded to the nearest one thousand shares on the last session in November. Additionally after last session of February, May, and August packages of shares are updated. Weightings of the largest companies are limited to 25% when the index number of participants is less than 20 and 10% in other cases.

4.7 Recalculation of index adjustment factor

Each time following periodic modification on the list of index participants the adjustment factor for each index is recalculated. This operation is carried out in order to maintain continuity of index values. For this purpose the following formula is used:

$$K(t) = \frac{M(t)+Q(t)-Z(t)}{M(t)} * K(t')$$

M(t) – capitalisation of index portfolio before modification

Q(t) - value of weightings of companies put on index list

Z(t) - value of weightings of participants deleted from index list

K(t) – new value of adjustment factor

K(t') – previous value of adjustment factor

5. Periodic modification announcement schedule

Index	Action	Announcement date
WIG20, WIG20TR, mWIG40, sWIG80, WIG30, WIG30TR, mWIG40TR, sWIG80TR	annual revision quarterly adjustment	2 weeks before change implementation i.e. prior to 3 rd Friday in March, June, September and December
WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, sectoral subindices	quarterly revision	1 week before change implementation i.e. prior to 3 rd Friday in March, June, September and December
RESPECT Index	annual revision quarterly adjustment	1 week before change implementation i.e. prior to 3 rd Friday in March, June, September and December

6. Extraordinary modifications

6.1 Entering a company on a list of index participants

A new company is put on a list of index participants when:

- for WIG20 and WIG30 indices if a company had an IPO, with the capitalisation in free float at IPO date accounting, at least, for 5% of capitalisation in free float of all companies in WIG20 or WIG30 index at such date. The company, which is currently index participant and was ranked at the lowest position is deleted from the index.
- for WIG, WIG-Poland and WIG-Ukraine indices if a company had an IPO, three days following the IPO, provided that all requirements related to periodic modifications have been met;
- for WIG-CEE if a company had an IPO, three days following the IPO if country of the company belong to the index or during the periodical review but at least two companies from one country are listed on WSE.

The weightings of index participants are determined pursuant to the principles of periodic modifications.

6.2 Deleting a company from a list of index participants

In special cases an extraordinary adjustment of index participants may be carried out. Such adjustment will involve deleting a company from a list of an index participants.

Deleting a company from a list of index participants reduces the number of index participants. In case of WIG20, mWIG40, sWIG80 and WIG30 the deleted company is replaced by a company from the highest position on a reserve list. Additionally in case of WIG20 (or WIG30) index if it comprises 5 companies (in case of WIG30 comprise 7 companies) from a single sector, then a new company has to represent another sector. Following the extraordinary modification the index adjustment factor is recalculated using the formula presented below:

$$K(t) = \frac{M(t)-Z(t)}{M(t)} * K(t')$$

M(t) – capitalization of index portfolio before modification

Z(t) - value of weighting of a company deleted from a list of index participants

K(t) – new value of adjustment factor

K(t') – previous value of adjustment factor

6.3 Change of weightings of index participants

The weightings of index participants are changed if:

- two or more index participants have merged,
- the index participant was split into two or more companies,
- change of free float of 250 euro mil.

The change of weighting of participant involves summing up of weightings of previous index participants in case of merger, free float change, split or spin off:

$$S(i) = S(i1) + S(i2)$$

S(i) – new number of shares of „i” participant in index portfolio

S(i1) – previous number of shares of „i1” participant in index portfolio

S(i2) – previous number of shares of „i2” participant in index portfolio

6.4 Modifications driven by market transactions

Indices are modified pursuant to the following market transactions:

- share split,
- reverse split,
- dividend (only for WIG20TR, WIG30TR, mWIG40TR, sWIG80TR, WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, WIG sectoral subindices and RESPECT Index),
- subscription right.

6.4.1 Share split or reverse split

In the event of share split or reverse split of an index participant the modification of an index involves designation of a new weighting of index participant using the following formula:

$$S(i) = S(i') * N$$

S(i) – new number of shares of „i” participant in index portfolio following the split

S(i') – previous number of shares of „i” participant in index portfolio

N – split or reverse split ratio

6.4.2 Dividend

Right to dividend has impact on total return indices (WIG20TR, WIG30TR, mWIG40TR, sWIG80TR, WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, WIG sectoral subindices and RESPECT Index) and requires the determination of a new value of adjustment factor using the following formula:

$$K(t) = \frac{M(t) - [D(i) * S(i)]}{M(t)} * K(t')$$

M(t) – capitalisation of index portfolio before modification,

D(t) - dividend per share payable by the „i” company that will be quoted at the trading session „t+1” for the first time as „without dividend”; if the dividend has been determined in a foreign currency, the amount of dividend will be converted into Polish zlotys using the average rate for this currency published by the National Bank of Poland effective on „t” day,

S(i) – a new number of shares of „i” participant in index portfolio

K(t) – new value of adjustment factor

K(t') – previous value of adjustment factor

6.4.3 Subscription right

6.4.3.1 Subscription right in total return indices

Subscription right has impact on total return indices (WIG20TR, WIG30TR, mWIG40TR, sWIG80TR, WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, WIG sectoral subindices and RESPECT Index) and requires the determination of a new value of adjustment factor using the following formula:

$$K(t) = \frac{M(t)-V(i)}{M(t)} * K(t')$$

$$V(i) = \frac{P(i) - P(e)}{N(i) + 1} * S(i)$$

V(t) – theoretical value of subscription rights to „i” shares that will be quoted for the first time at „t+1” trading session as shares „without subscription right”; it is not calculated when P(e)>P(i),

P(i) – price of an ‘i’ stock during a certain session

P(e) – price of shares of new issue with a subscription right of „i” company

N(i) – number of shares necessary to acquire 1 share of a new issue of „i” company

S(i) – a new number of shares of „i” participant in index portfolio

6.4.3.2 Subscription right in price indices

For price indices (WIG20, mWIG40, sWIG80 and WIG30) the subscription right involves the deletion of a certain company from the index during the first „without subscription right” trading session, if the price of “without subscription right” shares quoted for the first time is lower than the last closing price.

6.5 Suspension of trading index participant for determined period

In case of suspension of trading index participant for determined period, the index participant is still index member, and index values are calculated based on last price of suspended index participant.

7. Extraordinary modification announcement schedule

Index	Action	Announcement date
WIG20, WIG20TR, mWIG40, sWIG80, WIG30, WIG30TR, mWIG40TR, sWIG80TR	adding a new index participant, deletion of previous index participant, change of weight of index participant	2 days prior to making modifications
WIG, WIG-Poland, WIG-CEE, WIG-Ukraine, WIGdiv, WIG sectoral subindices	adding a new index participant, deletion of previous index participant,	Forthwith, at modification date at the latest
RESPECT Index	deletion of index participant	Forthwith, at modification date at the latest

III. Shares in Free Float

The shares in free float are all shares issued by the company and entered into an appropriate register except for:

- shares in the possession of a single or a group of shareholders having ties with one another accounting for at least 5% of total shareholders' equity,
- company equity earmarked for redemption,
- individual shares.

The following shares (regardless of percentage held) are always in free float:

- held by investment and pension funds,
- held by asset management financial institutions,
- covered by depository receipts issue programmes.

For domestic companies the calculation basis for the number of shares in free float are issuing prospectuses, current and periodic communiqués and publicly available information about their weighting structure. In the event of information about the acquisition or disposal of a large weighting that would result in free float share index drop below zero or jump above 100%, such information is not considered in index calculation until information has been given about the other transacting party.

For foreign companies that are listed at WSE and also at foreign exchanges (dual listing), shares in free float are calculated as a product of such shares and the ratio of traded volume at WSE and foreign market. If the value is less than a median of shares deposited with the National Depository for Securities for a period of last 3 months, then the number of shares in free float will be the median.

In doubtful cases the Exchange requests the opinion of Index Committee.

IV. Sectoral classification

The Exchange classifies the listed companies into one of economy sectors depending on the scope of their business activities in compliance with European Activity Classification and depending on revenues structure. In doubtful cases a company is put on a sectoral list based on opinion given by the members of Index Committee.

MACRO-SECTOR	Sector	sub-sector	
FINANCIALS	Banks	commercial banks	
		co-operative banks	
		mortgage banks	
		government and international banks	
		other	
	Insurance	insurance offices	
		other	
	Capital Market	exchanges and brokers	
		asset management	
		other	
	Real Estate	real estate sales	
		real estate rent	
		other	
		Leasing & Factoring	
		Mortgage	
		Financial Services	
	Investment		
	Other		
OIL & ENERGY	Oil & Gas	oil & gas exploration & production	
		oil & gas refining & transportation	
		other	
	Energy	power engineering	
		eco-energy	
		other	
	Water & Multi-utilities		
		Other	
CHEMICALS & MATERIALS	Chemicals	basic chemicals	
		specialty chemicals	
		other	
	Mining	carbon mining	
		metals mining	
		other	
	Metallurgy	steel metallurgy	
		non-ferrous metallurgy	
		other	
		Basic Materials	
		Rubber & Plastic	plastic
			rubber

		other
MACRO-SECTOR	Sector	sub-sector
	Paper & Forestry	forestry
		paper & packing
		other
	Recycling	
	Other	
INDUSTRIALS	Construction	general construction
		industry construction
		engineering
		construction materials
		building products
		other
	Machinery	electro machinery
		industrial machinery
		metals products
		farm & heavy trucks
		other
	Transportation	transport
		logistics
		other
	Industrial Supplies	electro products
		steel products
		chemical products
		other
	Industry Services	
	Other	
CONSUMER GOODS	Food & Drinks	food
		drinks
		agricultural products and fishing
		other
	Clothes & Cosmetics	clothes & footwear
		cosmetics & household chemicals
		other
	Consumer Durables	household durables
		electrical & electronic equipment
		other
	Automobiles & Parts	auto parts
		other
	Other	
TRADE & SERVICES	Wholesale Trade	consumer staples
		computers & electronics
		other
	General Retailers	consumer discretionary

		consumer electronics
MACRO-SECTOR	Sector	sub-sector
		other
	Leisure Facilities	hotels & restaurants
		travel agencies
		sports clubs
		sport & leisure
		other
	Media	radio & tv
		publishing
		advertising
		internet
		other
	Video Games	
	E-Trade	
	Other	
HEALTH CARE	Health Care Services	
	Health Care Equipment	
	Pharmaceuticals	
	Pharmaceuticals Wholesales	
	Biotechnology	
	Other	
TECHNOLOGY	Telecom	
	IT	software
		IT systems
		hardware
		other
	New Technology	
	Other	
GOVERNMENT	State	
	Local Government	voivodship
		county
		county state
		community
		other
	Central Banks	
	Other	
NON-CLASSIFIED		

V. Exchange Index Committee

The Exchange Index Committee is a permanent consultative and advisory body in the field of index methodology and exchange statistics. It was established by the WSE Management Board in October 1997. Its meetings precede the announcements of adjustments and revisions of exchange index portfolios. At present the Exchange Index Committee consists of:

Tomasz K. Wiśniewski (Chairman)

Krzysztof Borowski

Paweł Burzyński

Artur Iwański

Marcin Jurkowski

Małgorzata Odolińska

Paweł Puchalski

Marek Świętoń

Robert Wachała

VI. Licences

In January 1997 the Exchange registered its indices as trade-marks. Since then their use, inter alia, for the purposes of issuing financial instruments requires prior signing of a licence agreement with WSE.

At present the following indices are registered trademarks:

WIG20®
mWIG40®
sWIG80®
WIG®

VII. Benchmarks for financial institutions

In 2003 the Warsaw Stock Exchange started designing and calculation of benchmarks in line with individual requirements of third party institutions bearing in mind that their design and calculation principles have to be transparent. The Exchange guarantees the reliability of index design and exercises day-to-day supervision over the calculation of index value pursuant to concluded agreements.

The such service has been provided for:

- Investors MS benchmark, an investment fund Investors TFI S.A. (since March 2003),
- MiS80 benchmark, an indicator for Polish Chamber of Fund and Asset Management (from March to December 2014).
- TBSPIndex, a bond index for BondSpot S.A. (since February 2011),

VIII. Sales of index information

1. Market Data

The Exchange provides in electronic version the following historical exchange index data:

- index values (opening, min, max, closing);
- index portfolios (before and after the session);
- index parameters (adjustment factor, corporate action data).

The access to historical data and information about exchange indices is provided by Information Products and Indices Development Department.

2. Licences for exchange indices

Regarding the fact that indices are registered trademarks and their use requires purchase of a licence, detailed information on the principles of the use of exchange indices and fees is provided by the Information Products and Indices Development Department.

Contact information:

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When preparing this publication best efforts were taken to assure that data specified herein was accurate, however WSE will not bear any liability for damages caused by the publication of contingent errors.

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