



WARSAW STOCK EXCHANGE

Warsaw Stock Exchange Indices

May 2013



Table of Contents

I. Index historical outline	3
II. Exchange indices	5
1. Index Profiles	6
1.1 WIG20 index	6
1.1.1 WIG20TR index	6
1.1.2 WIG20short index	6
1.1.3 WIG20lev index	6
1.2 mWIG40 index	6
1.3 sWIG80 index	6
1.4 WIG-Plus index	7
1.5 WIGdiv index	7
1.6 WIG index	7
1.7 Sectoral subindices	7
1.8 WIG-CEE index	8
1.9 WIG-Poland index	8
1.10 WIG-Ukraine index	8
2. Index publication principles	9
3. Indices' calculation principles	10
3.1 Principles for main indices	10
3.2 Principles for strategy indices	11
4. Periodic modifications	12
4.1 WIG20, WIG20TR, mWIG40, sWIG80, WIG-Plus	12
4.2 WIG20short and WIG20lev indices	13
4.3 WIG, WIG-CEE, WIG-Poland and WIG-Ukraine indices	13
4.4 WIGdiv index	14
4.5 WIG index sectoral subindices	14
4.6 RESPECT Index	14
4.7 Recalculation of index adjustment factor	14
5. Periodic modification announcement schedule	16
6. Extraordinary modifications	17
6.1 Entering a company on a list of index participants	17
6.2 Deleting a company from a list of index participants	17
6.3 Change of weightings of index participants	17
6.4 Modifications driven by market transactions	18
7. Extraordinary modification announcement schedule	20
III. Shares in Free Float	21
IV. Sectoral classification	22
V. Exchange Index Committee	23
VI. Licences	24
VII. Benchmarks for financial institutions	25
VIII. Sales of index information	26



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

II. Exchange indices

The Exchange publishes 24 indices. The values of WIG20, WIG20short, WIG20lev, mWIG40, sWIG80, WIG-Plus, WIGdiv, RESPECT WIG-CEE and WIG indices are published during continuous trading, whereas the value of other indices are published free times during trading session (following first and second fixing and at session closing) – these include WIG20TR, WIG-Poland, WIG-Ukraine indices and sectoral subindices: WIG-banking, WIG-basic materials, WIG-construction, WIG-chemical, WIG-developers, WIG-energy, WIG-IT, WIG-media, WIG-oil&gas, WIG-food, WIG-telecom.

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

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

- 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 MINUS5 and ALERT LISTS segments and assigned to the Lower Liquidity Space.

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 equalled 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 historical values were recalculated since December 31, 2005 (the base date). The initial value of WIG20short index was 2654,65 points and equalled 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 historical values were recalculated since December 31, 2005 (the base date). The initial value of WIG20lev index was 2654,65 points and equalled 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.

1.3 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 a 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.

1.4 WIG-Plus index

WIG-Plus has been calculated since December 31, 2010 and comprises small companies with market value below € 50 M. The initial value of WIG-Plus index was 1000 points. WIG-Plus is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The WIG-Plus index excludes WIG20, mWIG40 and sWIG80 indices participants and foreign companies listed at WSE and other markets with the market capitalization at the ranking date above € 50 M. Number of index participants is variable.

1.5 WIGdiv index

WIGdiv index has been calculated since December 31, 2010 based on the value of portfolio with shares in 30 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.

1.6 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 an 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-banking (since December 31, 1998)
WIG-construction (since December 31, 1998)
WIG-chemicals (since September 19, 2008)
WIG-developers (since June 15, 2007)
WIG-energy (since December 31, 2009)
WIG-IT (since December 31, 1998)
WIG-media (since December 31, 2004)
WIG-oil&gas (since December 31, 2005)
WIG-food (since December 31, 1998)
WIG-basic materials (since December 31, 2010)
WIG-telecom (since December 31, 1998)

At baseline date the values of all subindices equalled then 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 could be a 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 an 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 at WSE Web site, 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-Plus			every 60 s	
WIG, WIG-CEE			every 60 s	
WIGdiv			every 60 s	
RESPECT			every 60 s	
WIG20TR	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 2 nd fixing)	
WIG-Poland				
WIG-Ukraine				
WIG index sectoral subindices				

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 certain session

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

I(0) – index underlying value:

WIG20 = 1 000.00 points,

mWIG40 = 1 000.00 points,

sWIG80 = 1 000.00 points,

WIG-Plus = 1 000.00 points,

WIG = 1 000.00 points,

WIG-CEE = 1 000,00

WIG-Poland = 1 000.00 points,

WIG-Ukraine = 1 000.00 points,

WIG-banking = 1 279.56 points,

WIG – basic materials = 4 748,99 points,

WIG-construction = 1 279.56 points,

WIG-chemicals = 3 836.10 points,

WIG-developers = 6 543.82 points,

WIG-energy = 3 998.60 points,

WIG-food = 1 279.56 points,

WIG-IT = 1 279.56 points,

WIG-media = 2 663.62 points,

WIG-oil&gas = 3 560.08 points,

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, WIG-Plus

The WIG20, WIG20TR, mWIG40, sWIG80, WIG-Plus index participants are selected based on data following the last session in January (annual revision) and April, July and October (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 are ranked.

4.1.2 Index ranking

For WIG20, WIG20TR, mWIG40 and sWIG80 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 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 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 WIG-Plus index participants

Unconditionally the index comprises all companies in last ranking qualified to segment 5PLUS, but not belongs to WIG20, mWIG40 or sWIG80 indices.

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 then 30) but companies from one country weight could no be higher then 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 August. Additionally after last session of February, May, and November packages of shares are updates.

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 August are added to index participant list. Accordingly dividend must be paid minimum three times 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 half year revision of RESPECT Index is conducted after the last session in January and July. 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 December and June. 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, WIG-Plus	annual revision quarterly adjustment	5 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	Half year revision	1 week before change implementation i.e. prior to last session in January and July

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 index 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 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 and sWIG80 the deleted company is replaced by a company from the highest position on a reserve list. Additionally in case of WIG20 index if it comprises 5 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,
- increase of free float above 250 euro mill.

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 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 (WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, WIG sectoral subindices and RESPECT Index) and necessitates 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 (WIG, WIG-CEE, WIG-Poland, WIG-Ukraine, WIGdiv, WIG sectoral subindices and RESPECT Index) and necessitates 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 WIG-Plus) 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.



7. Extraordinary modification announcement schedule

Index	Action	Announcement date
WIG20, WIG20TR, mWIG40, sWIG80, WIG-Plus	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.

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

- 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 smaller than a median of shares deposited with the National Depository for Securities, Poland for a period of last 3 months, then the number of shares in free float will be the median.

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

IV. Sectoral classification

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

Macrosector	Sector	Description	Subindex
INDUSTRY	Food	Foodstuffs, soft drinks and tobacco	WIG-food
	Light	Clothing, textile, woven fabrics and leather	
	Woodworking	Woodworking, pulp & paper, furniture	
	Chemicals	Chemicals and fertilizers	WIG-chemicals
	Pharmaceuticals	Pharmaceuticals, cosmetics and toiletries measures	
	Plastics	Plastics	
	Oil & Gas	Fuel, gas and refining of crude oil	WIG-oil&gas
	Construction materials	Construction materials and other non-metallic raw materials	
	Construction	Construction	WIG-construction
	Electro engineering	Electro engineering, electrical and electronic industries	
	Metal	Metallurgical, metal processing and machine-building	
	Automotive	Automotive and rubber	
	Basic Materials	Basic Materials and Mining	WIG – basic materials
	Other	Other industries	
FINANCE	Banks	Banks	WIG-banking
	Insurance	Insurance	
	Developers	Developers	WIG-developers
	Capital Market	Brokerage houses, investment firms	
	Other	Other financial services	
SERVICES	Wholesale trade	Wholesale trade	
	Retail trade	Retail trade	
	Conglomerates	Conglomerates	
	Telecommunications	Telecommunications	WIG-telecom
	IT	IT and related industries	WIG-IT
	Media	Press, radio, television, portals, advertising and related industries	WIG-media
	Energetic	Energetic and related activities	WIG-energy
	Hotels & Restaurants	Hotels, restaurants, leisure and related activities	
	Other	Other non-financial services	



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

Marcin Jurkowski

Paweł Puchalski

Marek Sojka

Marek Świętoń

Grzegorz Zawada



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 trade-marks:

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 first such service has been provided since 2003 for an investment fund Investors TFI S.A. and involves calculation of Investors MS index.



VIII. Sales of index information

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);
- adjustment factor values.

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

Licences for exchange indices

Owing to the fact that indices are registered trade-marks and their use requires purchase of a licence, detailed information on the principles of and fees for the use of exchange indices is provided by the Information Product Department.

Contact information:

Information Product Department,

ph. (+48 22) 537 72 72

fax. (+48 22) 537 71 34

e-mail: historical.data@wse.pl

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.

Publisher: Warsaw Stock Exchange S.A., Książęca 4,
00-498 Warsaw

Ph.: (+48 22) 537 76 74; fax: (+48 22) 537 76 76

©Copyright Warsaw Stock Exchange,
Warsaw 2013

Edited by: Indices and Statistics Unit
Official publication of The Warsaw Stock Exchange

ISBN 83-88451-44-8