

KAZAKHSTAN STOCK EXCHANGE

Approved

by a decision of the Management Board
of Kazakhstan Stock Exchange JSC

(meeting minutes No. 83
dated August 22, 2017)

Effective

as of October 2, 2017

NOTICE

Mentioned below Methodology in English has been translated by employees of Kazakhstan Stock Exchange for information purposes only. In case of any incompliance of this translation with the Methodology original version in Russian, the latter prevails.

METHODOLOGY

of market indexes calculation

Almaty

2017

LIST OF AMENDMENTS

1. Changes and additions No. 1:

- approved by a decision of the Management Board of Kazakhstan Stock Exchange JSC (meeting minutes No. 75 of July 25, 2018);
- effective from October 1, 2018.

2. Changes and additions No. 2:

- approved by a decision of the Management Board of Kazakhstan Stock Exchange JSC (meeting minutes No. 90 of August 28, 2018);
- effective from September 15, 2018.

3. Changes and additions No. 3:

- approved by a decision of the Management Board of Kazakhstan Stock Exchange JSC (meeting minutes No. 112 of September 25, 2019);
- effective from December 3, 2019.

This Methodology defines the list of market indexes, calculated by Kazakhstan Stock Exchange (hereinafter – the Exchange) and the procedure of calculation of these indexes.

Chapter 1. GENERAL PROVISIONS

Article 1. General provisions

1. In this Methodology concepts are used, defined by other internal documents of the Exchange, including the Methodology of Calculation of Bonds Yield and Amounts of Deals in Bonds (hereinafter – the Methodology of yield calculation).
2. For purposes of this Methodology:
 - 1) corporate bonds mean any debt securities, except for government securities (including foreign) and securities (bonds) of international financial institutions;
 - 2) deals mean deals concluded during the Exchange-operated trades;
 - 3) orders mean orders for conclusion of deals;
 - 4) successful day for a particular financial instrument means a day during which at least one deal in that financial instrument was concluded in the Exchange's trading system.
 - 5) the "net" price of a debt security means the price of that debt security without taking into account the interest accrued thereon but not paid out.
3. The Exchange calculates the following market indexes (hereinafter – indexes):
 - 1) the equity market capitalization;
 - 2) the corporate bond market capitalization;
 - 3) KASE Index is the equity market index reflecting the change in the total market value of the most liquid shares of the Exchange's official list, issued by major financially stable companies-residents of the Republic of Kazakhstan;
 - 4) the corporate bond market indexes of KASE_BM* series:
 - KASE_BMY – the yield indicator of corporate bonds of the main market of the Exchange's official list;
 - KASE_BMC – the index of "net" prices of corporate bonds of the main market of the Exchange's official list;
 - 5) indexes of the corporate bond market of KASE_BA* series:
 - KASE_BAY – the yield indicator of corporate bonds of the alternative market of the Exchange's official list;
 - KASE_BAC – the index of "net" prices of corporate bonds of the alternative market of the Exchange's official list;
 - 6) closing prices for securities.
4. Terms used in this Methodology may also be used in other internal documents of the Exchange, official documents and correspondence of the Exchange and market data.
5. Changes and/or additions to this Methodology are subject to publishing on the Exchange's website (www.kase.kz) not less than 15 days prior to the date of putting these changes and/or additions into effect, except for changes and/or additions which are of editorial and/or adjusting nature and do not impact the procedure of:
 - calculation of indexes;

composing the list of securities whose parameters are used for calculation of one or another indicator;

defining parameters of securities which are used for calculation of one or another indicator;

use by the Committee on Indexes and Securities Valuation (hereinafter – the Committee) of its powers.

Article 2. General Terms of Indexes Calculation

1. For calculation of one or another index, except for securities' closing prices, the Exchange generates the list of securities, parameters of which are used for such calculation (hereinafter – the representative list).

The procedure of generation of representative lists is described in articles 3–6 of this Methodology.

2. The impact of particular securities on KASE Index value or corporate bonds market indexes' value is limited by using the restrictive coefficient (in accordance with item 1 of article 9 and item 1 of article 10 of this Methodology) when calculating those indexes.
3. Indexes (except the KASE Index) are calculated daily upon completion of the trading day on securities¹.

The KASE Index is calculated during the trading day on shares, according to conclusion of deals in shares of those denominations, which are present in the representative list for the KASE Index calculation (irrespective of those deals' execution).

4. Indexes' values are published by the Exchange with accuracy of up to the second decimal place according to the mathematic rounding rules (digits to five are dropped to zero, and digits from five and up are increased to ten).
5. When calculating indexes:
 - 1) parameters of deals related to repo transactions and parameters of orders for conclusion of such deals are not used;
 - 2) parameters of only those deals are used, which were concluded by open trade methods, and only of those orders which were submitted during trades carried out by open trade methods;
 - 3) *(this sub-item was excluded following a decision of the Exchange's Management Board dated August 28, 2018);*
 - 4) parameters of securities, deals and orders, denominated in a foreign currency are converted into Kazakhstan's tenge at the official rate of the National Bank of the Republic of Kazakhstan, fixed with regard to that currency for purposes of accounting, customs and tax payments as of the index calculation day *(this sub-item was changed following a decision of the Exchange's Management Board dated August 28, 2018);*
 - 5) indexed parameters of indexed corporate bonds, deals in such bonds and orders for conclusion of deals in such bonds are used;
 - 6) the number of particular outstanding securities and the number of particular free floating shares are determined by the Exchange based on the information received by it from the admittance initiator of those securities (shares) as part of his obligations towards the Exchange on the information disclosure or from another source, trustworthy in opinion of the Committee.

¹ Hereinafter the trading day on securities means the trading day on securities of those denominations, whose parameters are included into calculation of the corresponding index.

6. In case of absence during the trading day of deals or orders involving securities, parameters of which are necessary for calculation of a particular indicator, for such calculation purposes the data of the last resultant day are used, based on which it is possible to determine such parameters, if not stipulated otherwise by the procedure of that indicator calculation.
7. In order to ensure the adequacy of indicators' values to the stock market's fair characteristics these data may be adjusted by the Committee. The conditions and procedure of such adjustment are specified in article 11 of this Methodology.

Chapter 2. INDICATORS CALCULATION

Article 3. Equity market capitalization calculation

1. The representative list for the calculation of the equity market capitalization (hereinafter in this article – representative list) is formed by the Exchange without the Committee making any decisions, out of shares of all titles included in the Exchange's official list with the use of, provided all of the following conditions are fulfilled in relation to shares of each particular name (considering the specifics, established by item 2 of this article) (*this paragraph was changed by a decision of the Exchange's Management Board dated September 25, 2019*):
 - 1) the receipt by the Exchange of the information on the number of outstanding shares of a particular name;
 - 2) opening by the Exchange of regular trades in shares of this name;
 - 3) conclusion of at least one deal in shares of this denomination by any open trade methods.
2. The following cannot be included in the representative list:
 - 1) preferred shares of an issuer, if common shares of that issuer are not present in the representative list;
 - 2) shares of issuers - non-residents, included in the official list according to the simplified procedure.
3. Particular shares are excluded from the representative list without the Committee making any decisions:
 - 1) exclusion of those shares from the Exchange's representative list;
 - 2) (if those are preferred shares) exclusion of common shares of the same issuer from the Exchange's official list.
4. The equity market capitalization is calculated according to the following formula:

$$CAP_s = \sum_{i=1}^n (Q_i \times \bar{P}_i), \text{ where}$$

- CAP_s – the equity market capitalization, in KZT;
- n – the number of shares denominations present in the representative list;
- Q_i – the number of outstanding shares of the i -th denomination (minus those re-purchased by the issuer), in units;
- \bar{P}_i – the weighted average price of one share of the i -th denomination on deals concluded during the last completed day of trading in shares, in KZT.

5. For information purposes the Exchange can publish the equity market capitalization values in US dollars or another foreign currency. If the equity market capitalization is expressed in a foreign currency, then the official exchange rate of the National Bank of the Republic of Kazakhstan, fixed for accounting purposes, customs and tax payments on the equity market capitalization calculation date is used (*this item was changed following a decision of the Exchange's Management Board dated August 28, 2018*).
6. At consolidation or splitting of particular shares, respective amendments are made to parameters of those shares used during the calculation of the equity market capitalization. In doing so:
 - 1) the indicator of the capitalization of the issuer of those shares is fixed based on the most recent parameters before the procedure of consolidation or splitting of those shares;
 - 2) the calculation of the capitalization of the issuer of those shares is carried out from the moment of conclusion of the first transaction in those shares after the input of the new value of outstanding shares.

(This item was included following a decision of the Exchange's Management Board dated August 28, 2018).

7. At changing of the number of particular outstanding shares respective amendments are made to parameters of those shares used during the calculation of the equity market capitalization.

If the difference between the date of calculation of the equity market capitalization and the date of the most recent transaction in those shares exceeds 90 calendar days (*this paragraph was changed following a decision of the Exchange's Management Board dated September 25, 2019*):

- 1) the indicator of the capitalization of the issuer of those shares is fixed based on the most recent parameters before the change in the number of outstanding shares;
- 2) the calculation of the capitalization of the issuer of those shares is carried out from the moment of conclusion of the first transaction in those shares after the input of the new value of outstanding shares.

(This item was included following a decision of the Exchange's Management Board dated August 28, 2018).

Article 4. Calculation of the corporate bond market capitalization

1. The representative list for calculation of the corporate bond market capitalization (hereinafter – the representative list) is formed by the Exchange, without the Committee making any decisions, out of shares of all denominations included in the Exchange's official list, as the Exchange receives the information on the number of outstanding corporate bonds of one or another denomination.
2. Corporate bonds of particular denomination are excluded from the representative list, without the Committee making any decisions, when excluding corporate bonds of that denomination from the Exchange's official list.
3. The corporate bond market capitalization is calculated according to the formula (considering specifics, established by item 4 of this article):

$$CAP_b = \sum_{i=1}^n Q_i \times N_i), \text{ where}$$

CAP_b – the corporate bond market capitalization, in KZT;

- n – the number of corporate bond denominations, present in the representative list;
- Q_i – the number of outstanding corporate bonds of the i -th denomination, in units;
- N_i – the face value of one corporate bond of the i -th denomination, in KZT.
4. If corporate bonds of particular denomination do not have a face value (as the concept "the bond's face value" is used in the legislation of the Republic of Kazakhstan), the total debt value in nominal terms, certified by the issue prospectus of those corporate bonds (or by a document similar to the issue prospectus of those corporate bonds) is used as the value of the product of the number of outstanding corporate bonds of that denomination by the face value of one corporate bond of that denomination.
 5. For information purposes the Exchange can publish values of the corporate bond market's capitalization in US dollars or another foreign currency. If the corporate bond market capitalization is expressed in a foreign currency, then the official exchange rate of the National Bank of the Republic of Kazakhstan, fixed for accounting purposes, customs and tax payments on the corporate bond market capitalization calculation date is used (*this item was changed following a decision of the Exchange's Management Board dated August 28, 2018*).

Article 5. KASE Index calculation

1. The representative list for calculation of KASE Index (hereinafter in this article – the representative list) is formed by the Committee out of shares present in the Exchange's official list and traded on the main market based on the following selection criteria:
 - 1) the total number of share denominations, present in the representative list, must make up not less than seven;
 - 2) shares of particular denomination can be included in the representative list only upon receipt by the Exchange of the information on the number of outstanding shares of that denomination and other data, necessary to determine the number of free floating shares of that denomination;
 - 3) the issuer whose shares are included in the representative list, must as at the planned date of inclusion comply with the following requirements:

the issuer must be a legal entity recognized as organization – resident of the Republic of Kazakhstan in accordance with item 3 of article 22-1 of Kazakhstan's Act "On the Securities Market" dated July 2, 2003;

the issuer's capitalization must make up at least KZT23 bn and be calculated according to the formula:

$$CAP_i = \sum_{j=1}^n (Q_{ij}^{ord} \times P_{ij}^{ord}) + \sum_{j=1}^m (Q_{ij}^{pref} \times P_{ij}^{pref}), \text{ where:}$$

- CAP_i – capitalization of the i -th issuer, in tenge;
- n – the number of issues of ordinary shares of the i -th issuer;
- m – the number of issues of preferred shares of the i -th issuer;
- Q_{ij}^{ord} – the number of outstanding ordinary shares (minus those repurchased by the issuer) of the j -th issue, of the i -th issuer in units;

- P_{ij}^{ord} – weighted average price of one ordinary share of the j-th issue of the i-th issuer in tenge on deals concluded in the Exchange's trading system over the last elapsed trading day successful for shares of that title;
- Q_{ij}^{pref} – the number of outstanding preferred shares (minus those repurchased by the issuer) of the j-th issue, of the i-th issuer in units;
- P_{ij}^{pref} – weighted average price of one preferred share of the j-th issue of the i-th issuer in tenge on deals concluded in the Exchange's trading system over the last elapsed trading day successful for shares of that title;

the issuer's equity must be positive according to the most recent audited annual financial statements presented to the Exchange;

the issuer's operations must be profitable (in terms of net income) over the last two financial years, according to audited annual financial statements of that issuer presented to the Exchange;

- 4) shares of a particular title are included in the representative list provided the following conditions were met as of the planned inclusion date:

the amount of trading in those shares for each of six months preceding the planned inclusion date must be at least KZT24 mln;

the number of successful days for those shares for each of six months preceding the planned inclusion date must be at least 70 % of all trading days of the respective month;

deals concluded in those shares for each of six months preceding the planned inclusion date must be concluded by at least five members of the Exchange (*this paragraph was changed following a decision of the Exchange's Management Board dated September 25, 2019*);

- 5) The Committee may take a decision on inclusion in the representative list of particular shares, violating terms, established by sub-item 4) of this item, given existence of other factors witnessing, in the Committee's opinion, of sufficient liquidity of those shares;

- 6) after the initial forming of the representative list it may change (particular shares may be included and excluded from it) once a calendar quarter – from the third business day of February, May, August and November; at that shares quoted in the representative list must comply with the following conditions as of the list change date (*this paragraph was changed following a decision of the Exchange's Management Board dated September 25, 2019*):

in each of any four months out of six months preceding the list change date, the minimum volume of trading in those shares must be equal to or exceed KZT12 mln; at that, if those shares are traded on a foreign exchange, the minimum volume of their trading in the Exchange's trading system must be more than or equal to KZT12 mln in each of any two months out of six months preceding the list change date, provided, the amount of trading in those shares on the foreign exchange is more than or equal to the equivalent of KZT12 mln in any four months out of six months preceding the list change date;

in each of any four months out of six months preceding the list change date at least 50 % of trading days (of the total number of trading days in the month) must be successful for those shares;

- in each of any four months out of six months preceding the list change date, deals in those shares must be concluded in the Exchange's trading system by at least five members of the Exchange (*this paragraph was changed following a decision of the Exchange's Management Board dated September 25, 2019*);
- 7) the issuer whose shares are in the representative list, must as of the list change date comply with the following requirements:
- the issuer's capitalization calculated according to the formula indicated in sub-item 3) of this item must make up at least KZT23 bn;
 - the issuer's equity must be positive according to the most recent audited annual financial statements presented to the Exchange;
 - the issuer's operations cannot be lossmaking (in terms of net income) for more than two years, preceding the list change date according to audited annual financial statements presented to the Exchange;
- 8) the Committee's decision on changing the representative list must be released on the Exchange's website until January 16, April 16, July 16, October 16, respectively (with exceptions specified in sub-item 11) of this item);
- 9) taking into account requirements of sub-item 10) of this article, shares of particular denomination are removed from the representative list following a decision of the Committee for the reason of:
- cease of circulation of shares of that denomination on the Exchange;
 - due to incompliance with terms specified in sub-items 6)–7) of this item with regard to them;
 - due to any other reason which the Committee will consider sufficient for taking such decision for purposes of ensuring the representativeness of the KASE Index (with exceptions specified in sub-item 10) of this item);
- 10) The Committee is entitled not to make the decision on exclusion of particular shares from the representative list due to non-observance in relation to them of terms, established by sub-item 6) of this item, at availability of factors witnessing, in the Committee's opinion, of the sufficient liquidity of shares of that denomination;
- 11) The Committee has the right to make the decision on exclusion from the representative list of particular shares violating terms, established by sub-item 6) of this item, if such exclusion, in the Committee's opinion, is necessary due to:
- exclusion of shares of that denomination from the Exchange official list;
 - suspension by the Exchange of trades in shares of that denomination;
 - detection of facts indicating a sharp decline in the liquidity of shares of that denomination or sharp aggravation or disappearance of circumstances, ensuring fair pricing on shares of that denomination;
 - detection of facts indicative of a sharp worsening of the financial position of the issuer of those shares.
- 12) the Committee's decision on changing the representative list for reasons out of those indicated in sub-items 5) and 11) of this article, must be released on the Exchange's website no later than two business days before the effective date of such decision.
2. KASE Index is calculated according to the following formula (*this item was changed following a decision of the Exchange's Management Board dated September 25, 2019*):

$$\text{IndexKASE} = \frac{MC_n}{D_n}, \text{ where}$$

IndexKASE – KASE Index, in points;

MC_n – the total market value of shares on the representative list; at the moment of calculation of n, calculated in compliance with item 4 of this article, in KZT;

D_n – the value of the total market value of all shares on the representative list as at the first day of KASE Index calculation, adjusted to the changes in the representative list and the initial value of KASE Index;

2-1. D_n indicator is recalculated in cases when the following elements change (*this item was changed following a decision of the Exchange's Management Board dated September 25, 2019*):

- 1) KASE Index representative list;
- 2) The number of free float shares of any denomination included in the representative list;
- 3) the number of outstanding shares of any denomination included in the KASE Index representative list, including the occurrence of any corporate events, entailing the change in the number of outstanding shares;
- 4) coefficient calculated according to Article 9 of this Methodology.

2-2. The D_n indicator is calculated according to the following formula with accuracy of up to four decimal places (the index is rounded according to the mathematical rounding rule):

$$D_n = D_{n-1} \cdot \frac{MC_n}{MC_{n-1}}, \text{ where:}$$

D_{n-1} – the last value of D indicator before the occurrence of the basis for its recalculation;

MC_{n-1} – the total market value of shares on the representative list at the time of D_{n-1} calculation;

MC_n – the total market value of shares on the representative list at the time of D_n calculation;

3. The initial KASE Index value is fixed in the size of 2,545.79 points as of 18:00 o'clock Almaty time (ALT) of September 28, 2007².

The total market value of shares, included in the representative list, at the moment of KASE Index calculation is fixed in the amount of KZT868,132,912,362.78 as of 18:00 o'clock ALT of September 28, 2007.

4. The total market value of shares, included in the representative list is calculated according to the following formula (*this item was changed following a decision of the Exchange's Management Board dated September 25, 2019*):

$$MC_n = \sum_{i=1}^n (P_i \times FF_i \times \bar{R}_i), \text{ where}$$

² This KASE index value is the last KASE_Shares index value, which was calculated from July 12, 2000 to September 28, 2007 in compliance with the Methodology of Market Indices Calculation, approved by the Exchange's Management Board decision No. 15/1 of February 21, 2001 (the initial KASE_Shares index value was fixed in the size of 100.00 points as of July 12, 2000). Accordingly, the numerical series of the KASE index values continues the numerical series of the KASE_Shares index values.

- n – the number of shares denominations, present in the representative list;
- P_i – the price of the transaction in shares of the i -th denomination or the closing price on shares of the i -th denomination (*this paragraph was changed following a decision of the Exchange's Management Board dated September 25, 2019*);
- FF_i – the number of free floating shares of the i -th denomination, determined in compliance with item 5 of this article, in units;
- \overline{R}_i – the restrictive coefficient for shares of the i -th denomination, calculated in compliance with article 9 of this Methodology.
5. The number of free floating shares of particular denomination is determined by the Committee at inclusion of those shares in the representative list and then simultaneously with the calculation of the restrictive coefficient for those shares:
- 1) as the number of outstanding shares of that denomination not belonging to:
the Republic of Kazakhstan (not the state property of the Republic of Kazakhstan);
officials of those shares' issuer;
persons, each of whom owns common shares issued by those shares' issuer in the quantity of five and more percent from the total number of outstanding shares of that issuer (except for persons who were not recognized by the Committee as those shares issuer's strategic shareholders, for example, except for institutional investors); or
 - 2) in case of insufficient information for determination of the number of free floating shares of that denomination in compliance with sub-item 1) of this item – based on an expertise.
6. For information purposes the Exchange, in compliance with item 7 of this article, calculates portions of free floating shares for shares quoted in the representative list.
7. The portion of free floating shares of a particular denomination is calculated according to the following formula:

$$F_i = \frac{FF_i}{Q_i} \times 100, \text{ where}$$

- F_i – the stake of free floating shares of the i -th denomination, in percentage;
- FF_i – the number of free floating shares of the i -th denomination, determined in compliance with item 5 of this article, in units;
- Q_i – the number of outstanding shares of the i -th denomination (excluding re-purchased by the issuer), in units.

Article 6. Corporate bond market indexes calculation

1. The representative list for calculation of the corporate bonds market indexes of series KASE_BM* (hereinafter in this item – the representative list) is formed by the Committee out of corporate bonds of all denominations, issued in compliance with the legislation of the Republic of Kazakhstan and present in the "Debt securities" sector of the Exchange's official list's "Main" market, as the following terms in relation to corporate bonds of each particular denomination are met:

- 1) the total number of corporate bonds titles present in the representative list must be at least seven;
 - 2) bonds must be denominated in tenge, their face value or the amount of interest must not be indexed at the change of the tenge's exchange rate against the foreign currency;
 - 3) bonds must be quoted in the Exchange's trading system in "net" prices (without taking into account the interest accrued but not paid), the yield of bonds to maturity must be calculated in the Exchange's information systems automatically;
 - 4) the Exchange must have information on the number of outstanding bonds of that denomination;
 - 5) a market-maker for bonds of that denomination must operate on the Exchange;
 - 6) regular trades in corporate bonds of that denomination must be opened on the Exchange, and as of the date of inclusion of the bonds in the representative list the trading must not be suspended;
 - 7) the issuer of bonds of that denomination must not have unsettled debts on payment of coupon interest and/or principal debt on bonds he issued.
2. The representative list for calculation of the corporate bonds market indexes of series KASE_BA* (hereinafter in this item – the representative list) is formed by the Committee out of corporate bonds of all denominations, issued in compliance with the legislation of the Republic of Kazakhstan and present in the "Debt securities" sector of the Exchange's official list's "Alternative" market, as the following terms in relation to corporate bonds of each particular denomination are met:
- 1) the total number of corporate bonds titles present in the representative list must be at least four;
 - 2) bonds must be denominated in tenge, their face value or the amount of interest must not be indexed at the change of the tenge's exchange rate against the foreign currency;
 - 3) bonds must be quoted in the Exchange's trading system in "net" prices (without taking into account the interest accrued but not paid), the yield of bonds to maturity must be calculated in the Exchange's information systems automatically;
 - 4) the Exchange must possess information on the number of outstanding bonds of that denomination;
 - 5) a market-maker for bonds of that denomination must be operating on the Exchange;
 - 6) regular trades in corporate bonds of that denomination must be opened on the Exchange, and at the moment of inclusion of bonds in the representative list trades must not be suspended;
 - 7) the issuer of bonds of that denomination must have no unsettled debts on payment of coupon interest and/or principal debt on bonds he issued.
3. After the generation of representative lists of KASE_BM* and KASE_BA* series indexes those lists may change (corporate bonds of particular denominations may be included and excluded from it) following a decision of the Committee once every three months from December 1, March 1, June 1, September 1. The Committee's decision on such change must be published on the Exchange's website no later than the business day preceding the date of such change.

4. The representative list of KASE_BM* series indexes may include bonds of a particular denomination at compliance with conditions specified in item 1 of this article.
5. The representative list of KASE_BA* series indexes may include bonds of a particular denomination at compliance with conditions specified in item 2 of this article.
6. The Committee has the right to make a decision on exclusion of corporate bonds of a particular denomination from the representative list of KASE_BM* series indexes, including those violating the terms, established by item 3 of this article, in case of their failure to comply with one or several criteria specified in item 1 of this article.
7. The Committee has the right to make a decision on exclusion of corporate bonds of a particular denomination from the representative list of KASE_BA* series indexes, including those violating the terms, established by item 3 of this article, in case of their failure to comply with one or several criteria specified in item 2 of this article.
8. The Committee has the right to make a decision on exclusion of corporate bonds of a particular denomination from the representative list of KASE_BM* and KASE_BA* series indexes, including those violating the terms, established by item 3 of this article, at emergence of factors not indicated in items 6 and 7 of this article and witnessing of a sharp worsening or disappearance of circumstances ensuring a fair pricing on bonds of that denomination.
9. In case of removal of corporate bonds of a particular denomination from the Exchange's official list, as well as in case of maturity of a particular bond, those bonds are excluded from representative lists of KASE_BM* and KASE_BA* series indexes without the Committee taking any decisions. In the first case the removal is effective as of the date of removal of bonds from the official list, in the second case – as of the record date for payment of bonds' face value at redemption and the final coupon interest (if applicable) *(this item was changed following a decision of the Exchange's Management Board dated July 25, 2018)*.
10. Change in representative lists of KASE_BM* and KASE_BA* series indexes in accordance with items 4–9 of this article is followed by settlement and application of respective adjustment and (if necessary) restrictive coefficients at calculation of values of KASE_BMC and KASE_BAC indexes for purposes of avoidance of said changes on those values. Coefficients are applied when calculating values of indexes based on results of the trading day, from which said changes are effective.
11. Indicators KASE_BMY and KASE_BAY are calculated according to the following formula:

$$K_{BY} = \frac{\sum_{i=1}^n Y_{i,t} \times P_{i,t} \times Q_i \times BR_i}{\sum_{i=1}^n (P_{i,t} \times Q_i \times BR_i)}, \text{ where}$$

- K_{BY} – yield indicators of corporate bonds in annual percentage;
- n – the number of denominations of bonds quoted in respective representative lists;
- $Y_{i,t}$ – the yield of the corporate bond of the i -th denomination, calculated based on the quotation price defined based on results of the expired trading day, in annual percentage;

- $P_{i,t}$ – the quotation price of the corporate bond of the i-th denomination, based on results of the expired trading day on corporate bonds, defined in accordance with item 12 of this article, in tenge;
- Q_i – the number of outstanding corporate bonds of the i-th denomination, in pieces.
- \overline{BR}_i – the restrictive coefficient for bonds of the i-th denomination, calculated in accordance with article 10 of this Methodology.

12. KASE_BMC and KASE_BAC are calculated according to the following formulas:

$$K_{BC} = K_{BCp} \times \frac{\sum_{i=1}^n (P_{i,t} \times Q_i \times \overline{BR}_i)}{\sum_{i=1}^n (P_{i,p} \times Q_i \times \overline{BR}_i)}, \text{ where}$$

- K_{BC} – indexes of "net" prices of corporate bonds in points;
- K_{BCp} – the previous value of the respective index of "net" prices" in points; at that, the value indicated in item 14 of this article is used for the first calculation;
- n – the number of bond denominations present in respective representative lists;
- $P_{i,t}$ – quotation price of one corporate bond of the i-th denomination based on results of the last expired trading day on corporate bonds, defined in accordance with item 13 of this article, in percentage of the face value of one corporate bond, denominated in tenge;
- $P_{i,p}$ – quotation price of one corporate bond of the i-th denomination based on results of the last but one expired trading day on corporate bonds, defined in accordance with item 13 of this article, in percentage of the face value of one corporate bond, denominated in tenge;
- Q_i – the number of outstanding corporate bonds of the i-th denomination in pieces;
- \overline{BR}_i – restrictive coefficient for bonds of the i-th denomination calculated in accordance with article 10 of this Methodology.

13. The following is used as the quoting price of one corporate bond of the i-th denomination:

- 1) the weighted average "net" price of one corporate bond of this denomination on deals, concluded during a particular trading day in corporate bonds; or
- 2) (in case of absence of deals in corporate bonds of this denomination on the mentioned trading day) the arithmetical mean value between the highest "net" price of orders for purchasing of corporate bonds of this denomination and the lowest "net" price of orders for their selling, submitted during the mentioned trading day); or
- 3) (in case of absence of orders for purchasing or selling of corporate bonds of this denomination, submitted during the mentioned trading day) the previous quoting price of one corporate bond of this denomination.

14. The initial value of KASE_BMC and KASE_BAC indexes is fixed in the size of 100.00 points as of September 1, 2017.

Article 7. Closing prices on securities

(This article was changed by a decision of the Exchange's Management Board dated September 25, 2019)

1. The Exchange sets closing prices for all securities admitted to trading on the Exchange.
2. The closing price for securities of any denomination is set once a day at the close of trading.
3. The price fixed at the closing auction on the securities of any denomination in accordance with the Regulations on Trading Methods in the ASTS+ Trading and Clearing System shall be used as the closing price on securities of that denomination.

If the price has not been set during the closing auction mentioned in the first paragraph of this item, or if such auction has not been held on securities of any denomination, or the auction is not provided for by the Exchange's internal documents, then the price of the last transaction with securities of this denomination shall be used as the closing price for such securities.

4. If on any trading day the closing price of a security of any title cannot be set in accordance with paragraph 3 of this article, the closing price on those securities shall not be calculated on that day.
5. The Exchange reserves the right to recalculate the closing price for a security of a certain denomination for a certain trading day, if on that trading day the closing price on that security was calculated taking into account the price of the transaction, which was not subsequently executed according to the procedure set by internal documents of the Exchange, or it was recognized as a transaction made for the purpose of manipulating the securities market.

Article 8. Calculation of adjustment coefficients

1. The adjustment coefficient is used at calculation of KASE Index to eliminate impact on the index value in case of a change in:
 - 1) the representative list for the KASE Index calculation;
 - 2) the number of outstanding shares of a particular denomination out of those included in KASE Index representative list, also resulted from occurrence of any corporate events, entailing a change in the number of outstanding shares (considering specifics, established by item 2 of this article);
 - 3) the number of free floating shares of a particular denomination;
 - 4) the restricting coefficient for shares of a particular denomination out of those included in KASE Index representative list.
2. The adjustment coefficient at calculation of the KASE Index is not calculated in case of a split or consolidation of shares of a particular denomination³.
3. The adjustment coefficient for KASE Index is calculated according to the following formula:

$$K_{\text{new}} = K_{\text{old}} \times \frac{IND_{\text{old}}}{IND_{\text{new}}}, \text{ where}$$

K_{new} – the new adjustment coefficient;

K_{old} – the previous adjustment coefficient;

³ Considering that during a split an increase in the number of authorized shares scales down their price, and at consolidation a decrease in the number of authorized shares scales up their price.

IND_{old} – the index value, calculated based on the previous values of changed parameters, indicated in item 1 of this article;

IND_{new} – the index value, calculated based on the new values of changed parameters, indicated in item 1 of this article.

4. During the calculation of KASE_BMC and KASE_BAC indexes, the adjustment coefficient is used to eliminate impact on the index values in case of a change in:
 - 1) the representative list of the respective index;
 - 2) the number of outstanding bonds of a particular denomination out of those included in the representative list of the respective index;
 - 3) the restrictive coefficient for bonds of a particular denomination out of those included in the representative list of the respective index.
5. The adjustment coefficient for KASE_BMC and KASE_BAC is calculated according to the following formula:

$$K = \frac{IND_{old}}{IND_{new}}, \text{ where}$$

K – adjustment coefficient;

IND_{old} – the value of KASE_BMC or KASE_BAC index, calculated based on the previous values of changed parameters, indicated in item 4 of this article;

IND_{new} – the value of KASE_BMC or KASE_BAC index, calculated based on the new values of changed parameters, indicated in item 4 of this article.

6. In case of changes described in item 4 of this article, the value of KASE_BMC and KASE_BAC indexes, calculated after coming of such changes into effect, must be adjusted by multiplying by the adjustment coefficient.

Article 9. Calculation of the restrictive coefficient during the KASE Index calculation

1. The restrictive coefficient, calculated in compliance with this article is used at the KASE Index calculation as the restrictive coefficient \bar{R}_i for particular shares (in compliance with item 4 of article 5 of this Methodology).
2. The restrictive coefficient for securities from KASE Index's representative list is calculated in one or several phases as follows:
 - 1) in the first phase:

the stake of the total market value of securities of this denomination in the total market value of securities of all denominations, present in the corresponding representative list (in compliance with item 3 of this article) is calculated, given this the interim coefficient for securities of this denomination equals to one;

if the resulting stake of the total market value of securities of this denomination in the total market value of securities of all denominations, present in the corresponding representative list, exceeds 0.15, then transition to the second calculation phase of the restrictive coefficient for securities of this denomination is carried out;
 - 2) at the second phase:

the interim coefficient for securities of this denomination (in compliance with item 5 of this article) is calculated;

3) at the third phase:

based on the interim coefficient value for securities of this denomination calculated at the second phase, the stake of their total market value in the total market value of securities of all denominations, present in the corresponding representative list (in compliance with item 3 of this article) is calculated again;

if the resulting stake of the total market value of securities of this denomination in the total market value of securities of all denominations, present in the corresponding representative list, exceeds 0.15, then another transition to the second calculation phase of the restrictive coefficient for securities of this denomination is carried out;

- 4) the second and the third phases of calculation of the restrictive coefficient for securities of this denomination are repeated until the stake of total market value of securities of any denomination in the total market value of securities of all denominations, present in the corresponding representative list, exceeds 0.15;
- 5) the restrictive coefficient for shares of a particular denomination is the product of all interim coefficients for shares of that denomination.

3. The stake of the total market value of securities from KASE Index universe in the total market value of securities of all denominations, present in the corresponding representative list, is calculated according to the following formula:

$$Z_i = \frac{A_i}{\sum_{i=1}^n A_i}, \text{ where}$$

Z_i – the stake of the total market value of securities of the i -th denomination in the total market value of securities of all denominations, present in the corresponding representative list;

A_i – the total market value of securities of the i -th denomination, determined in compliance with item 4 of this article, in KZT;

n – the number of securities denominations, present in the corresponding representative list.

4. The total market value of securities of the i -th denomination for calculation of KASE Index is determined according to the following formula:

$$A_i = P_i \times FF_i \times R_i, \text{ where}$$

P_i, FF_i – indicators, determined in item 4 of article 5 of this Methodology;

R_i – the interim coefficient for shares of the i -th denomination, calculated in compliance with item 5 of this article (is accepted equal to one at the first phase of calculation of the restrictive coefficient for shares of this denomination).

5. The interim coefficient for securities of the i -th denomination is calculated according to the following formula:

$$R_i = \frac{0,15}{0,85A_i} \times \left(\sum_{i=1}^n A_i - A_i \right), \text{ where}$$

n – the number of securities denominations, present in the corresponding representative list;

- A_i – the total market value of securities of the i-th denomination, determined in compliance with item 4 of this article using the previous interim coefficient for securities of this denomination, in KZT.
6. Restrictive coefficients for shares are calculated once a calendar quarter as of February 1, May 1, August 1, November 1 (taking into account the detail specified by item 7 of this article).
 7. Restrictive coefficients for shares can be calculated outside of the periodicity specified in item 6 of this article, in case:
 - 1) the number of shares of a particular denomination being in free circulation has changed by a value making up 10 or more percent of the total number of outstanding shares of that denomination;
 - 2) within at least 15 trade days the stake of the total market value of securities of a particular denomination in the total market value of shares of all denominations present in KASE Index representative list calculated in accordance with item 3 of this article exceeds 0.2.

Article 10. Calculation of the restrictive coefficient during calculation of corporate bond indicators of series KASE_BM* and KASE_BA*

1. The restrictive coefficient calculated in accordance with this article, is used when computing values of corporate bond indicators of series KASE_BM* and KASE_BA* as a restrictive coefficient \overline{BR}_i for bonds of a particular denomination (in accordance with items 11 and 12 of article 6 of this Methodology) taking into account the calculated share of the value of all bonds of that denomination (in accordance with article 10-1 of this Methodology) (*this item was changed following a decision of the Exchange's Management Board dated July 25, 2018*).
2. The restrictive coefficient for securities of the universe of indicators of corporate bonds of series KASE_BM* and KASE_BA* is calculated in one stage or several stages as follows:
 - 1) at the first stage:

the portion of the total "net" market value of particular securities in the total "net" market value of all securities quoted in the respective representative list is calculated (in accordance with item 3 of this article), whereby the interim coefficient for securities of that title is taken as equal to one;

in case the received portion of the total "net" market value of particular securities in the total "net" market value of all securities quoted in the respective representative list, exceeds the last calculated maximum value $Z_{i,max}$, then the transfer to the second stage of the calculation of the restrictive coefficient for those securities is carried out;

as the maximum value of the $Z_{i,max}$ for bonds of series of KASE_BM* the value rounded up to the greater integer is taken, which was calculated according to the following formula:

$$Z_{i,max} = 100/n + 1, \text{ where}$$

$Z_{i,max}$ – maximum value of the portion of the total "net" market value of bonds of the i-th title in the total "net" market value of all securities, quoted in the respective representative list, in percentage;

n – the number of titles of securities quoted in the respective representative list;

as the maximum value $Z_{i,max}$ for bonds of series KASE_BA* the value rounded up to the greater integer is taken, which was calculated according to the following formula:

$$Z_{i,max} = 100/n + 5, \text{ where}$$

- $Z_{i,max}$ – maximum value of the total "net" market value of bonds of the i-th title in the total "net" market value of all securities, quoted in the respective representative list, in percentage;
- n – the number of titles of securities quoted in the respective representative list;

2) at the second stage:

The interim coefficient for securities of that title (in accordance with item 5 of this article) is calculated;

3) at the third stage:

based on the value of interim coefficient for securities of that title, calculated at the second stage, the portion of their total "net" market value in the total "net" market value of all securities quoted in the respective representative list is calculated (in accordance with item 3 of this article);

in case the received portion of the total "net" market value of securities of particular securities in the total "net" market value of all securities quoted in the respective representative list, exceeds the last calculated maximum value $Z_{i,max}$, then another transfer to the second stage of the calculation of the restrictive coefficient for those securities is carried out;

4) the second and third stages of calculation of the restrictive coefficient for particular securities are repeated, till the portion of the total "net" market value of securities of any title in the total "net" market value of all securities quoted in the respective representative list, exceeds the last calculated maximum value $Z_{i,max}$;

5) the restrictive coefficient \overline{BR}_i for bonds of any title is the product of all interim coefficients for bonds of those titles (*this sub-item was changed by a decision of the Exchange's Management Board dated July 25, 2018*).

3. The portion of the total "net" market value of securities of particular securities in the total "net" market value of all securities quoted in the respective representative list, is calculated according to the formula:

$$Z_i = \frac{A_i}{\sum_{i=1}^n A_i}, \text{ where}$$

Z_i – the portion of the total "net" market value of securities of the i-th title in the total "net" market value of all securities quoted in the respective representative list;

A_i – the total "net" market value of securities of the i-th title, defined in accordance with item 4 of this article, in tenge;

n – the number of titles of securities quoted in the respective representative list.

4. The total "net" market value of securities of the i-th title for calculation of indicators of corporate bonds of series KASE_BM* и KASE_BA* is defined according to the formula:

$$A_i = P_{i,t} \times BR_i, \text{ where}$$

- $P_{i,t}$ – quotation price of one corporate bond of the i-th title based on results of the last expired trading day on corporate bonds, defined in accordance with item 13 of article 6, in percentage of the face value of on corporate bond;
- BR_i – interim coefficient for a corporate bond of the i-th title, calculated in accordance with item 5 of this article (is taken as equal to one at the first stage of calculation of the restrictive coefficient for bonds of that title) *(this paragraph was changed by a decision of the Exchange's Management Board dated July 25, 2018)*.

5. The interim coefficient for securities of the i-th denomination is calculated according to the formula:

$$BR_i = \frac{Z_{i,max}}{(1 - Z_{i,max}) \times A_i} \times \left(\sum_{i=1}^n A_i - A_i \right), \text{ where}$$

- $Z_{i,max}$ – maximum value of the share of the total "net" market value of the bond of the i-th title in the total market value of securities of all titles, quoted in the respective representative list, in percent (in accordance with sub-item 1) of item 2 of this article);
- n – the number of securities titles, present in the corresponding representative list;
- A_i – the total "net" market value of securities of the i-th denomination, determined in compliance with item 4 of this article using the previous interim coefficient for securities of this denomination, in KZT.

6. Restrictive coefficients for bonds are calculated upon each change in the representative list for calculation of indicators of corporate bonds of series KASE_BM* and KASE_BA* (taking into account the specifics set in item 7 of this article).
7. Restrictive coefficients for bonds can be calculated respective of the periodicity, indicated in item 6 of this article, in case if within at least fifteen trading days the share of the total "net" market value of bonds of particular title in the total "net" market value of bonds of all titles, which are quoted in the representative list for calculation of corporate bond indicators of series KASE_BM* and KASE_BA*, calculated in accordance with item 3 of this article, exceeds the last calculated maximum value $Z_{i,max}$, determined in accordance with sub-item 1) of item 2 of this article.

Article 10-1. Calculation of the share of value of particular bond in the total value of all bonds of the representative list of corporate bond indicators of series KASE_BM*

1. The share of the value of particular bonds in the total value of all bonds of the representative list of corporate bond indicators of series KASE_BM* (hereinafter in this article – representative list), calculated in accordance with this article, is used during the calculation of the restrictive coefficient BR_i for bonds of that title, quoted in the representative list (in accordance with article 10 of this Methodology).
2. The share of the value of particular bonds in the total value of all bonds of the representative list is calculated in two stages:
- 1) at the first stage:

the share of the value of particular bonds (w_i) in the total value of all bonds of the issuer who issued those bonds quoted in the representative list is calculated according to the following formula:

$$w_i = \frac{IB_i}{\sum_i^n IB_i}, \text{ where}$$

- IB_i – the total "net" market value of bonds of particular title, defined in accordance with item 3 of this article, in tenge;
- n – the number of titles of bonds of the issuer who issued this title of bonds, in the representative list;

2) at the second stage:

the share of the value of particular bonds in the total value of all bonds of the issuer who issued those bonds quoted in the representative list is calculated, taking into account the issuer's interim coefficient which was determined in accordance with items 2 and 4 of article 10-2 hereof according to the formula, indicated in sub-item 1) of this item.

3. The total "net" market value of particular bonds (IB_i) quoted in the representative list is calculated according to the following formula:

$$IB_i = P_{i,t} \times Q, \text{ where}$$

- $P_{i,t}$ – quotation price of one bond of particular title based on results of the last expired trading day, defined in accordance with item 13 of article 6 of this Methodology and denominated in percentage of the face value of one bond;
- Q – the number of bonds of that title.

(This article was included following a decision of the Exchange's Management Board dated July 25, 2018).

Article 10-2. Calculation of the share of the total value of all bonds of a particular issuer quoted in the representative list in the total value of all bonds of the representative list of corporate bonds of series KASE_BM*

1. The share of the total value of all bonds of a particular issuer quoted in the representative list in the total value of all bonds of the representative list of corporate bonds of series KASE_BM* (hereinafter in this article – representative list) is used as the interim coefficient WRI of one issuer.
2. The interim coefficient of one issuer, whose bonds are included in the representative list, is calculated in one or several stages as follows:

1) at the first stage:

the share of the total value of all bonds of a particular issuer quoted in the representative list in the total value of all bonds of the representative list is calculated (in accordance with item 3 of this article);

if the share obtained in accordance with the preceding paragraph exceeds the last calculated maximum value $W_{i,max}$, then the transition to the second stage of calculation of the interim coefficient of the issuer is carried out;

the value rounded up to the greater whole is taken as the maximum value of the weight of the issuer ($W_{i,max}$) and is calculated according to the following formula:

$$W_{i,max} = \frac{100\%}{n} + 5\%, \text{ where}$$

- n – the number of issuers whose bonds are quoted in the representative list;

2) at the second stage:

the interim coefficient of one issuer (WRI) is calculated according to the following formula:

$$WRI = \frac{W_{i,max}}{(1 - W_{i,max}) \times \sum_{i=1}^n SUM_i} \times (\sum_{i=1}^n SUM_i - SUM_i), \text{ where}$$

$W_{i,max}$ – the maximum value of the total share of the value of all bonds of a particular issuer quoted in the representative list in the total value of all bonds of the representative list, denominated in percentage (in accordance with sub-item 1) of item 2 of this article);

n – the number of issuers whose bonds are quoted in the representative list;

SUM_i – the total market value of all bonds of a particular issuer quoted in the representative list, defined in accordance with item 4 of this article using the preceding interim coefficient of one issuer and denominated in tenge;

3) at the third stage:

based on the value of the interim coefficient of one issuer calculated in the second stage, the share of the total value of all bonds of one issuer in the total value of all bonds of the representative list is calculated anew (in accordance with item 3 of this article);

if the obtained share of the total value of all bonds of a particular issuer in the total value of all bonds of the representative list exceeds the last calculated maximum value $W_{i,max}$, then another transition to the second stage of calculation of the interim coefficient of one issuer is carried out;

4) the second and third stages of calculation of the interim coefficient of the total value of all bonds of a particular issuer quoted in the representative list are repeated, until the share of the total value of all bonds of a particular issuer quoted in the representative list in the total value of all bonds of the representative list becomes less than or equal to the last calculated value of $W_{i,max}$;

5) the interim coefficient WRI of a particular issuer is the product of all interim coefficients of that issuer, calculated in accordance with sub-item 2) of this item.

3. The share of the total value of all bonds of a particular issuer in the total value of all bonds of the representative list (W_i) is calculated according to the following formula:

$$W_i = \frac{SUM_i}{\sum_{i=1}^n SUM_i}, \text{ where}$$

SUM_i – the total market value of all bonds of a particular issuer quoted in the representative list, defined in accordance with item 4 of this article and denominated in tenge;

n – the number of issuers whose bonds are quoted in the representative list.

4. The total market value of all bonds of a particular issuer quoted in the representative list:

$$SUM_i = \sum_{i=1}^n (Q \times P_{i,t}) \times WRI, \text{ where}$$

$P_{i,t}$ – quotation price of one bond of particular title based on results of the last expired trading day, defined in accordance with item 13 of

article 6 of this Methodology, in percentage of the face value of one bond;

- Q – the number of bonds of particular title of that issuer;
- WRI – the interim coefficient of one issuer, calculated in accordance with sub-item 2) of item 2 of this article (take as equal to one at the first stage of calculation of the interim coefficient of one issuer).

(This article was included following a decision of the Exchange's Management Board dated July 25, 2018).

Chapter 3. SPECIAL AUTHORITIES OF THE COMMITTEE REGARDING INDICATORS

Article 11. Special authorities of the Committee regarding indicators

1. In addition to authorities, established by items 1 and 5 of article 5, items 3, 6, 7 and 8 of article 6 of this Methodology, the Committee is entitled to correct indicators values, excluding from their calculations parameters of those deals and/or orders, which, in the Committee's opinion, unrepresentatively influence (influenced) these values (for example, unexecuted deals, deals, at conclusion of which technical mistakes were committed, deals or orders, prices of which obviously discord with the market status and/or market dynamics of corresponding securities' prices).

If the Committee decides to exclude from calculation of one or another indicator parameters of any deal or order (any deals and/or orders) the corresponding re-calculation of this indicator is implemented not later than the business day, following the day, when the unrepresentative value of this indicator was received.

In case of technical fault or occurrence of an emergency situation not related to a change in market conditions and not provided for in this Methodology, but which has significantly affected the value of an indicator, the Committee may take a decision on a special calculation of restrictive or adjustment coefficients specified in items 1 and 3 of article 8, item 1 of article 9 and item 1 of article 10 of this Methodology.

2. When the Committee exercises its special authorities in compliance with item 1 of this article, the minutes of its meeting must describe the reasons for use of these authorities and actions, undertaken by it in compliance with these authorities.

Article 12. Final provisions

1. This Methodology is subject to release on the Exchange's website.
2. The responsibility for the timely making of changes and/or additions (updating) rests with the structural unit in charge of calculation of indicators on the Exchange.
3. This Methodology is subject to updating upon necessity, but at least once a year.