METHODOLOGY FOR CALCULATION OF THE REAL AND EFFECTIVE EXCHANGE RATES INDEXES OF TENGE

Nominal Effective Exchange Rate Index (NEER) of tenge is calculated as the weighted average product of changes in the nominal exchange rates of tenge to the currencies of partner countries:

$$NEER = \prod_{k=1}^{nk} (Ier_k)^{w^k} * 100 \, ,$$

k – trading partner country,

w^k – weight of the k trading partner country in the trade turnover of Kazakhstan,

Ier_k – change in the tenge's exchange rate to the currency of the trading partner country k.

Real Exchange Rate Index (RER) of tenge is calculated as change in the nominal bilateral exchange rate (foreign currency per one tenge) adjusted for the changes in consumer prices in the Republic of Kazakhstan and in the trading partner country:

$$RER_k = \frac{Ier_k}{(CPI\_k / CPI\_KZ)} * 100 \, ,$$

where RER_k – RER with respect to trading partner country k,

Ier_k – change in the tenge's exchange rate to the currency of the trading partner country k,

CPI_KZ – change in the consumer price index in Kazakhstan,

CPI_k – change in the consumer price index in the trading partner country.

Real Effective Exchange Rate Index (REER) of tenge is calculated as a weighted average product of changes in the real exchange rates of tenge to the currencies of trading partner countries. The shares of the respective countries in the foreign trade turnover are used as weights:

$$REER = \prod_{k=1}^{nk} (RER_k)^{w^k} * 100$$

,

where $REER$ – summary REER index,

$$\prod_{k=1}^{nk}(RER_k)^{w^k}$$ – product of changes in RER indexes to the currencies of trading partner countries weighted by specific weights in Kazakhstan's trade turnover.

The selection of the countries - major trading partners is made annually on the basis of the data of the Bureau of National statistics of the Agency for Strategic planning and reforms of the Republic of Kazakhstan and the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan. The calculation of weights for each trading partner is based on the data of exports and imports of goods for 3 years. The sample of major trading partners should be about 90% of the total trade turnover.

For analytical purposes, effective exchange rate indices are also calculated by the National Bank of the Republic of Kazakhstan on the basis of weights of the trade except for operations with oil and gas condensate (HS code – 2709). The effect of the exchange rate on the competitive advantage of energy exporters and importers is insignificant, because of its dependence on the change of world prices. Therefore, the effective exchange rate index without oil can provide more adequate estimate of the effect of the exchange rate changes on the volume and structure of foreign trade.