Approved by the Order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

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Methodology for calculating (estimating) the nominal cash income of the population

Chapter 1. General зrovisions

1. This Methodology for calculating (estimating) the nominal cash income of the population (hereinafter – the Methodology) was developed in accordance with the Law of the Republic of Kazakhstan dated March 19, 2010 "On State Statistics".

2. The methodology determines the total amount of nominal monetary income of the population.

3. This Methodology is applied by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan (hereinafter – the Committee) and its territorial bodies when calculating the nominal monetary income of the population in the Republic of Kazakhstan and regions.

4. Monetary incomes of the population are estimated using macro–level data by comparing survey results with data from the system of national accounts (hereinafter – SNA).

5. Estimation of nominal cash incomes of the population (hereinafter – NMIP) is carried out monthly with a cumulative total for the period from the beginning of the year only for the Republic of Kazakhstan, and for the quarter and year – for the Republic of Kazakhstan and regions.

6. This Methodology uses the concepts adopted by the International Conferences of Labor Statisticians (hereinafter – ICLS) and the recommendations of the International Labor Organization (hereinafter – ILO), as well as the following definitions:

1) income from employment – wages, all types of incentive pay, wage supplements, fees, bonuses and benefits received by employees at the place of work;

2) gross regional product (RGP) – the final result of the production activities of resident producer units of a particular region, over a certain period of time and calculated at market prices;

3) wage fund of employees (wages) – total funds accrued by organizations, as well as funds in kind, converted into a monetary unit for remuneration of employees (official salaries (tariff rates), additional payments, allowances, bonuses, payments of incentive and compensatory character), taking into account taxes and other deductions (income tax, mandatory pension contributions), regardless of the source of their financing and the period of their actual payments;

4) index of real money income – a relative indicator that characterizes the change in nominal money income, taking into account changes in prices in the reporting period compared to the base period;

5) income from self–employment – income in cash and in kind received from the production of goods and services on the basis of self–employment;

6) consumer price index (CPI) – an indicator characterizing the change in time of the average price level for a fixed basket of goods and services purchased by the population for personal consumption;

7) household income – the amount of money received by household members in the form of wages, business income, social payments (pensions, scholarships, allowances, social transfers in kind, alimony), interest, dividends, insurance payments and others income from property, other cash receipts;

8) nominal cash income of the population ( assessment) – funds allocated by the population for current consumption, production activities and accumulation.

**Chapter 2. Calculation of the average per capita nominal cash income of the population**

7. Calculation of the average per capita nominal monetary income of the population includes the following main stages:

1) calculation of nominal cash income from employment ;

2) calculation of the coefficient of recalculation for concealment of wages;

3) calculation of nominal cash income from self–employment;

4) calculation of paid current transfers to the population;

5) calculation of other monetary income of the population;

6) calculation of average per capita nominal cash income;

7) calculation of indices of nominal and real money income.

**Paragraph 1. Calculation of nominal cash income from employment**

8. The indicator "Money income from employment" includes data on the payroll of all employees. The calculation of the payroll of persons employed for hire is carried out according to the following formula:

$ФЗП\_{ЗН}=Ч\_{ЗН}\*\overline{ЗП\_{ЗН}}$$ФЗП\_{ЗН}=Ч\_{ЗН}\*ЗП\_{ЗН}$, (1)

Where:

$ФЗП\_{ЗН }$– wage fund of persons employed for hire;

$Ч\_{ЗН} $– the number of employed persons;

$ЗП\_{ЗН}$– the average monthly nominal wage of employees.

9. The total number of employed persons is determined on the basis of data from a sample survey of households on employment. The monthly calculation of the number of employees by category is carried out by an expert, based on data from enterprise surveys, using the structure of the number of employees based on the results of a household survey on employment.

10. Sources of information on the indicators "average monthly salary" and "number of employees" employed in large, medium and small enterprises that are not engaged in entrepreneurial activity are data from the survey of enterprises on wages. The calculation of the above indicators by months in the interquarter period is based on the assessment based on the existing dynamic series of previous years.

11. For persons employed in organizations with less than 100 employees engaged in entrepreneurial activities, and in peasant (farm) enterprises, the source of information on the indicator "average monthly wage" is survey data on the activities of small enterprises.

12. Information on the average monthly salary of persons employed by individuals is formed according to the data of a sample survey of households on the standard of living of the population.

13. Calculation of monetary income from hired employment is carried out by summing up the wage funds of persons employed for hire in large, medium and small enterprises, with individuals and in peasant (farm) farms.

# Paragraph 2. Calculation of the recalculation coefficient for hiding wages

14. To ensure the completeness and reliability of data on wages, when calculating NMIP , an additional calculation is made for the underestimation of the wage fund (concealment).

15. An additional calculation for the concealment of wages in the whole country is carried out annually when forming the gross domestic product by the income method based on annual data (in the reporting year for the previous year). Since income from employment includes data on the payroll, in order to calculate the coefficient of adjustment for concealment of wages, the structure of the total wage bill and the share of concealed wages obtained in the calculations of the system of national accounts are used. The resulting structure of the wage fund for employeesremains unchanged during the year and is applied until the calculation of this information for the next year.

16. The initial procedure is to determine the absolute value of the recalculation of the wage bill of the country as a whole:

$Д\_{ФЗП}=\frac{ФЗП\*dД\_{СОТ}}{dФЗП\_{отч. д}}$, (2)

Where:

$Д\_{ФЗП}$– the absolute value of the recalculation of the wage fund in the country as a whole;

$ФЗП$– the annual wage fund of persons employed for hire (according to reporting data);

$dД\_{СОТ}$– the share of the allowance for the concealment of wages in the total wage fund as a percentage (according to the received structure of the SNA);

$dФЗП\_{отч. д}$– the share of reporting data in the total wage fund as a percentage (according to the received structure of the SNA).

Calculations are carried out in absolute values.

17. The calculation of the recalculation coefficient is carried out in 3 stages:

1) Calculation for determining the average amount of additional calculation coming per person in the Republic of Kazakhstan is equal to the ratio of the amount of additional calculation to the number of informally employed population in the Republic of Kazakhstan :

$Д\_{1 чел}=\frac{\sum\_{}^{}Д\_{респ}}{Числ\_{НЗ}}$ , (3)

Where:

$Д\_{1 чел}$– recalculation coming per one informally employed, on average in the republic;

$∑Д\_{респ}$– amount of recalculation;

$Числ\_{НЗ}$– number of informally employed population.

When calculating the recalculation coefficient for concealing wages, the unit of measurement in people should be converted to the unit of measurement in tenge.

The calculation for determining the total amount of additional count for all informally employed by region is determined by multiplying the additional count that comes on average per person by the number of informally employed in the regions.

$Д\_{НЗ\_{рег}}=Д\_{на 1 ч}\*Ч\_{НЗ\_{рег}}$$Д\_{по рег}=Д\_{на 1 ч}\*Ч\_{НЗ\_{рег}}$, (4)

Where:

$Д\_{НЗ\_{рег}}$– calculation of informally employed by regions;

$Д\_{на 1 ч}$– calculation on average per person;

$Ч\_{НЗ\_{рег}}$– the number of informally employed by region.

The calculation of the amount of additional counts for informally employed is not a full–fledged factor, since the economic characteristics of the regions are not taken into account and the average count of incoming per person is used. Further, the share of regions in RGP is used.

The source of information on the number of informally employed population by regions is the data of a sample survey of households on employment.

2) In order to carry out the necessary calculations by regions, it is necessary to distribute the amount of the additional calculation for the Republic of Kazakhstan and regions based on data on their share in the gross regional product of the Republic of Kazakhstan :

$Д\_{RGP\_{рег}}=\sum\_{}^{}Д\_{респ}\*d\_{RGP\_{рег}}$, (5)

Where:

$Д\_{RGP\_{рег}}$ $Д\_{рег}$– amount of recalculation by regions based on RGP;

$\sum\_{}^{}Д\_{RGP\_{респ}}$– amount of additional calculation for the republic based on RGP;

$d\_{RGP\_{рег}}$ $\sum\_{}^{}Д\_{ВРП\_{респ}}$– share of regions in RGP.

3) We determine the weight of each of these two factors in the recalculation structure, based on their interpretation, where the weighted average sum of the indicators will be as close as possible to the sum of this indicator in the republic.

$\sum\_{}^{}Д\_{\left(НЗ+RGP\right)}=\sum\_{}^{}\left[Д\_{НЗ}\*0,1+Д\_{RGP}\*0,9\right]$, (6)

Where:

$\sum\_{}^{}Д\_{\left(НЗ+RGP\right)}$– the weighted average amount of adjustments by regions of the Republic of Kazakhstan;

$Д\_{НЗ}$ – the value of the additional calculation, calculated by the number of informally employed;

$Д\_{RGP}$ – the value of the recalculation, calculated by the share of regions in the RGP.

The recalculation coefficient for the concealment of wages is determined by the following formula:

 $КД=\frac{ФЗП+\sum\_{}^{}Д\_{\left(НЗ+ВРП\right)}}{ФЗП}\*100$$КД=\frac{ФЗП+\sum\_{}^{}Д\_{\left(НЗ+RGP\right)}}{ФЗП}\*100$, (7)

Where:

$ФЗП$– the annual wage fund of employees;

$\sum\_{}^{}Д\_{\left(НЗ+RGP\right)}$– weighted average amount of adjustments by regions of the Republic of Kazakhstan.

The final recalculation factor remains unchanged during the year and is applied until it is calculated for the next year.

After receiving the final recalculation coefficient, the monthly, quarterly and annual data are recalculated according to the NMIP of the reporting year.

**Paragraph 3. Calculation of cash income from self–employment**

18. The indicator "Money income from self–employment" includes data on income from entrepreneurial activity, income of individuals from the sale of agricultural products.

19. The number of self–employed persons is determined on a monthly basis using the balance sheet method, taking into account data from a sample survey of households on employment and the structure of employees.

20. The average monthly income of self–employed persons is calculated on a monthly basis on the basis of data from a sample household survey on living standards. Based on the data of quarterly surveys, the average monthly income is determined for all categories of self–employed persons (employers employed on a personal farmstead and on an individual basis, members of production cooperatives and unpaid employees of family enterprises).

21. To determine the average monthly income from self–employment, information on income from self–employment (including income from agricultural activities) of all employed persons for the relevant quarter is selected from the sample household survey database.

22. The total amount of cash income from self–employment of the population is determined by the product of the number of the specified category of employed persons and their average monthly cash income :

 $Д\_{СЗ}=Числ\_{СЗ}\*\overline{Д\_{СЗ}}$
$Д\_{СЗ}=Числ\_{СЗ}\*ДД\_{СЗ}$, (8)

Where:

$Д\_{СЗ}$– cash income from self–employment of the population;

$Числ\_{СЗ}$ *–* number of self–employed population;

$ДД\_{СЗ}$ *–* average monthly income of the self–employed population.

**Paragraph 4. Calculation of paid current transfers to the population**

 23. The indicator "Current transfers paid to the population" includes: the amounts of paid pensions, scholarships, targeted social and housing assistance, state benefits, compensation payments.

**Paragraph 5. Calculation of other monetary income of the population**

 24. The indicator "Other cash income of the population" takes into account the following types of cash income: from property, from renting out housing, winnings from lotteries, casinos, quizzes, inheritance, and so on. The data are compiled on the basis of a sample survey of households by standard of living.

25. The calculation of the amount of other monetary income of the population is made by summing up data on other income, insurance payments and income from deposits (deposits) of the population.

# Paragraph 6. Calculation of average per capita nominal cash income

 26. The total NMIP is determined by summing income from employment and self–employment, current transfers paid and other cash income.

 27. The average per capita nominal cash income is determined by the following formula:

 $НДД\_{ср/д}=\frac{\sum\_{}^{}НДД\_{общ}}{Числ\_{нас}}$, (9)

Where:

$\sum\_{}^{}НДД\_{общ}$– total amount of NMIP for the reporting period;

$Числ\_{нас}$– the population of the country at the time of the calculation period.

28. In accordance with the different frequency of submission of primary statistical data and clarification (adjustment) of summary statistical data (information) and data obtained from departmental statistical observations, a preliminary calculation (first assessment) and recalculation (second assessment or clarification) of the total volume of nominal and real monetary income of the population for the periods of the month, quarter and year.

29. Preliminary calculation of nominal and real monetary incomes of the population for the period from the beginning of the year is carried out on the 40th calendar day after the reporting period on the basis of monthly and quarterly summary statistical data (information) and data obtained from departmental statistical observations, as well as expert estimates and calculations of statistical indicators that are not available at the time of calculation (estimation).

30. Recalculation (updated estimate) of nominal and real money incomes of the population for the period from the beginning of the year and for the year is carried out in September of the year following the reporting one, based on annual summary statistical data (information) and annual data obtained from departmental statistical observations.

**Chapter 3. Calculation of indices of average per capita nominal monetary income of the population**

**Paragraph 1. Calculation of the index of nominal cash income**

31. To assess the dynamics of NMIP, the index of nominal cash income is calculated.

32. The index of nominal cash income characterizes the change in nominal cash income in the reporting period compared to the base period and is determined by the following formula:

$иНДД=\frac{НДД\_{отч.п}}{НДД\_{баз.п}}\*100\%$$иНДД=\frac{НДД\_{отч.п}}{НДД\_{баз.п}}\*100\%$, (10)

Where:

$иНДД$– index of nominal cash income;

$НДД\_{отч.п}$– average per capita nominal cash income for the reporting period;

$НДД\_{баз.п} $– per capita nominal cash income for the base period.

**Paragraph 2. Calculation of indices of real money income**

33. Calculation of the average per capita nominal cash income in real terms is carried out using the consumer price index.

34. The calculation of the average per capita nominal cash income in real terms is carried out by bringing the current indicator to comparable prices of the base period according to the formula:

$иРДД=\frac{иНДД}{ИПЦ}\*100\%$$иРДД=\frac{иНДД}{CPI}\*100\%$, (eleven)

Where:

$иРДД$– the index of real money income;

$иНДД$– index of nominal cash income for the reporting period;

$CPI$– consumer price index for the reporting period.