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# The methodology for calculating the gross output of services and VI by regions

Chiba 2017

# Formation of the gross output of services

**Statistics of commercial services** - a branch of statistics that reflects the patterns and trends in the development of the commercial services market, the characteristics of its infrastructure and regional characteristics.

The service is an activity aimed at satisfying any needs of the person or society as a whole, carried out by the producers at the request of consumers and leading to a change in the state of the units that consume these services.

### Formation of the gross output of services

The statistics of commercial services consists of the following activities of the General Classifier of Economic Activities in accordance with the international classifier NACE:

Section J - Information and Communication

Section L - Real estate activities

Section M - Professional, scientific and technical activities

Section N - Administrative and support services activities

Section O - Public administration and defense; compulsory social security

Section R - Art, entertainment and recreation

Section S - Other service activities

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### Formation of the gross output of services

#### The gross output of the service sector:

the cost of market services, cost of non-market services.

#### Producers of services are:

- enterprises, regardless of the form of ownership and the number of employees;
- individual entrepreneurs:
- -government bodies.

#### The composition of gross production includes:

- 1. the total volume of services, formed according to the aggregate data of national statistical observations;
- 2. the volume of services formed in the sphere of the non-observed economy. For each group of services, the coefficient for calculating the non-observed economy is calculated, which is then used to determine the amount of hidden and informal activity.

### Formation of the gross output of services

#### **Information sources**

The volume of services provided to enterprises and individual entrepreneurs are determined on the basis of:

- state statistical observation in the form 2-SERVICES "Report on the volume of services rendered" quarterly and annual periodicity;
- administrative data on expenditures of the general government on general public services, defense, public order, security (MF RK);
- estimates of volumes for the non-observed economy.

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### Formation of the gross output of services

The gross output of the services sector is calculated as follows:

$$V_s = V_e + V_{ie} + V_{noe}$$

V<sub>s</sub> – volume of gross output of services;

Ve – volume of services of small, medium and large enterprises;

V<sub>ie</sub> – the volume of individual entrepreneurs of services;

V<sub>noe</sub>— estimate the volume of non-observed economy services.

The volume of services provided by enterprises includes the volume of services provided by enterprises reporting on the results of nationwide statistical observations and an estimate of the volume of non-reporting enterprises (an unobservable economy for statistical reasons).

The volume of services financed from the state and local budgets is formed according to the data of the Ministry of Finance of the Republic of Kazakhstan.

### Features of calculating the volume index of services

Algorithm for calculating the VI services by types:

1) determination of the volume index of services for a particular activity using the CPI:

$$I = (V_1 / I_{cni} \times 100) / V_0 \times 100$$
,

 $V_1$ ,  $V_0$  - cost volumes of services respectively in the reporting and the base period in current prices for a particular activity;

 $I_{\text{cpi}}$ — consumer price index for services in the reporting period compared to the base period.

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### Features of calculating the volume index of services

2) determination of the weighted volume index of services for a certain activity:

$$I_{w} = (I_{ts} \times S_{ts})/100,$$

where

I<sub>w</sub> – weighted volume index of services for a certain type of activity;

 $I_{ts}$  – an index of physical volume for a certain type of activity;

 $S_{ts}$  – the share of a certain type of activity in the total volume of services in the base period;

3) determination of the weighted average volume index of services by summing the weighted volume indices of services for each activity:

$$I_{avi} = I_{w1} + I_{w2} + ... + I_{wi}.$$

The volume index of services by regions is calculated in the same way as the calculation of the VI for the republic.

## GDP structure by production method, in%

NACE (final draft)	2010	2011	2012	2013	2014	2015	2016
Production of goods	45,1	42,0	40,5	38,3	37,6	35,5	36,6
Production of services	51,7	49,1	51,5	53,1	54,8	59,4	57,8
Wholesale and retail trade; repair of							
motor vehicles and motorcycles	13,0	13,6	14,9	15,1	16,0	17,0	16,8
Transportation and storage	8,0	6,8	7,3	7,5	7,9	8,6	8,3
Accommodation and food service							
activities	1,0	0,9	0,9	0,9	0,9	1,1	1,1
Information and communication	3,1	2,6	2,6	2,6	2,6	2,6	2,1
Financial and insurance activities	3,6	2,0	2,1	2,7	3,0	3,5	3,5
Real estate activities	8,6	8,5	8,6	8,4	8,3	9,0	8,7
Professional, scientific and technical							
activities	3,9	4,4	4,5	4,2	4,2	4,6	5,0
Administrative and support service							
activities	1,9	1,7	1,8	1,8	1,9	2,1	2,1
activities	1,9	1,7	1,0	1,0	1,9	۷, ۱	2,1
Public administration and defence;							
compulsory social security	2,1	2,0	2,0	2,0	1,9	2,0	1,8
Education	3,2	3,1	3,1	2,9	2,8	2,9	2,8
Human health and social work activities	1,7	1,7	1,7	1,6	1,7	1,8	1,9
Arts, entertainment and recreation	0,6	0,7	0,7	0,7	0,7	0,8	0,8
Other service activities	0,9	1,1	1,2	2,6	2,8	3,3	2,8
Activities of households as employers; undifferentiated goods and services-		Ĺ			ĺ	ĺ	ĺ
producing activities of households for							
own use	0,1	0,0	0,1	0,1	0,1	0,1	0,1
Total for branches	96,8	91,1	92,0	91,4	92,4	94,9	94,4
Gross value added	94,7	91,1	92,0	91,4	92,4	94,9	94,4
Net taxes on products and imports	5,3	8,9	8,0	8,6	7,6	5,1	5,6
Fross domestic product	100,0	100,0	100,0	100,0	100,0	100,0	100,0

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#### **Short-term economic indicator**

Calculation of short-term economic indicators in the regional context is carried out to ensure efficiency and based on the change in the index of manufacture basic industries: agriculture, industry, construction, trade, transport and communication, constituting over 60% of GDP. The indicator is formed without adjustments to the non-observed economy and without the use of other macroeconomic adjustments.

The short-term economic indicator is an operative estimate that is relevant at the time of publication and therefore is not recalculated when the sectoral indices of the physical volume are revised based on the results of quarterly data, as these refinements are taken into account directly when calculating GRP.

# **Short-term economic indicator**

Calculations of Short-term economic indicator are conducted monthly in the context of regions:

- -month to the previous month of the corresponding year;
- -month to the corresponding month of the previous year;
- the period to the corresponding period of the previous year.

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# Short-term economic indicator, in%

	January-July 2017 to January-July 2016	July 2017 to July 2016	July 2017 by June 2017	January-August 2017 to January- August 2016	August 2017 to August 2016	August 2017 by July 2017
The Republic of Kazakhstan	105,5	104,3	100,4	105,8	107,8	104,5
Akmola	99,8	92,8	102,6	100,6	101,9	114,1
Aktobe	105,4	103,3	95,5	105,6	107,2	110,4
Almaty	102,8	93,5	106,6	101,5	94,5	119,0
Atyrau	117,1	114,7	96,9	120,2	140,0	94,4
West Kazakhstan	109,5	100,4	101,9	108,9	103,0	100,5
Zhambyl	102,0	102,9	103,2	102,2	103,2	114,2
Karaganda	104,2	102,7	94,9	104,2	104,6	109,3
Kostanay	104,7	106,6	95,5	104,1	104,8	122,1
Kyzylorda	97,9	90,9	100,9	98,2	102,9	104,7
Mangistau	99,1	101,4	101,7	99,8	101,2	102,7
South Kazakhstan	102,2	101,2	111,4	101,5	105,3	112,9
Pavlodar	106,2	105,5	103,1	105,2	102,4	97,2
North-Kazakhstan	99,5	96,4	115,0	99,7	95,7	123,7
East Kazakhstan	103,5	100,9	101,1	102,1	94,4	100,9
Astana city	100,5	101,5	112,5	101,8	103,4	99,8
Almaty city	103,4	106,2	98,6	103,6	104,3	101,0

# Thank you!

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