

Supply – use table in comparable prices

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- **Methods of assessment;**
- **Recalculation of gross output;**
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- **Estimation of intermediate consumption;**
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SUT Evaluation Methods

- The main method of estimating the supply table and the use table in constant prices is deflation.
- In a number of cases, the extrapolation method is used to make the estimation in constant prices.
- Comparable prices are average prices of previous year.

SUT Evaluation Methods

- Recalculation of SUT in comparable prices is performed in the following stages:



Recalculation of Gross Output

- The main component of the SUT is gross output. The output of each activity is divided into the following categories:

1.

- Production of market goods and services

2.

- Production of goods and services for own final use

3.

- Production of other non-market goods and services

Recalculation of Gross Output

Estimates of the industries output in constant prices are carried out separately for each of components.

The output of market goods and services is estimated by deflating with producer price indices or by extrapolating by volume indices of production or other indicators describing the change in production in a given industry.

The output of goods and services for own final use is revalued at constant prices using price indices for similar market goods and services, and if these data are not available, then by cost elements.

The output of other non-market services is estimated by the cost elements of which this output is composed (intermediate consumption, wages, other taxes on production, consumption of fixed capital), since there are no prices for these services.

Recalculation of Gross Output

	Type of economic activity	Recalculation in comparable prices (prices of the previous year)
A	Agriculture, hunting and forestry	Direct recalculation of the volume indicators of the current period in the prices of the previous period (as prices - producer prices)
B	Fishing	Deflation using producer price indices
C	Quarrying	Deflation using producer price indices
D	Manufacturing	Deflation using producer price indices
E	Electric and heat energy, gas and water supply	Extrapolation using the index for change in the number of persons employed
F	Construction	Deflation using the index of changes in the estimated cost of construction and installation works
G	Wholesale and retail trade	Extrapolations using the weighted average volume index of agriculture, industry and imports.

Recalculation of Gross Output

	Type of economic activity	Recalculation in comparable prices (prices of the previous year)
H	Hotels and restaurants	
	1. catering services	deflation using the price index for catering services
	2. hotels	deflation by hotel price index;
I	Transport and communication	
	1. freight transport services	extrapolation of data using the turnover index (by type of transport)
	2. passenger transport services:	extrapolating data by passenger indexes (by type of transport).
	3. communication services	deflation with indices of tariffs for communication services
J	Financial intermediation	extrapolating data by indexes of changes in the number of persons employed
K	Operations with real estate, rent and services to enterprises	market services - deflation of data by appropriate price indices; non-market services - by estimating the cost elements.
L	Государственное управление	by estimating the cost elements and by extrapolating data on the index of changes in the number of persons employed.

Recalculation of Gross Output

	Type of economic activity	Recalculation in comparable prices (prices of the previous year)
M	Education	<p>a) by an estimation on the cost elements (non-market services);</p> <p>b) by extrapolating the output at current prices for the previous year:</p> <ul style="list-style-type: none"> - by indices of quantitative indicators characterizing the change in the volume of services provided in physical terms (for example, the number of pupils, the number of students and students by type of education, etc.); - by indexes for change in number of persons employed.
N	Health and social services	<p>a) by an estimation cost elements(non-market services);</p> <p>b) by extrapolating the output at current prices for the previous year:</p> <ul style="list-style-type: none"> - by indices of quantitative indicators characterizing the change in the volume of services provided in physical terms (for example, the number of hospitalized in hospitals, the number of visits to the doctor, the number of visits by the doctor to patients at home, etc.); - by indexes for change in number of persons employed.

Recalculation of Gross Output

	Type of economic activity	Recalculation in comparable prices (prices of the previous year)
O	Other utilities, social and personal services	<p>a) by valuation of cost element (non-market services);</p> <p>b) by extrapolating the output in current prices for the previous year: by indices of quantitative indicators characterizing the change in the volume of services provided in physical terms (for example, sewage – the volume of waste water;</p> <p>photography - the number of the made pictures;</p> <p>baths - the number of washes;</p> <p>hairdressing, funeral and other services - the number of clients who were provided with these services;</p> <p>museums, exhibitions, art galleries, circuses, zoos, clubs - the number of visits;</p> <p>theaters, concert venues - the number of spectators;</p> <p>parks of culture and recreation – surface of parks;</p> <p>libraries - the number of readers, etc.); - according to employment indexes.</p>

Estimation of the short SUT

As example the calculations for 2014 year

At the first stage, each supply and use item recalculated into comparable prices according to the following scheme:

Supply/use item						
Type of economic activity	2013 year current prices	Indices of physical volume	2014 year comparable prices	Price index	2014 current price	Nominal index
Agriculture, hunting and forestry						
Fishing, fish farming						
Mining industry						
Manufacturing industry						
Food and Beverage						
Wholesale and retail trade; car repair ...						
Transport, auxiliary and additional activities ...						
.....						
CIF / FOB Import Correction						
Adjustment to final consumption of households						
TOTAL						

Estimation of short SUT in comparable prices

- Current prices for 2013 are from SUT for 2013
- Current prices for 2014 - from the balanced table for 2014

Price indices for:

- The output of each type of activity - producer price indices, volume indices
- CIF / FOB adjustment – price indices for imported goods
- CIF imports – price indices for imported goods
- Product taxes (excise taxes) – deflator of output
 - Value Added Tax Index = $\left(\frac{\text{VAT}_{2014} \text{ cur. prices}}{\text{VP}_{2014} \text{ cur. prices}} / \frac{\text{VAT}_{2013} \text{ cur. prices}}{\text{VP}_{2013} \text{ cur. prices}} \right) * \text{deflator of output 2014}$
- Trade margin - Consumer Price Index
- Transport margin - deflator of output of the transport industry
- Customs duties - price indices for imports of goods
- Product Subsidies - deflator of output

Estimate of the short SUT at comparable prices

- intermediate consumption – deflators calculated for all resources
- final consumption of general government – indexes of changes in the number of persons employed
- final consumption of NPISH – indexes of changes in the number of persons employed
- household final consumption – deflators of output
- gross fixed capital formation - price indices for construction and installation works, design and survey work, producer prices for machinery and equipment repair services, average price indices for the corresponding import product groups
- changes in inventories - deflators calculated for the output of relevant industries
- export - price indices for exported goods

Methods for recalculating use components

Use component	Recalculation in comparable prices (prices of the previous year)
Household final consumption	
purchase of goods	Deflation using the consumer price index for goods
purchase of services	Deflation using the consumer price index for services
personal consumption	Deflation using consumer price indices; prices of producers of industrial and agricultural products
Final consumption of bodies of state administration and NPISHs	Deflation using a deflator for the release of the corresponding type of service or extrapolation a) using quantitative indices for the relevant services; b) using indices of change in the number of persons employed in the respective units.
Gross fixed capital formation	Deflation using the index on investments in fixed capital, the price index of the printing industry, the price index for construction and installation works, the price index for machines and equipment, etc.
Changes in inventories	Deflation using the consumer price index for goods; producer price indices of industry and agriculture
Export and import of goods	Deflation using the price index for imported goods
Exports and imports of services	Deflation using the index calculated from the data of those countries that predominate in the import of a particular type of service.

estimation of intermediate consumption

- Indicators of intermediate consumption are revalued in constant prices for each type of activity.
- For each type of activity, the most appropriate price index or deflator is selected. It may be:

producer price index for this group of products

deflator for the output of this group of products

a special deflator, taking into account the characteristics of intermediate consumption in the industry

- The use of producer price indices is based on the assumption that they largely characterize changes in purchasers' prices when using these products for intermediate consumption.
- Output deflators are typically used to estimate intermediate consumption of services.

Balancing SUT

Balancing SUT is a complex and time-consuming process:

- I. Balancing the short SUT;**
- II. A comparative analysis of the adjusted data with the original data (volume indices, deflators, structures);**
- III. Evaluation adjustments are made, both in terms of supply and in terms of use (if necessary);**
- IV. Analyzes of the results for intermediate consumption (volume indices, deflators, structures);**
- V. Analysis of the estimates of the detailed SUT (the dynamics of the structure along the vertical and horizontal, deflators, volume indices, etc.) is carried out.**

Thank you for your attention!

