# INSTITUTUL NAȚIONAL DE STATISTICĂ



B-dul Libertății nr. 16, sector 5, București, tel / fax: 318.18.69, e-mail biroupresa@insse.ro

Embargo ora 10.00

# **COMUNICAT DE PRESÃ**

No. 243 of October 8, 2014

Gross Domestic Product in 2012 - Final data –

The Gross Domestic Product in 2012 – final data was compiled based on the methodology of European System of Accounts (ESA) 2010. The national accounts for the period 1995-2011, as well as the Gross Domestic Product in 2013 –provisional data, were recalculated based on the same methodology.

For further information, please see the methodological notes on page 8!

The Gross Domestic Product in 2012 – final data – was, in real terms, by 0.6% higher as compared to 2011.

#### Review of Gross Domestic Product in 2012

The review of Gross Domestic Product in 2012 was determined by:

- a. the current review from the semi-final to the final version of national accounts;
- b. the implementation of changes related to the reserves expressed by the European Commission in terms of Romanian Gross National Income reliability, comparability and exhaustiveness;
- c. the implementation of changes stipulated in the new methodology for national accounts, ESA 2010.

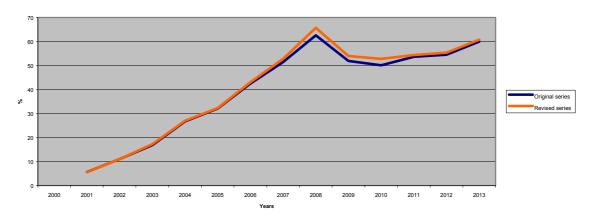
The impact of each review type on the nominal Gross Domestic Product is indicated in the following table.

Impact of revisions on nominal GDP, for 2012

	Millions lei curent prices	Percentage
Curent revision	749.6	0.1
Implementation of reservations	6492.3	1.1
Implementation of ESA 2010	2689.7	0.5
Total	9931.6	1.7

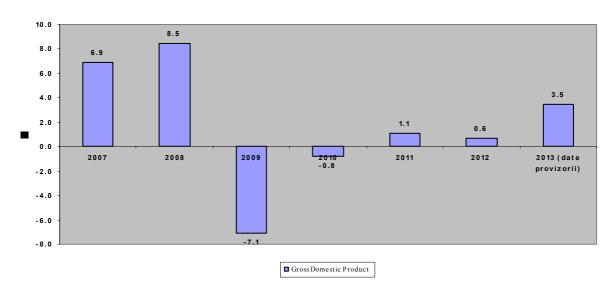
The changes in GDP evolution (growth rates) in the reviewed version as consequence of changes entailed by the treatment of reserves and by the implementation of ESA 2010, as compared to the original version, during 2000-2013, are presented in the table below.

GDP growth rates (%, 2000=100)



The Gross Domestic Product evolution during 2007-2013 is shown in the following graph.

GDP growth rates for the period 2007-2013 - changes over the previous year (%) -



The Gross Domestic Product in 2012 – final data amounted to 596681.5 million lei current prices, increasing – in real terms – by 0.6% as against 2011.

#### Gross domestic product, in 2012

	Semi-final data	Final data	Differences (+/-)
Millions lei curent prices	586749.9	596681.5	9931.6
GDP growth rate - % over 2011	100.6	100.6	0.0
GDP deflator - % over 2011	104.7	104.9	0.2

As compared to the semi-final version, the nominal GDP estimated for 2012 increased by 1.7% in the final version.

In terms of Gross Domestic Product formation, the changes which occurred in the final version, as compared to the semi-final one, both regarding the dynamics and the deflators by activity branches, are presented in the following table.

Evolution of resources categories, in 2012

	Growth rate - % as against 2011 -		Growth rate - % as against 2011 -		Deflator - % as against 2011 -	
	Semi-final data	Final data	Semi-final data	Final data		
Agriculture, forestry and fishing	75.4	73.9	104.5	103.8		
Minning and quarrying; manufacturing; electricity, gas, steam and air conditioning						
production and supply; water supply; sewerage, waste management and						
decontamination activities	98.8	93.0	104.4	97.2		
Construction	101.9	98.9	109.8	113.6		
Wholesale and retail; repair of motor vehicles and motorcycles; transport and storage; hotels						
and restaurants	108.7	133.0	100.3	119.5		
Information and communication	105.2	91.9	104.3	123.9		
Financial intermediation and insurance	99.0	105.5	103.7	105.5		
Real estate activities	100.1	102.5	102.4	103.2		
Professional, scientific and technical activities;						
activities of administrative services and						
support services	112.4	108.8	103.8	87.5		
Public administration and defence; social						
insurance of public sector; education; health and social assistance	100.5	96.9	109.4	104.4		
Shows, culture and recreation activities; repair	100.5	90.9	109.4	104.4		
of households goods and other services	104.5	104.6	106.1	103.2		
Gross value added	100.3	100.4	104.7	105.2		
Net taxes on products	102.6	102.2	104.5	102.7		
Gross domestic product	100.6	100.6	104.7	104.9		

The contribution of GDP resources to the nominal value and growth rate of GDP, in 2012

	Contribution to the nominal value of GDP - %		Contribution to the growth rate of GDP - %	
	Semi-final data	Final data	Semi-final data	Final data
Agriculture, forestry and fishing Minning and quarrying; manufacturing; electricity, gas, steam and air conditioning production and supply; water supply;	4.9	4.7	-1.6	-1.7
sewerage, waste management and decontamination activities Construction Wholesale and retail; repair of motor vehicles	28.2 8.6	24.4 8.5	-0.4 0.2	-2.1 -0.1
and motorcycles; transport and storage; hotels and restaurants Information and communication Financial intermediation and insurance Real estate activities	11.7 3.5 2.5 8.2	17.3 4.5 3.0 8.0	1.0 0.2 0.0 0.0	3.8 -0.3 0.2 0.2
Professional, scientific and technical activities; activities of administrative services and support services Public administration and defence; social	6.2	5.0	0.7	0.5
insurance of public sector; education; health and social assistance Shows, culture and recreation activities; repair	10.5	9.5	0.1	-0.3
of households goods and other services  Gross value added	3.0 <b>87.3</b>	2.9 <b>87.8</b>	0.1 <b>0.3</b>	0.1 <b>0.3</b>
Net taxes on products	12.7	12.2	0.3	0.3
Gross domestic product	100.0	100.0	0.6	0.6

In 2012, more significant changes in the contribution to GDP growth between the two estimates were recorded for:

- Industry, from -0.4% to -2.1%, as consequence of changes in the activity volume by -5.8 percentage points (from 98.8% to 93.0%);
- Construction, from +0.2% to -0.1%, as consequence of changes in the activity volume by -3.0 percentage points (from 101.9% to 98.9%);
- Wholesale and retail, repairs of motor-vehicles and motorcycles; transport and storage; hotels and restaurants, from +1.0% to +3.8%, as consequence of changes in the activity volume by +24.3 percentage points (from 108.7% to 133.0%);
- Information and communications, from +0.2% to -0.3%, as consequence of changes in the activity volume by -13.3 percentage points (from 105.2% to 91.9%);
- Public administration and defence; public social insurances; education; health and social assistance, from +0.1% to -0.3%, as consequence of changes in the activity volume by -3.6 percentage points (from 100.5% to 96.9%).

From the standpoint of Gross Domestic Product uses, the changes that occurred in the final version as compared to the semi-final one, both in terms of dynamics and of deflators by category of uses, are presented in the following table.

The GDP evolution by use, in 2012

	Volumes - % as against 2011-		Prices - % as against 2011-	
	Semi-final	Final data	Semi-final	Final data
	data		data	
Total final consumption	101.5	101.1	104.1	104.8
Actual individual consumption of households	101.5	101.7	104.0	104.2
Final consumption expenditure of households	101.1	100.8	103.9	104.6
Final consumption expenditure of Non-profit institutions serving households Individual final consumption expenditure	119.9	121.2	105.6	104.5
of General government Collective final consumption expenditure	101.5	104.8	104.4	101.5
of General government	100.7	94.4	105.6	112.3
Gross fixed capital formation	103.8	100.1	102.3	107.2
Change in inventories	-	-	-	-
Net export	_	-	-	-
Export of goods and services	98.5	101.0	108.6	106.1
Import of goods and services	99.8	98.2	105.6	107.3
Gross domestic product	100.6	100.6	104.7	104.9

In 2012, changes in the contribution to GDP growth between the two estimates were recorded for:

- Total final consumption expenditure, from +1.2% to +0.9%, mainly as consequence of the decrease in final consumption expenditure volume of households by 0.3% (from 101.1% to 100.8%) and of the actual collective final consumption expenditure of public administrations by 6.3% (from 100.7% to 94.4%);
- Gross Fixed Capital Formation, from +1.0% to +0.0%, as consequence of changes in its volume by -3.7 percentage points (from 103.8% to 100.1%).
- Net exports of goods and services, from -0.5% to +1.1%, as consequence of the 1 percentage point increase of the exports of goods and services contribution, correlated with the decrease by 0.6 percentage points of imports of goods and services.

# The contribution of GDP expenditure to the nominal value and growth rate of GDP, in 2012

		Contribution to the nominal value of GDP - %		Contribution to the growth rate of GDP - %	
	Semi-final data	Final data	Semi-final data	Final data	
Total final consumption	78.8	77.9	1.2	0.9	
Actual individual consumption of households	72.4	71.6	1.1	1.2	
Final consumption expenditure of households	61.9	61.4	0.7	0.5	
Final consumption expenditure of Non-profit institutions serving households Individual final consumption expenditure of General government	1.7 8.8	1.6 8.6	0.3 0.1	0.3	
Collective final consumption expenditure of General government	6.4	6.3	0.1	-0.3	
Gross fixed capital formation	26.3	27.5	1.0	0.0	
Change in inventories	-0.3	-0.5	-1.1	-1.4	
Net export Export of goods and services Import of goods and services	<b>-4.8</b> 40.6 45.4	<b>-4.9</b> 37.4 42.3	<b>-0.5</b> -0.6 -0.1	<b>1.1</b> 0.4 -0.7	
Gross domestic product	100.0	100.0	0.6	0.6	

#### **GROSS DOMESTIC PRODUCT BY RESOURCES AND USES, IN 2012**

- final data -

			- iinai data -
	Milions RON	Volume indices	Price indices
	current prices	– in % as against	– in % as against
		2011	2011
Agriculture, forestry and fishing	27885.8	73.9	103.8
Minning and quarrying; manufacturing; electricity, gas, steam	27000.0	75.5	103.0
and air conditioning production and supply; water supply;			
	445540.0	02.0	07.0
sewerage, waste management and decontamination activities	145513.3	93.0	97.2
Construction	50470.4	98.9	113.6
Wholesale and retail; repair of motor vehicles and motorcycles;		400.0	
transport and storage; hotels and restaurants	103429.7	133.0	119.5
Information and communication	26889.1	91.9	123.9
Financial intermediation and insurance	17905.6	105.5	105.5
Real estate activities	47988.3	102.5	103.2
Professional, scientific and technical activities; activities of			
administrative services and support services	29926.5	108.8	87.5
Public administration and defence; social insurance of public			
sector; education; health and social assistance	56429.6	96.9	104.4
Shows, culture and recreation activities; repair of households			
goods and other services	17562.0	104.6	103.2
Gross value added	524000.3	100.4	105.2
Net taxes on products 1)	72681.2	102.2	102.7
Gross domestic product	596681.5	100.6	104.9
Final consumption	465306.8	101.1	104.8
Actual individual consumption of households <sup>2)</sup>	427993.5	101.7	104.2
Final consumption expenditure of households	366640.8	100.8	104.6
Final consumption expenditure of Non-profit institutions	000010.0	100.0	101.0
serving households	9768.7	121.2	104.5
Individual final consumption expenditure of General government	51584.0	104.8	101.5
Collective final consumption expenditure of General government	37313.3	94.4	112.3
Gross capital formation	160988.5	95.2	107.4
of which:			
Gross fixed capital formation	164146.8	100.1	107.2
Net export	-29613.8	_	-
Export of goods and services	223045.7	101.0	106.1
Import of goods and services	252659.5	98.2	107.3

<sup>1)</sup> Represents the difference between taxes on product due to the State Budget (VAT, excise duties, other taxes) and product subsidies paid from the State Budget.

<sup>2)</sup> Comprises: expenditure of population households for purchasing goods and services in view to meet their members needs, the expenditure for individual consumption of public administration (education, health, social security and social activities, culture, sport, leisure activities, collection of household waste) and the expenditure for individual consumption of non-profit institutions serving households (religious organisations, trade unions, political parties, unions, foundations, cultural and sport associations).

<sup>3)</sup> Comprises the expenditure for collective consumption of public administration (general public services, national defence and territory security, public order and security, legislative and regulatory activities, research & development, etc.).

#### Methodological notes

The Gross Domestic Product at market prices (GDP), the main macroeconomic aggregate of national accountancy, represents the final result of production activities carried out by resident productive units, during a defined period, namely a year. The Gross Domestic Product at market prices, in current prices, is estimated based on the three method briefly described below: production method, expenditure method and income method. When estimating the Gross Domestic Product at average prices of previous year, only the first two methods are used.

Production method	Expenditure method	<b>Income method</b>
GDP = GVA+TP-PS,	GDP = FC + GCF + E - I,	GDP = CE+TPI-TS+GOS,
where:	where:	where:
GVA = gross value added at basic price;  TP = taxes on product;  PS = product subsidies	FC = actual final consumption;  GCF = gross capital formation;  E = exports of goods and services;  I = imports of goods and services.	CE = compensation of employees;  TPI = taxes on production and imports;  TS = total subsidies;  GOS = gross operating surplus.

The main data sources used for the estimation of annual Gross Domestic Product in the semi-final and final versions are:

#### Statistical sources

- o Structural Business Survey;
- o Family Budgets Survey;
- o Households Labour Force Survey (HLFS);
- o Economic Accounts for Agriculture;
- o Balance of Agricultural Products;
- o Labour Cost;
- o Population and Housing Census;
- o Specific surveys carried out by INS specialised departments related to industry, transports, trade, construction, services, number of employees, earnings, etc.;
- Other available annual and infra-annual surveys related to industrial production, construction, services, trade;
- o Price indices.

#### • Administrative sources

Execution of public administrations general budget – budgetary reports, consisting of: Central public administration budget; Local administrations budgets; Social security budget, consisting of: Unemployment Funds, Health Insurance Funds, Social Security Funds. o Statements on global income from independent activities, submitted by individual entrepreneurs and family associations to the Ministry of Public Finances (MPF).

# • Accounting and financial sources:

- o Financial statements of financial companies;
- o Financial statements of other economic operators.

#### • Other data sources:

o Balance of Payments

### **GDP** estimation at current prices

#### 1. Production method

The measurement of production and intermediate consumption at current prices is directly carried out by institutional sector and activity branch, based on the available data sources.

The Gross Value Added is estimated as the balance between production and intermediate consumption.

The calculation of taxes and subsidies on products is based on budgetary execution data.

## 2. Expenditure method

The main GDP components in the expenditure method are:

- Final consumption expenditure
  - Actual final consumption of households
    - Final consumption expenditure of households
    - Final consumption expenditure of public administrations
    - Final consumption expenditure of non-profit institutions serving households (NPISH)
  - Actual final consumption of public administrations
- Gross Capital Formation
  - Gross Fixed Capital Formation
  - Changes in stocks
- Net exports of goods and services:
  - Exports of goods and services;
  - Imports of goods and services.

*The assessment of each component* is directly carried out based on the information taken over from available data sources.

#### 3. Income method

Based on the income method, GDP is the sum of the following elements: compensation of employees (gross salaries and allowances and social subscriptions paid by employers), gross operating surplus, other taxes on production, taxes on products, out of which other subsidies on production and subsidies on products are to be subtracted.

The compensation of employees, the taxes and subsidies are directly assessed based on the information taken over from available data sources.

**The Gross Operating Surplus** is the balancing item of operating account and represents the remaining value added, newly created in the production process, after the payment of employees compensations and the taxes on production.

#### GDP estimation at constant prices (average prices of previous year)

Within the Romanian system of national accounts, the Gross Domestic Product at constant prices is estimated based on two methods: *production method* and *expenditure method*. For each method, independent indices of components are used, while final results are subject to reconciliation.

The Gross Domestic Product at constant prices results from the aggregation of its components, evaluated at constant prices.

The main methods used for the estimation at constant prices are:

- *deflating through prices* methods; the following prices indices are used for deflating the values at current prices: industrial production price indices, construction cost indices, consumer price indices, unit value indices, "inputs" prices, e.g. labour force price of and average price of intermediate consumptions, etc.
- *volume extrapolation* method, using the production volume indices, "inputs" volume indices, e.g.: number of employees or the change in intermediate consumption volume.

Both the semi-final and the final version of Gross Domestic Product have the same coverage and are based on the same data sources. The differences between the semi-final and the final versions are mainly entailed by:

- the level of details for the computation of all aggregates, namely:
  - o in the semi-final version, production, intermediate consumption and gross value added are estimated at division (2 digits) level of CANE rev.2, while in the final version these are estimated at class (4 digits) level of the same classification;
  - o in the semi-final version, the expenditure elements, as well as taxes and subsidies on product are estimated only at total economy level, while in the final version these are estimated at class (4 digits) level of CPSA 2008;
- the way of reaching a balance between resources and uses, namely:
  - o in the semi-final version, at total economy level;
  - o in the final version, by class, according to CPSA 2008.

The final version of national accounts also includes the synthesis tables stipulated by ESA 2010, namely:

- *The Input Output / Resources Uses Table* at division level of CANE rev.2. The table is issued both at current prices and at previous year prices.
- *The Table of Integrated Economic Accounts*, at current prices, for the six institutional sectors. The accounts are balanced based on the accounting balancing items.

#### Implementation of changes related to the treatment of reserves and to ESA 2010

# <u>Implementation of reserves</u>

Through the letter Ares(2012)677973 of June 7, 2012, The European Commission informed Romania about its reserve in expressing its position regarding the national accounts data on the compilation of the contribution to own resource based on GNI, presented by Romania, for the period 2007-2010, waiting for checks on GNI inventory, procedures and basic statistics used for the compilation of GNI and its components, in accordance with ESA 95.

The checking process was conducted during 2012-2013 and pointed out the following problems related to Romanian GNI reliability, comparability and exhaustiveness:

- 1. Estimation of the operation surplus for the production of market producers measured as the sum of costs;
- 2. Estimation of Gross Fixed Capital Formation for the enterprises which do not have the status of company, to be deducted from their intermediate consumption;
- 3. Clarification of sources and methods used for the estimation of new dwellings directly built up by owners and, as the case may be, improvement of national accounts estimates;
- 4. Improvement of sources and methods used in insurances field;
- 5. Improvement of estimates dwellings related services of owners-occupants and clarification of the compilation procedure;
- 6. Improvement of sources and methods used for the estimation of original literature and artistic products, including the fixed capital consumption;
- 7. Clarification of sources and methods used for software production, particularly the production for own final consumption;
- 8. Improvement of several issues related to adjustments for exhaustiveness;
- 9. Improvement of estimates on fixed capital consumption, particularly for intangible assets (mining explorations, software, original cultural products and public infrastructure);
- 10. Improvement of sources and methods used for the estimates on the compensation of employees for the transition from GDP to GNI;
- 11. Additional clarifications on sources and methods, as well as improvement of national accounts estimates, as the case may be, for the following components:
  - coverage of the statistical register (REGIS);
  - treatment of agricultural production as consequence of a secondary activity of an institutional unit and the coherent treatment of wines production in the economic accounts for agriculture (EEA) and national accounts;
  - principles for the assessment of travel agencies services;
  - sources and methods used for the estimates of financial leasing;
  - criteria used for subsidies classification.

The Commission has also identified several trans-cutting issues on GNI compilation that require a comparative analysis of solutions adopted by Member States, namely:

- I. Treatment of cross-borders property income;
- II. Compilation and allocation of financial intermediation services indirectly measured (FISIM);
- III. Treatment of neglectable or null presence entities;
- IV. Treatment of old motor-vehicles retirement system;
- V. Treatment of dwellings cooperatives;
- VI. Inclusion in national accounts of illegal activities. For further information on the methodology please access the following link:
  - http://www.insse.ro/cms/ro/content/impact-sec2010
- VII. Recording the motor-vehicles registration tax;

VIII. Compilation of intermediate consumption for actual and imputed rents in the estimation of real estate services.

# **Implementation of ESA 2010**

The implementation of ESA 2010 envisaged the following improvements:

- 1. Research & development expenditure recognised as capital formation;
- 2. Non-life (general) insurances output, reimbursement of disaster damages and re-insurances;
- 3. Expenditure of public administrations for military equipment, recognised as capital formation;
- 4. Classification of units in public administrations and non-financial corporations;
- Tools:
- 6. The third own resource of the European Union based on VAT;
- 7. Central Bank allocation of output;
- 8. Expenditure for land arrangements, recognised as capital formation.

For further details on the implementation of reserves and of ESA 2010, as well as on their impact in Gross Domestic Product and Gross National Income for the period 2007-2013 please access the following link:

http://www.insse.ro/cms/ro/content/impact-sec2010

The methodology on the compilation of annual national accounts and annual GDP data in published on the INS web page: <a href="www.insse.ro">www.insse.ro</a>.

Gross Domestic Product for 2013, <u>semi-final data</u>, is to be published in a press release, according to the calendar published on the INS web page, on December 20<sup>th</sup>, 2014.

Comparative data with the other European Union Member States could be obtained from the Eurostat web page: <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/">http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/</a>.