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## THE EVOLUTION OF THE GROSS DOMESTIC PRODUCT IN 2021 SUGGESTS AN UNFAVORABLE EVOLUTION IN THE CONTEXT OF THE CURRENT CRISES

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### Abstract

*In this article, the authors aimed to highlight the risky perspective that the Romanian economy will have in 2022 in the context of the combined effect of the crises. The Gross Domestic Product recorded an encouraging evolution in 2021. This appreciation is based on the fact that in the last quarter of this year compared to the previous quarter there was a decrease -0.1%. In the context in which in 2022 the economic evolution will face a cumulation of crises. In this regard, the pandemic crisis, through the restrictions imposed, will continue to negatively influence the macroeconomic results. In the conditions of this crisis, some restrictions are maintained that hold back the evolution of the Romanian economy as a whole. The Covid 19 crisis triggered the economic and financial crisis with negative effects on macroeconomic stability. Thus, the unprecedented increase in prices of the entire range of products and services was triggered. The year 2022 started with a third crisis in the field of energy, as a result of the decreasing resources of oil, natural gas, coal and other products in this area. The market for energy products has destabilised and imposed particularly high prices, which in turn have influenced in every direction the increase in prices of agro-food products, construction, industry, transport and services, being able to discuss a general crisis determined by the supply-demand ratio at national / international level. In February 2022, with the onset of the armed conflict (war), the evolution of prices worsened, which exceeded any anticipation of economic financial researchers. Against this background we can discuss the conjugation of these mentioned crises, which will influence macroeconomic results nationally / internationally, pushing the economy towards a possible state of recession. In this article we used a complex methodology specific to statistical analysis. Thus, we have made extensive use of statistical indicators*

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*and indices, dynamic and structural analysis of the Gross Domestic Product, as well as the presentation of databases and graphical presentations, as well as the processing of data by statistical-econometric methods.*

**Keywords:** Developments, GDP, indices, indicator, resources, crises.

**JEL classification:** E30, F40

### **Introduction**

This article focuses on the study on the results obtained in 2021 with the concern to decipher the perspective of macroeconomic evolution in 2022. If in 2021 the economic evolution of Romania followed a reassuring trend of recovery, ending with a reduction of -0.1% in GDP growth in the fourth quarter of 2021 compared to the third quarter of 2021. The year 2022 begins with the deepening of the crises (sanitary, economic, financial, energy and the crisis caused by the armed conflict – the Russo-Ukrainian war). In the study we presented data, based on those provided by the National Institute of Statistics and Eurostat, in connection with the anticipation of the effects that the evolution of the specified crises will have on the economic evolution at national, international level, as well as the period for the world economy to reach a state of collapse, being able to enter recession.

Further in this article I referred to the contribution that resources have had and should have in the formation of the Gross Domestic Product. At the same time, we have also broadened the analysis of the effect of uses on the change in the macroeconomic indicator of results.

We have expressed opinions about the danger posed by the rate of inflation, as a result of the explosion in prices caused by the crises and especially by the armed conflict on the country's border.

There are prospects of creating major difficulties in connection with the scarcity of gas, oil and electricity resources that will require further price increases with the effect not only of GDP evolution, but also of quality of life.

Under the impact of price growth, the real level of income has seriously departed from its face value. We mention that this removal is much more pronounced if we straighten the analysis on the basis of physical indicators, because galloping inflation causes nominal increases, which can give the impression of a positive evolution, but when we perform the deflation, the real level is significantly reduced.

Through graphs and tables, we aimed to highlight as suggestively as possible the evolution of the Gross Domestic Product in 2021, compared to the previous periods, and in a forecasting attempt to suggest the economic trend for the next period.

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### Literature review

The analysis of the evolution of the Raw Product based on resources and uses is a topic addressed by many researchers. Thus, Anghelache, C., Anghel, M.G., Iacob, S.V., Samson, T. (2020) analyzed the evolution of the Gross Domestic Product starting with the resources and uses that this indicator had in obtaining the results. Anghelache, C. (2015) and others analyze in a study the evolution of gross domestic product under the influence of consumption. Censolo, R. and Colomco, C. (2008) publish a study on consumption and economic growth. Dornbusch, R, Fischer, S. and Startz, R. (2007) refer to these aspects in their study of macroeconomics. Deschenes, D. and Greenstone, M. (2012) conduct a study on the impact of climate change on economic growth, and Goodwin, N.R. (2008) publishes a paper addressing these issues on macroeconomic evolution in the 21st century. Lee, J. and Brahmsterne, T. (2013) investigate in an article the influence of tourism on economic growth. Usher, D. (1980) lays the foundation for the real measurement of economic growth.

### Methodologies

In order to make it easier to understand the aspects presented in this article, we have extracted below some methodological aspects that the National Institute of Statistics and Eurostat use. Thus, the quarterly gross domestic product at market price (GDPT), the main macroeconomic aggregate of the national accounting, represents the final result of the production activity of the resident producer units, during a period, respectively one quarter. Quarterly gross domestic product is estimated by three methods, briefly described below: the method of production, the method of expenditure and the method of revenue.

(a) *method of production*:  $GDP = GVA + IP - SP$ ,

where: GVA = gross value added at basic price;

IP = taxes on the product;

SP = subsidies per product

(b) *expenditure method*:  $GDP = CF + FBC + E - I$ ,

where: CF = actual final consumption;

GFCF = gross capital formation;

E = the export of goods and services;

I = importation of goods and services.

c) *income method*:  $PIBT = R + EBE + IMP - SUB$ ,

where: R = compensation of employees;

EBE = gross operating surplus;

IMP = taxes on production and imports;

SUB = subsidies on production and imports.

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The main data sources used to estimate the quarterly Gross Domestic Product are infra-annual surveys on industrial production, construction, services, trade; the agricultural production account calculated on the basis of data provided by the Ministry of Agriculture; infra-annual investigations on earnings and the number of employees; balance sheets of financial institutions and execution of the state budget and local budgets, as well as of the state social insurance budget; Balance of external payments.

The estimation of production in current prices is obtained for non-financial corporations (enterprises), households and non-profit institutions serving households, it is estimated, by branches of activity, by extrapolation in volume and price, or in value, of the production from the corresponding quarter of the previous year, using the available volume, price and value indices from the statistical data sources.

For financial companies and general government, it is determined directly on the basis of data sources (balance sheets and budget executions).

At the same time, intermediate consumption is obtained for non-financial corporations (enterprises), households and non-profit institutions serving households, it is estimated, by branch of activity, by applying the share of intermediate consumption in production calculated for the corresponding quarter of the previous year, for which there were complete and detailed data sources, based on the assumption of constant technological coefficients and for corporations financial and general government are determined directly on the basis of data sources (balance sheets and budget executions).

For this purpose, gross value added is calculated as the balance between output and intermediate consumption. The calculation of taxes and subsidies on product is also based on data from budget implementations.

Quarterly gross domestic product is estimated in current prices, in the prices of the corresponding period of the previous year and in the average prices of 2000. The estimates in the average prices of 2000 are calculated by chaining the volume indices.

In addition to the gross estimates of quarterly Gross Domestic Product, seasonally adjusted estimates are also calculated using the regressive method also used by Eurostat.

The seasonal adjustment aims to eliminate seasonal effects from the data series in order to highlight real economic developments in consecutive periods.

For the adjustment of the series of the main aggregates on the basis of which GDP is estimated by the three methods, the JDEMETRA package of programmes version 2.2.0 is used. It carries out the estimation of the seasonal effect (events that happen at the same time, with the same magnitude and direction each year, such as: seasons, holidays, etc., the number of working

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days different from one month to the next and the effect of the calendar, such as Orthodox Easter, leap year and other national holidays) as well as the identification and correction of extreme values (occasional level changes, transient or permanent) and interpolation of missing values.

The quarterly national accounts in Romania generally show a strong seasonality, being adjusted also according to the number of working days and the calendar even if the effect of the latter is insignificant.

The seasonally adjusted series was obtained by eliminating the seasonal effect from the gross series, with the help of correction coefficients, established according to the regression model used (additive or multiplicative). The additive or multiplicative model used for regression is automatically identified by the JDemetra program depending on the nature of the series subject to adjustment.

Seasonally adjusted GDP is obtained by the direct method, which leads to the emergence of a statistical discrepancy between GDP and the sum of its seasonally adjusted components independently.

The seasonally adjusted series for the last 5 years and the available quarters of the reference year shall be recalculated each quarter as a result of the revision of the gross quarterly and annual data series, as statistical and administrative data sources with a greater degree of coverage and accuracy become available, of the entry in the data series of the last available observation, of the modification of the adopted models and of the regression parameters.

Starting with the first quarter of 2012, the policy of estimation and dissemination of the Gross Domestic Product quarterly has changed by the introduction of a third estimate, called provisional data (2), which is published, according to the press schedule on the INS website, approximately T+95 days after the end of the reference quarter. The main objectives of this review are related to the integration of statistical, financial, banking and administrative information that became available or which was corrected after the publication of the first provisional estimates, approximately T+70 days after the end of the reference quarter and ensuring consistency between the aggregates underlying the quarterly GROSS DOMESTIC PRODUCT estimate and the aggregates in the quarterly accounts of the institutional sectors, in particular those of the public administrations sector, with a deadline of dissemination T+90 days from the end of the reference quarter.

The additional information used in the estimation of gross domestic product provisional data (2) refers to: corrected statistical data, for the last month of the quarter, on: indices of industrial production, indices of industrial production prices, indices of construction works, cost indices in construction, indices of volume of turnover in retail trade excluding motor vehicles and

motorcycles, indices of turnover volume for trade in trade wholesale and retail, maintenance and repair of motor vehicles and motorcycles, value indices of turnover for wholesale trade, indices of turnover for market services provided to the population, value indices of turnover for market services provided mainly to enterprises; additional statistical data on passenger and freight transport; detailed administrative data on budget implementations and amended data on the Balance of External Payments.

### Data, results and discussions

Gross domestic product in the fourth quarter of 2021 was, in real terms, lower by 0.1% compared to the third quarter of 2021. Compared to the same quarter of 2020, gross domestic product registered an increase of 2.4% on the gross series and of 3.9% on the seasonally adjusted series. Also, the seasonally adjusted series of quarterly Gross Domestic Product was recalculated as a result of the revision of the estimates for the quarters I-IV 2021, with no significant changes recorded. The evolution of quarterly gross domestic product in the period 2019 - 2021, calculated as gross series and seasonally adjusted series, is presented in Table number 1.

**Evolution of quarterly Gross Domestic Product  
in the period 2019 - 2021**

*Table 1*

		Q I	Q II	Q III	Q IV	Year
in % in relation to the corresponding period of the previous year						
Gross series	2019	105.1	104.4	103.0	104.4	104.2
	2020	102.6	90.2	94.6	98.5	96.3
	2021	99.9	115.4	106.9	102.4	105.9
Seasonally adjusted series	2019	104.8	104.1	103.7	103.7	-
	2020	102.4	91.2	94.9	97.9	-
	2021	99.6	112.7	108.0	103.9	-
in % in relation to the previous quarter						
Seasonally adjusted series	2019	101.5	100.8	100.7	100.7	-
	2020	100.3	89.8	104.8	103.9	-
	2021	101.9	101.6	100.4	99.9	-

Source: INS press release no. 85 / 8 April 2022

Gross Domestic Product, seasonally adjusted data, estimated for the fourth quarter of 2021 was 305,569.3 million lei current prices, decreasing in real terms by 0.1% compared to the third quarter of 2021 and increasing by 3.9% compared to the fourth quarter of 2020. The seasonally adjusted estimates of gross domestic product in provisional versions (1) and (2), as well as the differences between the two variants, are presented in Table no. 2.

**Seasonally adjusted estimates of Gross Domestic Product in provisional versions (1) and (2)**

*Table 2*

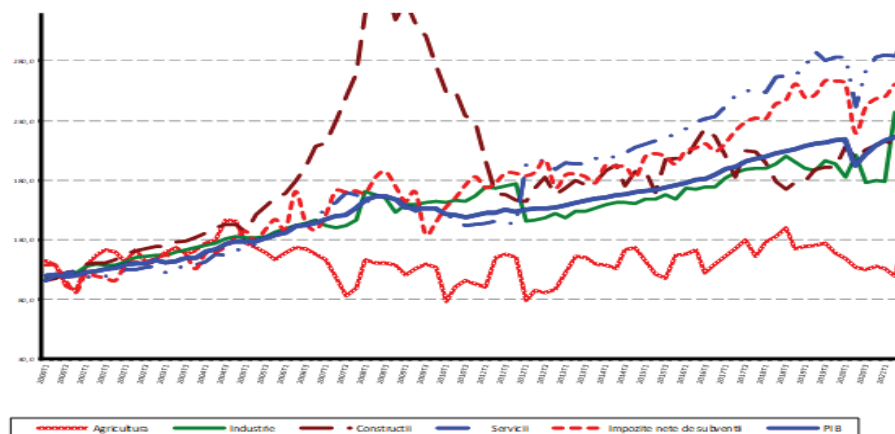
		Q I	Q II	Q III	Q IV
Million lei current prices	<i>Provisional (1)</i>	284895.4	292906.7	294163.3	303812.0
	<i>Provisional (2)</i>	286469.2	291950.8	294288.3	305569.3
	<i>Differences</i>	1573.8	-955.9	125.0	1757.3
In % compared to the previous quarter	<i>Provisional (1)</i>	102.0	101.5	100.4	99.9
	<i>Provisional (2)</i>	101.9	101.6	100.4	99.9
	<i>Differences</i>	-0.1	0.1	0.0	0.0
In % compared to the corresponding period in the previous year	<i>Provisional (1)</i>	99.5	112.7	108.0	103.9
	<i>Provisional (2)</i>	99.6	112.7	108.0	103.9
	<i>Differences</i>	0.1	0.0	0.0	0.0

Source: INS press release no. 85 / 8 April 2022

The quarterly evolution of the Gross Domestic Product, of the agricultural, industrial, construction and services activity, as well as the net subsidy taxes, in the period 2000-2021 is presented in graph number 1.

**Quarterly evolution of the Gross Domestic Product, agricultural, industrial, construction and service activity, as well as net subsidy taxes, in the period 2000-2021 in % (quarterly average of 2000 = 100%)**

*Chart 1*



The gross domestic product estimated for 2021 was of 1,181,917.9 million lei current prices, increasing in real terms by 5.9% compared to 2020. The gross domestic product estimated for the fourth quarter of 2021

was 357,334.9 million lei current prices, increasing in real terms by 2.4% compared to the fourth quarter of 2020. The estimates of the gross series of gross domestic product in the provisional versions (1) and (2), as well as the differences between the two variants, are presented in Table no. 3.

**Estimates of the gross series of gross domestic product in provisional versions (1) and (2)**

		Q I	Q II	Q III	Q IV	Year 2021
Million lei current prices	<i>Provisional (1)</i>	226651.0	276159.8	321371.2	355194.9	1179376.9
	<i>Provisional (2)</i>	228053.4	275104.6	321425.0	357334.9	1181917.9
	<i>Differences</i>	1402.4	-1055.2	53.8	2140.0	2541.0
In % compared to the corresponding period in the previous year	<i>Provisional (1)</i>	99.9	115.4	106.9	102.4	105.9
	<i>Provisional (2)</i>	99.9	115.4	106.9	102.4	105.9
	<i>Differences</i>	0.0	0.0	0.0	0.0	0.0

Source: INS press release no. 85 / 8 April 2022

Table number 4 shows the contribution of the categories of resources and uses to the modification of gross domestic product.

**Contribution of resource categories and uses to the modification of gross domestic product**

*Table 4*

	Provisional (1)	Provisional (2)	Provisional (1)	Provisional (2)
Agriculture, forestry and fisheries	4.4	4.3	0.5	0.5
Industry	21.3	21.2	1.0	1.0
Construcții	6.6	6.6	-0.1	-0.1
Wholesale and retail trade; repair of motor vehicles and motorcycles; transport and storage; hotels and restaurants	19.0	19.0	1.7	1.7
Information and communications	6.4	6.3	0.8	0.8
Financial intermediation and insurance	1.5	1.6	0.0	0.0
Real estate transactions	7.4	7.4	0.2	0.2
Professional, scientific and technical activities; administrative service activities and support service activities	7.1	7.1	0.3	0.3
Public administration and defence; social security in the public system; education; health and social assistance	13.8	13.8	0.2	0.2
Performance, cultural and recreational activities; repairs of household products and other services	3.0	3.0	0.5	0.5

<b>Gross value added – total</b>	<b>90.5</b>	<b>90.3</b>	<b>5.1</b>	<b>5.1</b>
<b>Net taxes on product</b>	<b>9.5</b>	<b>9.7</b>	<b>0.8</b>	<b>0.8</b>
<b>Gross domestic product</b>	<b>100.0</b>	<b>100.0</b>	<b>5.9</b>	<b>5.9</b>

Source: INS press release no. 85 / 8 April 2022

We note that in 2021, the dynamics of GDP and gross value added did not change in the provisional version (2) compared to the provisional version (1). At the same time, the volume of gross value added registered more important changes in the activities of financial intermediation and insurance (+0.4%), from 97.7% to 98.1%. Also, the amount of net taxes on the product did not register changes in the provisional version (2) compared to the provisional version (1).

Table number 5 presents the data on the contribution of the categories of uses to the formation and growth of the Gross Domestic Product in 2021.

#### **Contribution of the categories of uses to the formation and growth of the Gross Domestic Product in 2021**

Table 5

	<b>Provisional (1)</b>	<b>Provisional (2)</b>	<b>Provisional (1)</b>	<b>Provisional (2)</b>
<b>Total actual final consumption</b>	<b>79.5</b>	<b>79.8</b>	<b>4.5</b>	<b>4.8</b>
Final actual individual consumption of households	69.8	69.1	4.8	4.1
Expenditure on final consumption of households	61.5	61.4	4.7	4.8
Expenditure on final consumption of non-profit institutions serving households	0.9	0.9	0.0	0.0
Expenditure on individual final consumption of general government	7.4	6.8	0.1	-0.7
Actual collective final consumption of general government	9.7	10.7	-0.3	0.7
<b>GFCF</b>	<b>24.6</b>	<b>24.1</b>	<b>0.9</b>	<b>0.6</b>
<b>Change in stocks</b>	<b>1.7</b>	<b>1.8</b>	<b>2.0</b>	<b>1.8</b>
<b>Net export of goods and services</b>	<b>-5.8</b>	<b>-5.7</b>	<b>-1.5</b>	<b>-1.3</b>
Export of goods and services	40.4	40.8	4.2	4.7
Import of goods and services	46.2	46.5	5.7	6.0
<b>Gross domestic product</b>	<b>100.0</b>	<b>100.0</b>	<b>5.9</b>	<b>5.9</b>

Source: INS press release no. 85 / 8 April 2022

Analyzing the data presented in table number 5, I note that from the point of view of GDP use, larger changes in the contribution to GDP growth in 2021, between the two estimates, recorded: Gross fixed capital formation, from +0.9% to +0.6%, as a result of the reduction of its volume from 104.0% to 102.3%; Final consumption expenditure of general government, from

-0.2% to 0.0%, following the increase in its volume from 98.8% to 100.4% and net export from -1.5% to -1.3%, following the decrease in its volume from 135.9% to 132.6%.

Table number 6 presents the data on gross domestic product in the fourth quarter of 2021 by categories of resources and uses, gross series.

**Gross Domestic Product in the fourth quarter of 2021 by categories of resources and uses, gross series**

*Table 6*

	Achievements million lei current prices	Volume indices in % compared to the fourth quarter of 2020	Price indices in % compared to the fourth quarter of 2020
Agriculture, forestry and fisheries	5831.0	89.4	106.3
Industry	80927.6	97.8	124.1
Construction	41238.7	96.9	113.4
Wholesale and retail trade; repair of motor vehicles and motorcycles; transport and storage; hotels and restaurants	68059.1	105.9	106.4
Information and communications	20112.3	112.0	91.8
Financial intermediation and insurance	5787.9	95.7	105.1
Real estate transactions	25996.9	103.4	102.6
Professional, scientific and technical activities; administrative service activities and support service activities	26362.6	104.1	92.1
Public administration and defence; social security in the public system; education; health and social assistance	41603.8	101.1	98.3
Performance, cultural and recreational activities; repairs of household products and other services	9118.4	108.6	104.9
Gross value added – total	325038.3	101.9	107.1
Net taxes on product <sup>1)</sup>	32296.6	107.3	99.0
<b>Gross Domestic Product</b>	<b>357334.9</b>	<b>102.4</b>	<b>106.3</b>
Actual final consumption	289651.0	108.3	106.5
Actual individual final consumption of households <sup>2)</sup>	244987.2	104.6	107.3
Expenditure on final consumption of households	221201.9	109.5	107.8
Expenditure on final consumption of non-profit institutions serving households	5463.4	102.6	105.1
Expenditure on individual final consumption of general government	18321.9	69.0	102.5

Actual collective final consumption of public administrations <sup>3)</sup>	44663.8	132.7	102.2
Gross capital formation	86424.9	87.1	109.3
of which:			
GFCF	80265.6	94.0	115.5
Net export of goods and services	-18741.0	-	-
Export of goods and services	134648.2	108.3	112.4
Import of goods and services	153389.2	108.5	113.7

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

<sup>2)</sup> It includes: expenditure of households on the purchase of goods and services in order to meet the needs of their members, expenditure for individual consumption of public administrations (education, health, social security and social actions, culture, sport, recreational activities, collection of household waste) and expenditure for individual consumption of non-profit institutions serving households (religious organizations, trade unions, political parties, unions, foundations, cultural and sports associations).

<sup>3)</sup> It includes expenditure for collective consumption of public administrations (general public services, national defense and territory security, maintenance of public order and security, legislative and regulatory activities, research and development, etc.)

Source: INS press release no. 85 / 8 April 2022

From the data presented in table number 6 it follows that in the fourth quarter of 2021 the contribution of resources to the formation of the Gross Domestic Product was different. Thus, the volume indices expressed in percentage points compared to the previous quarter highlighted the following: agriculture, forestry and fisheries contributed 10.6 lower, industry by 2.2, construction by 3.1. Also, financial intermediation and insurance decreased by 4.3%. The other resources had significant increases.

The price indices analyzed over the same period, the third and fourth quarters of 2021 recorded increases. Thus, in agriculture, forestry and fisheries they increased by 3.7%, in industry by 24.1%, in construction by 13.2%, wholesale and retail trade by 3.6%, information and communications by 5.1% and in cultural activities by 5.1%.

In terms of gross value added, prices increased by 7.1%. In these conditions, the price index of gross domestic product in the fourth quarter of 2021 compared to the III quarter of 2021 increased by 6.3%.

From the point of view of consumption, we find that there have been increases in actual final consumption, gross capital formation, export and import of goods and services.

Decreases in volume indices in the analyzed period were recorded in the individual final consumption of general government (31%), gross capital formation (12.9%).

In terms of price indices expressed in percentage terms for the fourth quarter of 2021 and the third quarter of 2021, there were increases across the line. Thus, the actual final consumption increased by 6.5%, the gross capital formation increased by 15.5%, the export of goods and services by 12.4% and the import by 13.7%.

Table number 7 presents the data on gross domestic product in the fourth quarter of 2021 by categories of resources and uses, series seasonally adjusted and according to the number of working days.

**Gross Domestic Product in the fourth quarter of 2021 by categories of resources and uses, seasonally adjusted for the number of working days**

*Table 7*

	Achievements million lei current prices	Volume indices in % compared to the third quarter of 2021	Price indices in % compared to the third quarter of 2021
Agriculture, forestry and fisheries	10954.4	70.6	117.0
Industry	65623.8	94.5	118.0
Construction	20251.6	103.2	101.6
Wholesale and retail trade; repair of motor vehicles and motorcycles; transport and storage; hotels and restaurants	58071.2	100.1	102.3
Information and communications	19883.2	101.2	102.2
Financial intermediation and insurance	4360.3	93.8	102.1
Real estate transactions	23618.9	103.7	103.3
Professional, scientific and technical activities; administrative service activities and support service activities	20845.1	101.2	91.6
Public administration and defence; social security in the public system; education; health and social assistance	40568.1	99.8	99.7
Performance, cultural and recreational activities; repairs of household products and other services	8051.4	93.9	102.1
Gross value added – total	272228.0	97.2	105.4
Net taxes on product <sup>1)</sup>	27749.8	106.0	94.9
Statistical discrepancy	5591.5	-	-
<b>Gross Domestic Product</b>	<b>305569.3</b>	<b>99.9</b>	<b>103.9</b>
Actual final consumption	251075.8	103.7	102.8
Actual individual final consumption of households <sup>2)</sup>	210844.2	99.8	101.5
Expenditure on final consumption of households	192957.9	101.7	103.4

Expenditure on final consumption of non-profit institutions serving households	2650.5	104.6	98.0
Expenditure on individual final consumption of general government	15235.8	45.6	151.7
Actual collective final consumption of public administrations <sup>3)</sup>	40231.6	172.4	84.5
Gross capital formation	70905.9	95.9	98.6
of which:			
GFCF	70105.5	95.8	104.4
Net export of goods and services	-18020.7	-	-
Export of goods and services	130247.7	102.9	102.8
Import of goods and services	148268.4	101.8	104.7
Statistical discrepancy	1608.3	-	-

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

<sup>2)</sup> It includes: expenditure of households on the purchase of goods and services in order to meet the needs of their members, expenditure for individual consumption of public administrations (education, health, social security and social actions, culture, sport, recreational activities, collection of household waste) and expenditure for individual consumption of non-profit institutions serving households (religious organizations, trade unions, political parties, unions, foundations, cultural and sports associations).

<sup>3)</sup> It includes expenditure for collective consumption of public administrations (general public services, national defense and territory security, maintenance of public order and security, legislative and regulatory activities, research and development, etc.)

Source: INS press release no. 85 / 8 April 2022

Analyzing the data presented in table number 7, series seasonally adjusted according to the number of working days, it follows that in the fourth quarter of 2021 the contribution of resources to the formation of the Gross Domestic Product was different. Thus, the volume indices expressed in percentage points compared to the same period in the third quarter of 2021 highlighted the following: agriculture, forestry and fisheries had a contribution of 29.4 less, industry with 5.5. Also, financial intermediation and insurance decreased by 4.2% and gross value added by 2.8%.

The price indices analyzed over the same period, the third and fourth quarters of 2021 recorded increases. Thus, in agriculture, forestry and fisheries they increased by 17%, in industry by 18%, in construction by 1.6%, wholesale and retail trade by 2.3%, information and communications by 2.2% and in cultural activities by 2.1%.

In terms of gross value added, prices increased by 5.4%. Under these conditions, the price index of gross domestic product in the fourth quarter of 2021 compared to the III quarter of 2021 increased by 3.9%.

From the point of view of consumption, we find that there were increases in actual final consumption (6.3%), export of goods and services (2.9%) and import (1.8%).

Decreases in volume indices in the analyzed period were recorded in the effective final consumption of households (1.2%), gross capital formation (4.1%).

In terms of price indices expressed in percent for the fourth quarter of 2021 and the third quarter of 2021, there were increases in actual final consumption increased by 2.8%, the export of goods and services by 2.8% and the import by 4.7%.

Table number 8 presents data on gross domestic product in 2021 by categories of resources and uses, gross series.

**Gross Domestic Product in 2021 by categories of resources and uses,  
gross series**

*Table 8*

	Achievements million lei current prices	Volume indices in % compared to 2020	Price indices in % compared to 2020
Agriculture, forestry and fisheries	51409.9	113.5	107.8
Industry	250955.1	105.0	111.0
Construction	77426.1	98.3	113.5
Wholesale and retail trade; repair of motor vehicles and motorcycles; transport and storage; hotels and restaurants	224386.9	109.4	104.8
Information and communications	75029.8	113.4	98.9
Financial intermediation and insurance	18388.7	98.1	106.2
Real estate transactions	87800.9	102.5	101.7
Professional, scientific and technical activities; administrative service activities and support service activities	84051.5	103.6	99.9
Public administration and defence; social security in the public system; education; health and social assistance	162593.2	101.2	101.6
Performance, cultural and recreational activities; repairs of household products and other services	35624.4	117.0	104.5
Gross value added – total	1067666.5	105.6	105.3
Net taxes on product <sup>1)</sup>	114251.4	108.2	106.6
<b>Gross Domestic Product</b>	<b>1181917.9</b>	<b>105.9</b>	<b>105.4</b>
Actual final consumption	942600.0	106.1	105.0

Actual individual final consumption of households <sup>2)</sup>	816714.4	106.0	105.3
Expenditure on final consumption of households	726121.5	108.0	105.5
Expenditure on final consumption of non-profit institutions serving households	10358.5	103.0	104.3
Expenditure on individual final consumption of general government	80234.4	91.7	103.2
Actual collective final consumption of public administrations <sup>3)</sup>	125885.6	106.8	103.0
Gross capital formation	306216.6	109.8	107.8
of which:			
GFCF	285026.7	102.3	110.3
Net export of goods and services	-66898.7	-	-
Export of goods and services	482802.9	112.5	109.1
Import of goods and services	549701.6	114.6	109.2

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

<sup>2)</sup> It includes: expenditure of households on the purchase of goods and services in order to meet the needs of their members, expenditure for individual consumption of public administrations (education, health, social security and social actions, culture, sport, recreational activities, collection of household waste) and expenditure for individual consumption of non-profit institutions serving households (religious organizations, trade unions, political parties, unions, foundations, cultural and sports associations).

<sup>3)</sup> It includes expenditure for collective consumption of public administrations (general public services, national defense and territory security, maintenance of public order and security, legislative and regulatory activities, research and development, etc.)

Source: INS press release no. 85 / 8 April 2022

Based on the data in Table no. 8, it follows that in 2021 the contribution of resources to the formation of the Gross Domestic Product was different. Thus, the volume indices expressed in percentage points compared to the same period in 2020 highlighted the following: agriculture, forestry and fisheries contributed 13.5 more, industry by 5 and gross value added by 5.6%. Also, financial intermediation and insurance decreased by 1.9%.

The price indices analyzed over the same period 2020-2021 recorded increases in most cases. Thus, in agriculture, forestry and fisheries they increased by 7.8%, in industry by 11%, in construction by 13.5%, in wholesale and retail trade by 4.8%, and in cultural activities by 4.5%.

In terms of gross value added, prices increased by 5.3%. Under these conditions, the price index of the Gross Domestic Product in 2021 compared to 2020 increased by 5.4%, which is basically the annual inflation index.

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From the point of view of consumption, we find that there were increases in actual final consumption (6.1%), export of goods and services (12.5%) and import (14.6%).

Decreases in volume indices during the period under review were recorded in expenditures on individual final consumption of general government (8.3%).

In terms of price indices expressed in percentages for 2021 versus 2020, they increased across the line. Thus, the actual final consumption increased by 5%, the gross capital formation by 7.8%, the export of goods and services by 9.1% and the import by 9.2%.

### **Conclusions**

From the study carried out in this article, on the basis of data provided by the National Institute of Statistics and Eurostat, a number of theoretical and practical conclusions can be distinguished. A first conclusion would be that in addition to the significantly negative evolution of the Gross Domestic Product, there is also the prospect that the external debt reached a level of over 50% of the Gross Domestic Product will seriously affect the perspective of the national economy, becoming very difficult to resort to external credits. In order to redress the situation, it is necessary to allocate funds in investments, but due to the low level of incomes of the population and for consumption. It is necessary to make efficient use of the funds allocated from the Community budget, but especially of the amounts that are distributed to Romania through the national recovery and resilience program.

In the current conditions, it is to be assumed that in the future evaluations of the institutions in the field, the country level will decrease even more, this will affect the access of funds through external credits.

At the same time, we must note that from the study of the resources and uses that are the basis for the formation and growth of the Gross Domestic Product, the imbalances will be deepened. The final effect of this situation will be to deepen in a negative sense the incomes of the population, which will be reflected in the reduction of the quality of life.

As evidenced by the analyses of specialists internationally, if these crises deepen and the Russo-Ukrainian war continues, there is a danger of the world economy entering recession. We specify that we do not refer only to the technical aspect of declaring the entry into recession, but to the disastrous evolution of the world economy, and consequently also of Romania.

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