

23 September 2024



Years 1995-2023 ANNUAL NATIONAL ACCOUNTS

Istat publishes today the 2024 general revision of national accounts data, agreed at the European level, which introduces innovations and improvements in methods and sources. The time series since 1995 are made available on the data warehouse IstatData.

In 2023 GDP at current prices is equal to 2,128,001 million euro, grew by +6.6% compared with the previous year. The chained volume measure of GDP increased by +0.7%.

Gross fixed capital formation rose in volume by +8.5%, final consumption expenditure by +1.2%, exports by +0.8% while imports of goods and services decreased by -0.4%.

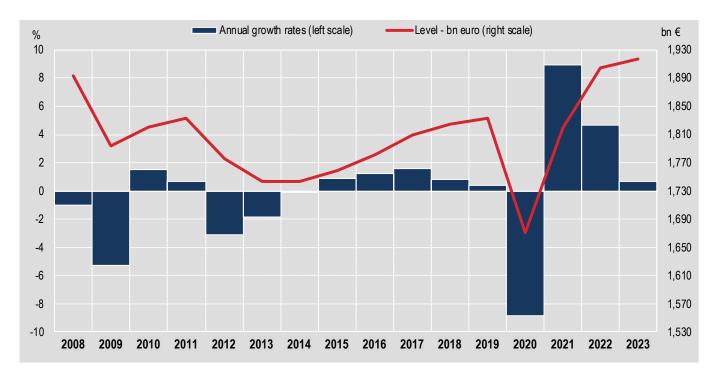
In terms of contributions to GDP growth, national demand (excluding changes in inventories) contributed by +2.8 percentage points, net exports by +0.4 percentage points and changes in inventories by -2.5 percentage points.

Value added in volume increased in construction (+6.7%) and service activities (+1.1%), while it decreased in agriculture, forestry and fishing (-3.5%) and in mining and quarrying, manufacturing and other industrial activities (-1.6%).

General government net borrowing is -7.2% of GDP (-8.1% in 2022). Primary balance (General government net borrowing net of interests) is -3.5% of GDP (-4.0% in 2022).

CHART 1. GDP IN VOLUME

Years 2008-2023, billion euro (chain-linked volumes, reference year 2020) and annual percentage changes



keyfigures

CHART 2. GENERAL GOVERNMENT BALANCES

Years 2008-2023, annual percentage values on GDP

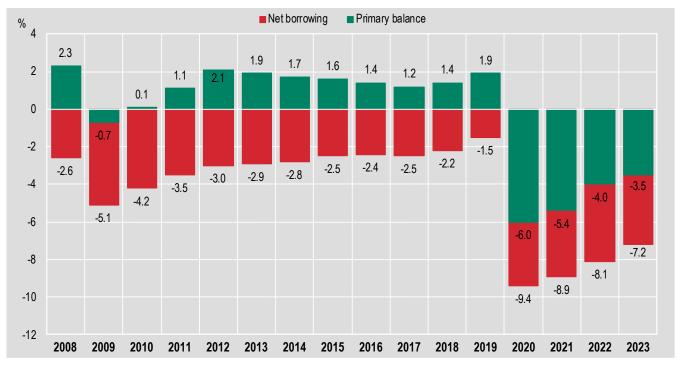


TABLE 1. GDP AND EXPENDITURE COMPONENTS

Year 2023, million euro (current prices, chain-linked volumes - reference year 2020) and annual percentage changes

AGGREGATES	Current prices	Percentage changes 2023/2022	Chained volumes	Percentage changes 2023/2022
Gross Domestic Product at market prices	2,128,001	+6.6	1,917,249	+0.7
Imports	691,821	-6.2	550,663	-0.4
Final Consumption Expenditure	1,617,827	+5.1	1,447,387	+1.2
- Households final consumption expenditure	1,224,365	+6.1	1,074,087	+0.9
- Government final consumption expenditure	382,623	+2.0	363,323	+1.9
- NPISH final consumption expenditure	10,840	+9.5	10,137	+7.3
Gross Fixed Capital Formation	478,961	+9.8	430,992	+8.5
Changes in inventories	2,409	-	-	-
Acquisitions less disposals of valuables	2,857	+7.7	2,592	+11.5
Exports	717,769	+2.3	605,798	+0.8

The sum of components may differ from the total due to rounding effects





keyfigures

Table 2. CONTRIBUTIONS TO GDP GROWTH

Years 2019-2023, previous year prices

2019	2020	2021	2022	2023
+0.2	-7.6	+7.8	+4.5	+2.8
-0.1	-6.3	+3.9	+2.9	+0.9
0.0	-6.3	+3.4	+2.8	+0.6
-0.1	+0.1	+0.5	+0.1	+0.4
+0.3	-1.3	+3.9	+1.6	+1.9
-0.5	-0.5	+1.1	+1.0	-2.5
+0.7	-0.8	0.0	-0.8	+0.4
+0.4	-8.9	+8.9	+4.7	+0.7
	+0.2 -0.1 0.0 -0.1 +0.3 -0.5 +0.7	+0.2 -7.6 -0.1 -6.3 0.0 -6.3 -0.1 +0.1 +0.3 -1.3 -0.5 -0.5 +0.7 -0.8	+0.2 -7.6 +7.8 -0.1 -6.3 +3.9 0.0 -6.3 +3.4 -0.1 +0.1 +0.5 +0.3 -1.3 +3.9 -0.5 -0.5 +1.1 +0.7 -0.8 0.0	+0.2 -7.6 +7.8 +4.5 -0.1 -6.3 +3.9 +2.9 0.0 -6.3 +3.4 +2.8 -0.1 +0.1 +0.5 +0.1 +0.3 -1.3 +3.9 +1.6 -0.5 -0.5 +1.1 +1.0 +0.7 -0.8 0.0 -0.8

The sum of individual contributions may differ from the total - i.e. the rate of change of GDP - due to rounding effects.

Table 3. GROSS VALUE ADDED AT BASIC PRICES

Years 2019-2023, annual percentage change on chain-linked volumes (reference year 2020)

AGGREGATES	2019	2020	2021	2022	2023
Gross Value Added	+0.7	-8.3	+9.0	+5.1	+0.7
Agriculture, forestry and fishing	-2.0	-4.2	-0.3	+2.7	-3.5
Mining and quarrying, Manufacturing and Other industrial activities	+0.2	-12.1	+14.6	+0.0	-1.6
of which: Manufacturing	+0.2	-13.7	+15.6	+2.8	-1.0
Construction	+3.0	-6.1	+21.9	+16.4	+6.7
Services	+0.8	-7.6	+7.0	+5.8	+1.1
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	+2.8	-17.0	+15.0	+9.0	+0.9
Information and communication	+2.8	-0.8	+10.5	+3.7	+3.4
Financial and insurance activities	+0.4	-0.1	-1.0	-0.0	-6.6
Real estate activities	+1.0	-3.2	+0.7	+3.1	+5.0
Professional, scientific and technical activities; administrative and support service activities	-0.8	-1.8	+9.5	+11.3	+0.7
Public administration and defence; compulsory social security; education; human health and social work activities	-0.9	-4.1	+4.5	+1.3	-0.6
Arts, entertainment and recreation, repair of household goods and other services	-0.4	-17.0	+3.7	+12.4	+5.0

TABLE 4. GENERAL GOVERNMENT MAIN AGGREGATES AND RATIOS

Years 2020- 2023

MAIN AGGREGATES AND RATIOS	2020	2021	2022	2023
Net lending (+) or Net borrowing (-)	-156,627	-163,130	-161,575	-152,735
Net lending (+) or Net borrowing (-) / GDP (%)	-9.4	-8.9	-8.1	-7.2
Primary balance (a)	-99,501	-100,136	-79,730	-74,748
Primary balance/GDP (%)	-6.0	-5.4	-4.0	-3.5
Total receipts from taxes and compulsory social contributions	713,563	779,635	832,288	882,593
Tax burden (a)	42.7	42.3	41.7	41.5
Debt	2,574,153	2,680,558	2,758,225	2,863,438
Debt/GDP (%)	154.1	145.5	138.1	134.6

Debt is reported by Bank of Italy, Statistics, "The Public Finances: Borrowing Requirement and Debt - July 2024" 16 September 2024

(b) On October 11, the Bank of Italy will publish in the Economic Bulletin the public debt figure updated at the General National Accounts Review. This update will take into account, among other things, Eurostat's Advice on the treatment of interest on EFSF loans to Greece published last September 20.



⁽a) see glossary



revisions

The revision of GDP estimates for years 2021-2023

The revision of GDP other National Accounts data published here shows a generalized review of all aggregates. In particular, the general revision with reference year 2021 has significantly modified the estimates of the levels of GDP and its main aggregates in recent years, with a limited impact on their rates of change. For more details on sources and methodological changes of the 2024 general revision, please refer to the Italian version of the press release (see note published on the 6th of August 2024). Here changes with respect to the previous release of GDP and main aggregates for the years from 2021 to 2023 are reported.

It is worth pointing out that, due to the benchmark revision, the level of nominal GDP in 2021 has been revised upward by +20,572 million euros (+1.1%). Upward revisions occurred for the rate of change of GDP in volume, from +8.3 to +8.9%. On the demand side, upward revisions were recorded for the level of household consumption (+4,623 million, equal to 0.5% of the aggregate), for Public administration spending (+8,162 million, equal to 2.3%) and for investments (+10,831 million, equal to 2.9%). Concerning foreign flows, there is a downward revision of the level of both components: -9,032 million for imports of goods and services (-1.7%) and -10,737 million for exports (-1.8%), which lead to a worsening of 1.7 billion in net exports.

	2021				2022		2023			
AGGREGATES	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	
Gross domestic product at market prices	1,842,507	1,821,935	+20572	1,997,055	1,962,846	+34209	2,128,001	2,085,376	+42625	
Imports	536,729	545,761	-9,032	737,636	748,574	-10,938	691,821	702,213	-10,392	
Final Consumption Expenditure	1,399,525	1,386,577	+12,948	1,538,987	1,541,632	-2,645	1,617,827	1,620,370	-2,543	
- Households final consumption expenditure	1,028,546	1,023,923	+4,623	1,154,027	1,156,239	-2,212	1,224,365	1,230,862	-6,497	
- Government final consumption expenditure	361,824	353,662	+8,162	375,059	375,423	-3,64	382,623	378,494	+4,129	
- NPISH final consumption expenditure	9,155	8,992	+163	9,901	9,970	-69	10,840	11,014	-174	
Gross Fixed Capital Formation	382,698	371,867	+10,831	436,347	425,145	+11,202	478,961	441,441	+37,520	
Exports	574,339	585,076	-10,737	701,306	716,584	-15,278	717,769	731,019	-13,250	

TABLE 5. REVISIONS TO GDP AND ITS COMPONENTS ON THE EXPENDITURE SIDE.Years 2021-2023, current prices, vintage comparison September 2024 versus March 2024

TABLE 6. REVISIONS TO ANNUAL PERCENTAGE CHANGE OF GDP AND ITS COMPONENTS ON THE EXPENDITURE SIDE. Years 2021-2023, chain-linked volumes (reference year 2020), vintage comparison September 2024 versus March 2024

		2021			2022		2023			
AGGREGATES	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	September 2024 estimate a	March 2024 estimate b	Revisioni a-b	
Gross domestic product at market prices	+8.9	+8.3	+0.6	+4.7	+4.0	+0.7	+0.7	+0.9	-0.2	
Imports	+16.0	+15.6	+0.4	+13.2	+12.9	+0.3	-0.4	-0.5	+0.1	
Final Consumption Expenditure	+4.9	+4.4	+0.5	+3.9	+3.9	0.0	+1.2	+1.2	0.0	
- Households final consumption expenditure	+5.8	+5.4	+0.4	+5.0	+4.9	+0.1	+0.9	+1.2	-0.3	
- Government final consumption expenditure	+2.3	+1.4	+0.9	+0.6	+1.0	-0.4	+1.9	+1.2	+0.7	
- NPISH final consumption expenditure	+12.7	+8.7	+4.0	+2.0	+5.4	-3.4	+7.3	+6.9	+0.4	
Gross Fixed Capital Formation	+21.5	+20.3	+1.2	+7.5	+8.6	-1.1	+8.5	+4.7	+3.8	
Exports	+14.1	+14.1	0.0	+9.8	+10.2	-0.4	+0.8	+0.2	+0.6	





revisions

Concerning 2022, the new estimates resulted in a significance upward revision of GDP at market prices, equal to +34,209 million euro at current prices. Upward revisions occurred for the rate of change of GDP in volume, from +4.0 to +4.7%. The rate of change have been revised upwards for households final consumption expenditure (from +4.9 to +5.0%) and imports (from +12.9 to +13.2%), while downward revisions occurred for the rate of change of exports (from +10.2 to +9.8%), government final consumption expenditure (from +1.0 to +0.6%), NPISH final consumption expenditure (from +5.4 to +2.0%) and fixed capital formation (from +8.6 to +7.5%).

In 2023, a downward revisions occurred for the rate of change of GDP in volume, from +0.9 to +0.7. In particular, downward revisions emerged in the rates of change of households final consumption expenditure (from +1.2 to +0.9%), while upward revisions occurred for government final consumption expenditure (from +1.2 to +1.9%), NPISH final consumption expenditure (from +6.9 to +7.3%), gross fixed capital formation (from +4.7 to +8.5%), exports (from +0.2 to +0.8%) and imports (from -0.5 to -0.4%).

The revision to General government account for the period 2021-2023

With respect to the previous release, in 2021 both revenues (+3,051 million) and expenditure (+7,012 million) were revised upwards with an impact on net borrowing of -3,961 million. The ratio to GDP was revised downwards by -0.2 percentage points (-8.7% in September and -8.9% in April).

TABLE 7. REVISIONS TO GENERAL GOVERNMENT ACCOUNT

Years 2021-2023, million euro current prices, vintage comparison (September 2024 versus April 2024)

		2021			2022		2023			
AGGREGATES	September 2024 estimate a	April 2024 estimate b	Revisions a-b	September 2024 estimate a	April 2024 estimate b	Revisions a-b	September 2024 estimate a	April 2024 estimate b	Revisions a-b	
Market and for own final use output	43,387	43,891	-504	46,042	46,857	-815	48,288	49,605	-1,317	
Current taxes on income, wealth, etc.	268,362	268,231	+131	290,412	291,021	-609	320,796	320,817	-21	
Taxes on production and imports	262,100	260,189	+1,911	279,901	279,485	+416	290,724	294,682	-3,958	
Social contributions receivable	247,577	246,071	+1,506	260,268	261,408	-1,140	269,464	269,221	+243	
Other current revenues	36,638	36,551	+87	40,511	40,401	+110	39,766	38,318	+1,448	
Total current revenues	858,064	854,933	+3,131	917,134	919,172	-2,038	969,038	972,643	-3,605	
Total capital revenues	11,149	11,229	-80	17,838	17,138	+700	23,070	23,949	-879	
Total revenues	869,213	866,162	+3,051	934,972	936,310	-1,338	992,108	996,592	-4,484	
Compensation of employees	181,825	176,803	+5,022	183,341	187,419	-4,078	187,131	186,474	+657	
Intermediate consumption and social transfers in kind	158,953	158,534	+419	170,069	169,005	+1,064	174,830	174,395	+435	
Social benefits other than social transfers in kind	397,876	397,876	0	406,898	406,898	0	424,486	424,491	-5	
Other current expenditures	148,232	146,752	+1,480	174,760	178,915	-4,155	165,932	174,642	-8,710	
Total current expenditures	886,886	879,965	+6,921	935,068	942,237	-7,169	952,379	960,002	-7,623	
Total capital expenditures	145,457	145,366	+91	161,479	162,031	-552	192,464	190,714	+1,750	
Total expenditures	1,032,343	1,025,331	+7,012	1,096,547	1,104,268	-7,721	1,144,843	1,150,716	-5,873	
Net lending (+) or Net borrowing (-)	-163,130	-159,169	-3,961	-161,575	-167,958	+6,383	-152,735	-154,124	+1,389	
GDP	1,842,507	1,821,935	+20,572	1,997,055	1,962,846	+34,209	2,128,001	2,085,376	+42,625	
Net lending (+) or Net borrowing (-) /GDP (%)	-8.9	-8.7	-0.2	-8.1	-8.6	+0.5	-7.2	-7.4	+0.2	
Tax burden (a)	42.3	42.6	-0.3	41.7	42.5	-0.8	41.5	42.5	-1.0	

(a) See glossary







In 2022, total revenues were revised downwards by -1,338 million and expenditures by -7,721 million, with an impact on net borrowing of +6,383 million, which improved the debt/GDP ratio to -8.1% from -8.6% estimated in April 2024.

In 2023, both revenues (-4,484 million) and expenditure (-5,873 million) were revised downwards, mainly due to indirect taxes (-3,958 million). The ratio to GDP was revised upwards by +0.2 percentage points (--7.2% in September and -7.4% in April 2024).







Acquisitions less disposals of valuables: valuables are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time under normal conditions and are acquired and held primarily as stores of value.

Basic price: is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale. It excludes any trade margins and transport charges invoiced separately by the producer.

Chain-linked values: measure of national accounts aggregates in volume (referred to data net of price movements). For each aggregate and each year, a volume index is calculated as the ratio between its value calculated at previous year prices and its value at current prices in the preceding year. Then, the volume indices are chained by successively multiplying them starting from a value set at 100 for the first year and then shifting the base to the reference year (currently 2015). The result is a chain-linked index, that multiplied for the current value of the reference year (and divided by 100) produces the volume measure of the aggregate.

Changes in inventories: are measured by the value of the entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories. They consist of changes in: material and supplies, work in progress, finished goods, goods for resale.

Compensation of employees: is the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during an accounting period. Compensation of employees is made up of wages and salaries and employers' social contributions, actual and/or imputed.

Current balance of the General Government: the difference between General Government current revenue and current expenditure.

Exports: consist of transactions in goods and services (sales, barter, gifts or grants) from residents to non-residents. Exports of a good occurs when economic ownership changes between residents and non-resident. This applies irrespective of corresponding physical movements of goods across frontiers. They are valuated *free on board (FOB)* that is the value of the goods at the exporter's customs frontier. Export of services consist of all services rendered by residents to non-residents.

Final consumption expenditure of NPISHs: consists of the expenditure incurred by resident non-profit institutions serving households (NPISHs) on individual consumption goods and services. It includes:

- the value of the goods and services produced by NPISHs other than own-account capital formation and other than goods and services sold to households and other units;
- expenditures by NPISHs on goods or services produced by market producers that are supplied to households for their consumption without any transformation.

Full time equivalents (FTEs): is an employment measure obtained by transformation of part-time and multiple jobs into full-time equivalent units. FTEs are net of hours paid for by CIG (Wage Supplementation Fund).

General Government: consists of institutional units whose main function is to produce and supply non-market goods and services, intended for individual and collective consumption, and to redistribute national income and wealth. These units are financed by compulsory payments made by units belonging to other sectors of the economy (corporations, non-profit institutions, households).

General Government gross debt: also known as **public debt**, is calculated according to the definition adopted in the Excessive Deficit Procedure of the European Union (Council Regulation (EC) No. 479/2009), as the sum of General Government financial liabilities in the following categories: currency and deposits, debt securities, and loans; liabilities are valued at face value. Debt is alto consolidated, thus excluding liabilities of which the corresponding financial assets are held by the sector of General Government. The Bank of Italy calculates the monthly General Government debt on the basis of statistical rules established at European level ("Maastricht debt").





Government final consumption expenditure: consists of expenditure incurred by General Government on both individual and collective goods and services to be supplied freely to households for consumption purposes. It includes:

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- the value of goods and services produced by General Government, other than own account capital formation and sales;
- purchases by General Government of goods and services produced by market producers that are supplied to households without any transformation

Gross domestic product at market prices (Gdp): final result of the production activity of resident producer units. It can be defined in three ways: as the sum of gross value added of all industries plus taxes and less subsidies on products; as the sum of the final uses of goods and services units (final consumption and gross capital formation), minus the value of imports of goods and services. It also corresponds to the sum of primary income distributed by resident producer units to the production factors.

Gross fixed capital formation: consists of resident producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets (e.g. land) realized by the productive activity of producer or institutional units. Fixed assets are material and immaterial (e.g. software) produced assets used in production for more than one year.

Household final consumption expenditure: consists of expenditures incurred by households on individual goods and services for the direct satisfaction of individual needs. A distinction is made between:

- domestic final consumption expenditure, incurred on the economic territory of resident and non-resident units;
- national final consumption expenditure, incurred by resident households on the economic territory and abroad.

Imports: consist of transactions in goods and services (purchases, barter, and gifts) from non-residents to residents. Imports of goods occur when economic ownership changes between non-residents and residents. In supply and use account, imports are valuated *free on board (FOB)* that is the value of the goods at the exporter's custom frontier. Imports of services consist of all services rendered by non-residents to residents.

Net lending (+)/ net borrowing (-): is a national accounts balancing item. It is the last balancing item of the nonfinancial accounts - namely the balancing item of the capital account. If positive (lending), it is a surplus loaned out, that is to say the amount available to a sector for financing, directly or indirectly, other sectors; if negative (borrowing), it is the financing of a debt, namely the amount which a sector is obliged to borrow from other sectors. The net lending (+) or borrowing (-) of the total economy is the sum of the net lending or borrowing of the institutional sectors. It represents the net resources that the total economy makes available to the rest of the world (if it is positive) or receives from the rest of the world (if it is negative). The net lending (+) or borrowing (-) of the total economy is equal but of opposite sign to the net borrowing (-) or lending (+) of the rest of the world.

Net lending (+)/ net borrowing (-) of General Government Sector: corresponds to the General Government surplus (+) / deficit (-) and is calculated as total revenue less total expenditure. It is used in the context of the Excessive deficit procedure (EDP) and government finance statistics.

Price deflators: ratio of the nominal (or current-price) measure of an economic aggregate to the corresponding real (or chain-linked value) measure. It measures the part of the nominal growth due to price changes.

Primary balance of the General Government: the balance between revenues and expenditure (government net borrowing or net lending) excluding interest payments.

Resources and Use Account: is an overview in tabular form of an accounting identity, under which, for the economy as a whole, total resources (gross domestic product and imports) are equal to total final uses (final consumption, changes in inventories, gross fixed capital formation, acquisitions less disposals of valuables, and exports).

Tax burden: total tax revenues (current taxes on income, wealth, taxes on production and imports, capital taxes and social security contributions) as a percentage of GDP.





Taxes: consist of compulsory, unrequited payments, in cash or in kind, which are levied by General Government, or by the institutions of the European Union. Three type of taxes are recorded:

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- current taxes on income, wealth levied periodically on the income and wealth and some periodic taxes, which are assessed neither on that income nor that wealth.
- taxes on production and imports levied in respect of the production and importation of goods and services, the employment of labour, the ownership or use of land, buildings or other assets used in production.
- capital taxes levied at irregular and very infrequent intervals on the values of the assets or net worth owned by
 institutional units or on the values of assets transferred between institutional units as a result of legacies, gifts
 between persons, or other transfers.

Terms of trade: ratio of percent change of export prices to percent change of import prices.

Value added at basic prices: the production value of goods and services less the purchases of goods and services consumed in the production process, where the production is evaluated at basic prices, i.e. net of taxes on products and including subsidies on products. Intermediate consumption is evaluated at purchasing prices. Value added is the sum of primary incomes distributed by resident producer units and of the consumption of fixed capital.

Wages and salaries: is the total remuneration in cash and in kind, including income taxes, and other payments payable by the employee, including those withheld by the employer and paid directly to social insurance schemes, tax authorities, etc. on behalf of the employee.





Introduction and legal framework

The system of national accounts describes in quantitative terms and in the context of an accounting framework the whole set of economic and financial activities of a country or its specific territorial subdivisions, for a period coinciding with the calendar year and for shorter time intervals (quarters).

As for any organized economic unit, be it a large enterprise or a single family, also for a country taken as a whole it is possible to build periodic cost and revenue statements in order to record, in aggregate form and systematic way, all the actions undertaken by economic agents taking part in the process of formation, distribution and use of resources.

National accounts estimates are produced in accordance with the provisions of the European System of National and Regional Accounts Manual (ESA 2010), which represents the application at European level of the System of National Accounts (SNA 2008) of the United Nations. The methodological provisions act as binding rules for EU member states, ensuring comparability of the estimates. ESA 2010 was introduced by Regulation (EU) of the European Parliament and of the Council No 549/2013 on the European system of national and regional accounts¹. The EU Regulation of the European Parliament and of the Council, No. 734/2023, in application from 1st September 2024, partially modified the transmission programme (Annex II of the Regulation) by including new tables, making the transmission of some aggregates mandatory and reviewing some data transmission deadlines.

The recording method of economic and financial flows adopted by national accounts follows the rules of quadruple entry, since most operations involve two institutional units and each operation has to be recorded twice by both intervening parties. The system is organized in an ordered set of accounts describing the performance of the economy, showing how the income is formed, distributed and used, how savings are accumulated, what are the forms of financing of the activities and what is the position of the country with respect to the rest of the world. The networks, the interdependencies and the behavioural relationships among sectors operating in the context of the country are also represented.

In a first step, all flows and stocks are measured in money terms (that is at current prices), which by definition incorporate the underlying price levels. When comparing different periods (years), it is essential to decompose the change of aggregates expressed in value terms, separating the component derived from price changes from the component derived from changes in volume (also called "real" or "at constant prices"). For all the variables subject to this decomposition, this result is obtained by the application of deflation techniques, resulting in estimates of the aggregates expressed first at prices of the previous year and then in "chain-linked" terms. The calculation allows the derivation of price indices (deflators) and of aggregates expressed in volume, that are comparable over the years. Particularly relevant is the measure of GDP at chain-linked values that represents the main reference variable summarizing the evolution of the economy in real terms.

All the estimation processes that contribute to the compilation of national economic accounts are included in the National Statistical Plan (current edition: PSN 2020-2022 – updating 2022) approved by Presidential Decree of 11 July 2023, published in <u>Gazzetta Ufficiale - serie generale - n. 201 del 29 agosto 2023</u>

Data compilation: process, tools and techniques

In Italy, national accounts are compiled building on a system of statistical sources and administrative data adapted to match ESA definitions. The accounts measure a broad set of variables that describe the economic system, its evolution over time and its relationships with the rest of the world. The annual estimates of GDP at current prices are obtained starting from the estimates of demand components (final consumption, gross fixed capital formation, intermediate consumption and exports) and of supply components (domestic production and imports). Estimates of the two sides of the economy, carried out mainly on the basis of independent approaches, are integrated within a system of supply and use tables (SUT) which allows to analyse and reconcile the differences between demand and supply until they are reduced to statistical discrepancies that can be handled through a mathematical balancing process.

In the current compilation process of national accounts, there is no independent estimate of GDP/GNI obtained through the income approach, that is based on the sum of the remunerations of the production factors. In fact, the

¹ The main features of the first version of national accounts compiled in accordance with the criteria laid down by ESA 2010 have been decribed in the information note *"I nuovi conti nazionali in SEC 2010 – Innovazioni e ricostruzione delle serie storiche (1995-2013)"* (October 2014). A brief description of the changes introduced in the general revision of September 23 2019 is available in the note "La nuova revisione del Conti Nazionali a cinque anni dall'Introduzione del SEC 2010" (https://www.istat.it/it/archivio/232520).





available statistical sources are inadequate in deriving a direct estimate of gross operating surplus and mixed income. These components are estimated in a second step, when compiling national accounts by institutional sector, as the difference between final estimates of value added and the other distributed primary incomes (in the first place compensation of employees) that can be measured from direct sources. The resulting income shares distributed to the production factors are a very important indicator of the reliability and economic plausibility of value added estimates.

As a rule, the estimation processes are performed at the highest possible level of disaggregation to ensure both a high degree of reliability of the estimates and an adequate detail to represent the economic phenomena under analysis and their evolution over time. The methods applied in the compilation process provide comprehensive estimates of GDP and national income, including the non-observed components of the economy².

As regards volume estimates (also called "at constant prices"), the deflation of aggregates previously estimated at current prices is performed applying different methods to the supply side and to the demand side. For the supply side of market producers, value added at prices of the previous year is estimated by applying the double-deflation method, which entails: a) the estimation of the current values of output and intermediate consumption; b) their deflation through Paasche-type price indexes of output and input respectively, obtaining output and intermediate consumption at prices of the previous year; c) the calculation of value added at prices of the previous year as the difference between these two aggregates. On the demand side, each component of expenditure is deflated using price indices appropriate to the types of goods and services. These indices are mainly based on consumer prices, output prices, as well as import and export prices.

Output of non-market services is, by convention, equal to the value of the costs of production. In the absence of specific price indices, output at previous year's prices is calculated using the input method, i.e. by the sum of the individual cost components (compensation of employees, fixed capital consumption, taxes on production and intermediate consumption) appropriately deflated. For compensation of employees, which accounts for the bulk of non-market output, deflation is based on the change in hours worked. Exclusively for the education services and for hospital services within the health industry, the output in volume is calculated by applying to the current value of production of the previous year the changes of specific volume indices; accordingly, the value added in volume is calculated through the double deflation method.

Since aggregates expressed at prices of the previous year are not suitable for time comparisons, they must be chain-linked and referred to a base year (presently 2015). The resulting values are based on Laspeyres type of chained volume indexes, which are subsequently expressed in money terms by multiplying them by the value at current prices in the base year.

Main sources used for the estimates

In order to compile the estimates of aggregates included in the system of national accounts, data derived from a large set of sources are used. Sources of Istat own production include both business surveys and household surveys, and statistical registers built integrating survey and administrative data. These are supplemented by specific administrative archives (such as some INPS archives), as well as information drawn from external sources, both public and private. Data drawn from surveys or other sources are in part already defined in a consistent way with the definitions of national accounts, while those that follow different definitions must be corrected and appropriately reclassified to comply with the recording rules established by ESA.

Here follows a synthetic list of main sources used to compile the final version of national accounts, usually accomplished more than two years after the end of the reference year (in March of year t for data referring to year t-3).

As regards estimates of the supply side, the most relevant sources are those providing census-type information on enterprises: the statistical register of active enterprises (ASIA-Enterprises) and the information system on economic results of enterprises (Frame-SBS in the following). This micro database includes information on economic results for the whole population of active market enterprises (excluding agriculture and financial intermediation). It is built through a complex integration procedure of data from administrative archives, treated statistically and combined with data drawn from the survey on small and medium enterprises (PMI) and from the survey on the financial statements of large enterprises (SCI). For the components that are outside the scope of the Frame SBS, the information is supplemented by administrative archives (mainly UNICO and IRAP). Information on the financial statements of companies operating in financial intermediation are provided by the supervisory authorities, that is

² See the methodological note accompanying the press release "The non-observed economy in National Accounts" normally released (in Italian) in October of each year.





the Bank of Italy, the insurance supervisory authority (Istituto per la vigilanza sulle assicurazioni - IVASS) and the supervisory commission on pension funds (Commissione di vigilanza sui fondi pensione - COVIP). Estimates for the primary sector (Agriculture, Forestry and Fishing) are based on several sectoral sources, complementing the information derived from 7° Censimento generale dell'Agricoltura del 2020. Estimates for the electricity, gas and water sectors are based on Frame SBS data and data from the Separate Annual Accounts of the Autorità di Regolazione per Energia, Reti e Ambiente (ARERA).

For the non-profit sector a dedicated database has been built starting from the statistical register of private non-profit institutions and public institutions, integrated with information drawn from the sample survey on the non-profit sector and from a set of administrative archives (UNIEMENS INPS, IRAP, UNICO, VAT).

Concerning the General Government a very analytical approach is utilized, based on the collection and treatment of financial statement data of the whole set of institutional units included in this sector, both at the central and at the local level. For some government units (e.g. the State, municipalities, regions, local health care units, universities, social security institutions) data are collected through a centralized system, while for other units a specific statistical survey of financial statements in summary form is used (RIDDCUE survey). For the estimation of taxes, source data are integrated with those provided by the Tax and revenue agency (Agenzia delle entrate) and by the Finance Department of the Ministry of Economy and Finance (MEF). For the most recent year (t-1), information provided by the public sector working balance compiled by the Ministry of Economy and Finance is used, together with cash flow data collected by the Information System on the Operations of Government Bodies (SIOPE), extensively exploited for local entities.

As regards the demand side, estimates of private consumption are based primarily on data provided by the household expenditure survey. For part of the goods purchased by households, as well as for some capital goods, the commodity-flow method is utilized, calculating the value of final uses available for consumption and for capital formation in an indirect way, starting from the resources (defined as the sum of production and imports, less exports). For gross fixed capital formation, estimates obtained with the commodity-flow method are complemented by information on firm activities derived from Frame-SBS and specific sources, such as registers of vehicles and of shipping, the Building Permits Survey, data on military expenditure from the Ministry of Defence, and the results of R&D surveys. As regards foreign trade (imports and exports of goods and services), the data derive from the survey on traded goods (Intrastat and Extrastat components) conducted by Istat and from information on the trade of services extracted from the Balance of Payments compiled by the Bank of Italy.

As regards labour input estimates, information collected by the Labour force survey is integrated with a broad database of administrative data (particularly social contribution statements) submitted to a statistical treatment. Information from statistical registers compiled in Istat are also used: the statistical register of active enterprises (ASIA-Enterprises), the statistical register of agricultural enterprises (ASIA-Agricolture), the statistical register of private non-profit institutions and public institutions, base population register and thematic register on labour. For compensation of employees of the private sector, estimates are based on data from different sources of statistical registers and surveys compiled in Istat: Frame-SBS, Annual thematic statistical register on wages, Hours and individual labor costs-RACLI, Extended statistical farm register FR2, Labor force survey (RfI), Thematic labor register. In addition, administrative sources are used: statements of contributions - INPS and data coming from the Bank of Italy and the Insurance Supervisory Institute (IVASS).

Estimates for year t-3 disseminated in March of year t are usually considered final, since they incorporate the final version of data from the information system on economic results of enterprises Frame-SBS and other structural sources which take longer than 18 months from the end of the reference period to be finalised. In the September release, semi-definitive estimates are then provided for year t-2 based on an information set that includes almost all the definitive structural data, including Frame-SBS, while those relating to year t-1 are calculated directly from the quarterly estimates based on indicators taken from Istat sources and, to a lesser extent, from other sources, administrative and non-administrative. For further details on the policy of revisions, see below

The estimates presented in September 2024 have specific characteristics, since they are the result of the regular major revision (normally termed "benchmark" revision) of national accounts carried out simultaneously in most EU countries. This revision led to changes both for 2021, identified as the reference year for the new level of the aggregates, and for the period 1995-2020 for which a retrospective reconstruction of the historical series was made. With regard to 2022 (the *t*-2 of the normal cycle of revision) most of the structural information made available in recent months has been used.

The table below summarizes the main changes in the statistical sources used for the estimates related to years t-1, t-2 and t-3 with respect to the version of annual national accounts published on the web site (<u>www.istat.it</u>) in 2024 on March.





Aggregates	Reference years	New statistical sources and updates
Value added of Agriculture	2021/2022	Final results of surveys on crops and animal production. Final results of estimative surveys run by regional and/or provincial agriculture representative offices. Final data on technical means of production. Provisional results of surveys on crops and animal production. Provisional results of estimative surveys run by regional
	2023	and/or provincial agriculture representative offices. Provisional data on technical means of production (seeds, fertilizers, plant protection products, feeding stuff).
Value added of	2021	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS). Integrated database for non-profit sector and sample survey of non-profit institutions (market units). Separate Annual Accounts of the Autorità di Regolazione per Energia, Reti e Ambiente (ARERA). Supervisory data for financial intermediaries (Bank of Italy) and insurance companies (IVASS).
industry and market services	2022	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS). Integrated database for non-profit sector (market units). Supervisory data for financial intermediaries (Bank of Italy) and insurance companies (IVASS).
	2023	Provisional data on banks and other financial intermediaries.
Final consumption	2021	Social Security Institute (INPS) administrative data on employees. Integrated database for non-profit sector and census survey of non-profit institutions (non-market units).
expenditure of NPISH	2022	Social Security Institute (INPS) administrative data on employees. Integrated database for non-profit sector (non-market units).
	2021	Update of estimates derived from the commodity flow method. Revision of data on car registrations. New indicators for the calculation of expenditure for dwelling services (Permanent Census 2021). New indicators for the fuels and energy, and transportation services. Update of expenditure for insurance and domestic services.
Household expenditure	2022	Update of estimates derived from the commodity flow method. Data revision of car registrations (UNRAE). Data on expenditure for recreational services from the Italian Society of Authors and Publishers (SIAE). Data on expenditure on medicines from the Osservatorio sull'impiego dei medicinali (OsMed) and on hospital services from the Ministry of Health. Data on students by level of education, transport services and on hotel stays. Update of expenditure for fuels and energy; insurance and financial services, domestic services.
Gross fixed capital formation for market enterprises and NPISH		Update of estimates derived from the commodity flow method. New data of vehicle registrations (UNRAE). Data for the estimate of other transport equipment. Data from Building Permits survey. Data from Research & Development survey on enterprises and non-profit institutions.
Imports and exports	2021	Revision of data on services in the Balance of Payments.
of goods and	2022	Final data on processing services (Intrastat-services).
services	2023	Revision of data on processing services (Intrastat-services), Balance of Payments and trade of goods Intra EU.
Employment	2021/2022	Labour force survey integrated at the micro level with the Statistical Labour Register (for employees) and administrative sources of the Social Security Institute on self-employed, outworkers, separate management workers, domestic workers, etc Final data on employment from the Business register (ASIA), the Farm Register extended version (FR2), the Statistical Register on Individual Wages, Hours and Labor Costs (Racli). Data on the economic units of the Asia Legal Units Register and data from the Archive of income tax statements. Data from the Public institutions statistical register and the Non-profit institutions statistical register. Survey on local units of large enterprises (IULGI). Results of the quarterly survey on job vacancies and hours worked.
		Final data from the Ministry of education. Final data on hours compensated by the Wage Supplementation Fund (INPS). Data on non-residents working for resident production units obtained from the integration of the Base Statistical Registers of individuals, families and cohabitations and the Labour Register). Survey on the financial statements of large enterprises (SCI). Multipurpose survey on households: aspects of daily life. Data from the annual account of General Government employees compensation.
	2021	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS). Registro statistico esteso delle aziende agricole (Extended Farm Register FR2).
Compensation of employees	2022	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS). Registro statistico esteso delle aziende agricole (Extended Farm Register FR2). Final budget data of local units of General Government on personnel costs.
	2023	Provisional data on banks, other financial intermediaries and insurance companies. Financial statement data of State and budgets for some entities of Central and Local Government.





The table below summarizes the main changes in the statistical sources used for the estimates related to years t-1, t-2 and t-3 with respect to the version of the General Government consolidated account published on the web site (www.istat.it) in 2024 on April the 22.

GG subsectors	New statistical sources and updates
	State sector working balance (RGS); State budget classified by Cofog.
State	Analytic information provided by various MEF departments: treasury management of flows with the European Union due to Community programmes (RGS); revenues of state and local taxes centrally managed, by type of tax (Finance Department); interests and cash flows arising from public debt management (Treasury Department).
Other central units	Constitutional bodies, other central government bodies producing economic services and regulating economic activities, research bodies, government bodies providing social care, recreational, cultural and sectoral regulation services, publicly-owned enterprises whose legal form is private: financial statements, income statements, balance sheets and notes to the financial statements, lstat surveys on budget flows, survey on information, data and document for the classification of economic units within institutional sectors established by ESA (RIDDCUE).
	Regions and Autonomous Provinces: General Government database (BDAP) – accounting schemes; General Government Transactions Information System (SIOPE).
Local government	Provinces and metropolitan areas: General Government database (BDAP) – accounting schemes; General Government Transactions Information System (SIOPE).
	Municipalities, associations of municipalities and mountain development bodies: General Government database (BDAP) – accounting schemes; General Government Transactions Information System (SIOPE).
	 Local health agencies, hospital agencies, public research hospitals, university polyclinics: budget flows collected by the Public health information system managed by the Ministry of Health;
	Local bodies providing social care, recreational, cultural and sectoral regulation services: RIDDCUE survey on budget flows, profit and loss accounts, balance sheets and notes to the financial statements;
Other local units	 Universities: profit and loss accounts and balance sheets; MIUR Survey on Universities budgets with supplementary tables on revenues, Cofog and capital formation*; General Government Transactions Information System (SIOPE).
	Other local bodies producing economic services and regulating economic activities, publicly-owned enterprises whose legal form is private: RIDDCUE survey on budget flows, profit and loss accounts, balance sheets and notes to the financial statements.
Social security institutions	INPS and INAIL financial statements and Istat survey on budget flows of social security institutions. For some specific flows, information from financial statements is integrated with extra-budgetary information or additional sources supplied by the MoF and Inps.

The Istat survey on research and development is used to produce estimates for all public entities. Moreover, to estimate flows with the rest of the world the ministry of finance supply the reporting of expenditure and credits on European Union funds and transfers to and from UE and European institutions.

Concerning the State and some corporations (Rai, Anas, RFI, GSE, CSEA and other companies), for the year *t-1* (2023) the final budgets and other documents, that in the previous release were provisional, are available as consolidated results. Estimates for local health units are based on data communicated by the regions to the Ministry of Health. For all other units, estimates of the single economic items for the year *t-1* are calculated applying to the values of the year *t-2*, the yearly rates of change of corresponding items based on data collected by the Ministry of Economy and Finance for the purposes of the public sector borrowing requirement. These data are preliminary adjusted for the effects of concentrations of cash receipts or payments (e.g. arrear payments related to labour agreements signed in the previous year), that by definition must not alter the evolution of flows recorded on an accrual basis.

Output: main analytical measures

The economic accounts provide a picture of the main macroeconomic variables of demand and supply in which GDP is the reference variable.

Variables on the demand side are final consumption expenditure of households, of non-profit institutions serving households (NPISH) and of General Government, gross fixed capital formation, valuables, changes in inventories and exports. Variables on the supply side are output, intermediate consumption, value added, net indirect taxes





and imports. These aggregates are expressed both in value (at current prices) and in volume (at prices of the previous year or at chain-linked values).

Measures of labour input are the number of persons employed, the number of jobs, worked hours and full-time equivalent units.

Value added, output, compensation of employees, wages and salaries and measures of labour input are made available for up to a maximum of 64 economic activity groups (aggregations of the divisions of two-digit NACE Rev.2).

Exports and imports are divided into goods and services.

Household expenditure on the economic territory is published for the first time according to the new Coicop-2018 Classification with different details and contents of expenditure divisions. Dissemination will be for 66 expenditure items (3 and 4 digits of Coicop-2018) and by group of products (durable, non-durable and semi-durable goods, and services). Final consumption expenditure of resident households is obtained adding their expenditure in the rest of the world to their expenditure on the economic territory, and subtracting expenditure on the economic territory of non-resident households.

Gross fixed capital formation is available by type of asset, material and immaterial: dwellings, non-residential buildings and other structures, transport equipment, computer hardware, communication equipment, other machinery and equipment, weapons systems, cultivated biological resources, research and development, mineral exploration, entertainment, literary or artistic originals, software and databases. Gross fixed capital formation, depreciation and fixed capital stock are also disseminated by industry.

Data revision policy

"Revision" means the change of any previously disseminated statistical data, while "revision policy" is the set of rules that define the timing of the release of revised data and the length of the revision period. The aim of the revision policy is to make the revision practice transparent and understandable for users of official statistics. Istat follows the European Harmonized Revision Policy (HERP)³.

Revisions are classified as routine, extraordinary (or general) and other non-scheduled revisions.

Routine revisions mainly derive from the update of preliminary data due to the availability of more up-to-date sources of information (see Tables below). The preliminary estimates of economic aggregates often rely on provisional data, or are based on partial results;. Furthermore, the first estimates may be also built on alternative sources from those used for the final estimates, as it is the case of short-term indicators primarily employed in the early editions of annual estimates. Over time, once the data has reached a higher quality, the provisional results are replaced with the definitive ones.

In Italy national accounts data are published twice a year, at the beginning of March and at the end of September. If no significant adjustment to the year t-4 is deemed necessary, in the March release a definitive estimate is published for year t-3, together with a provisional estimate of year t-2 and a first provisional estimate of year t-1, both compiled through a more simplified approach based on quarterly estimates. In the September release, data are revised for year t-2, drawing upon the statistical sources that have become available, while for year t-1 the estimates are updated but are still compiled using a simplified approach based on quarterly national accounts. Moreover, this release allows the alignment between national accounts and balance of payments estimates.

There are two further time windows in which it is possible to review the published data to ensure consistency with their use for administrative purposes: the former (lasting one month) takes into account any updating of the General Government account between the publication of the data from the beginning of March and the publication of the Notification on general government net borrowing and debt4 in April (around the 20th); the second window (lasting one week) includes any updates to the annual estimates following the September publication and the dispatches, in accordance with European regulations, of the gross national income questionnaire5 at the end of September and the publication of the Notification on net debt and on the GG debt in October (by the 20th). These windows, however, are rarely used.

⁵ Council Regulation (EC, Euratom) No 1287/2003 of 15 July 2003.



³ <u>See Practical guidelines for revising ESA 2010 data</u> (2019).

⁴ Council Regulation No 479/2009 and subsequent amending regulations.



In accordance with the national revision policy and with European rules concerning data of relevance for the EDP, routine revisions can be extended back to year t-4 for general government estimates.

Revisions are extraordinary (or major) when are triggered by methodological changes in the treatment of basic data, by extraordinary changes in the classification and/or in the definition of variables. In the context of national accounts, extraordinary revisions – coordinated and introduced every five years and at European level – concern the reference year of the new estimate in terms of economic aggregates (defined as benchmark estimate) and affect the whole time series of data. Concentrating this kind of major changes in specific revision operations avoids frequent changes in sources and methods that would produce breaks in time series and undermine the consistency of national accounts estimates over time.

The one presented in this press release is a general revision of national accounts. The revision takes on board new available sources and introduces methodological innovations and improvements aimed at enhancing the quality of national accounts. As regards timing, the revision is coordinated at European level, with similar operations taking place in most European countries. The last extraordinary revision was disseminated in September 2019. A milestone general benchmark revision of national accounts took place in September 2014, implementing the transition to the new ESA (from ESA95 to ESA 2010) with the ensuing methodological changes.

If it is deemed necessary to revise some aggregates outside of the scheduled timetable, following the correction of errors and/or inconsistencies, the new estimates are treated as non-scheduled revisions and the modified timeseries are re-published in the data warehouse I.Stat. In such cases, users are duly informed in time through the institutional website.

Coverage and geographic detail

The national accounts provide a picture of the economy of a country as a whole. All units that have their centre of predominant economic interest on the economic territory of the country are covered. These units are defined as resident units, irrespective of their nationality, legal form or presence on the economic territory at the time they carry out a transaction.

The main geographic reference of annual economic accounts is the whole economic territory.

Timeliness

The first release of annual economic accounts and of the General Government consolidated account takes place two months after the end of the reference year (generally the 1st of March). Updated estimates are released approximately nine months after the end of the reference year (generally the 22nd of September).

Dissemination

Information on national accounts is available at <u>https://www.istat.it/en/statistical-themes/economy/national-</u> accounts/

For less recent information, click on the button "Read more".

Time series of national economic accounts according to ESA 2010 are produced and disseminated in million euro at current prices, at prices of the previous year and at chain-linked values with 2015 as the base year. Time series of the General Government consolidated account are produced and disseminated in million euro at current prices.

Some relevant time series are disseminated in Excel format as attachment to the two yearly press releases ("GDP and General Government net borrowing" and "Annual national accounts").

The complete set of time series is disseminated through the <u>IstatData</u> data warehouse in the section "National Accounts\Annual national accounts" immediately after the publication of the press release on the website. The data warehouse can be accessed from the "national-accounts" page or directly from the homepage. The data warehouse displays data in multidimensional tables that allow the drafting of customised figures and tables for many economic aggregates by acting on variables, reference periods and the arrangement of table heads and sides.

In the data warehouse <u>IstatData</u> under the section "National Accounts\General Government statistics", the annual account and the key indicators of General Government are made available.

Quarterly national accounts and quarterly non-financial sectors accounts, aligned with the estimates released today, will be available in <u>IstatData</u> data warehouse on October 4, simultaneously with the complete set of time series of





Annual Sector accounts. The complete set of time series of General Government accounts (comprehensive of subsectors) will be disseminated through the <u>IstatData</u> data warehouse in section "National Accounts\General Government statistics" on the 21 of October 2024, after the conclusion of the validation process by the European Commission and simultaneously with the publication of the press release on "Notification of General Government deficit and debt according to the excessive deficit procedure".

IstatData contains time series according to ESA 2010 starting from 1995 for values at current prices and chainlinked values, from 1996 for values at prices of the previous year. In the section "National Accounts" are stored series already disseminated: "National accounts - 2019" and "National accounts - 2014".

For technical and methodological information

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