

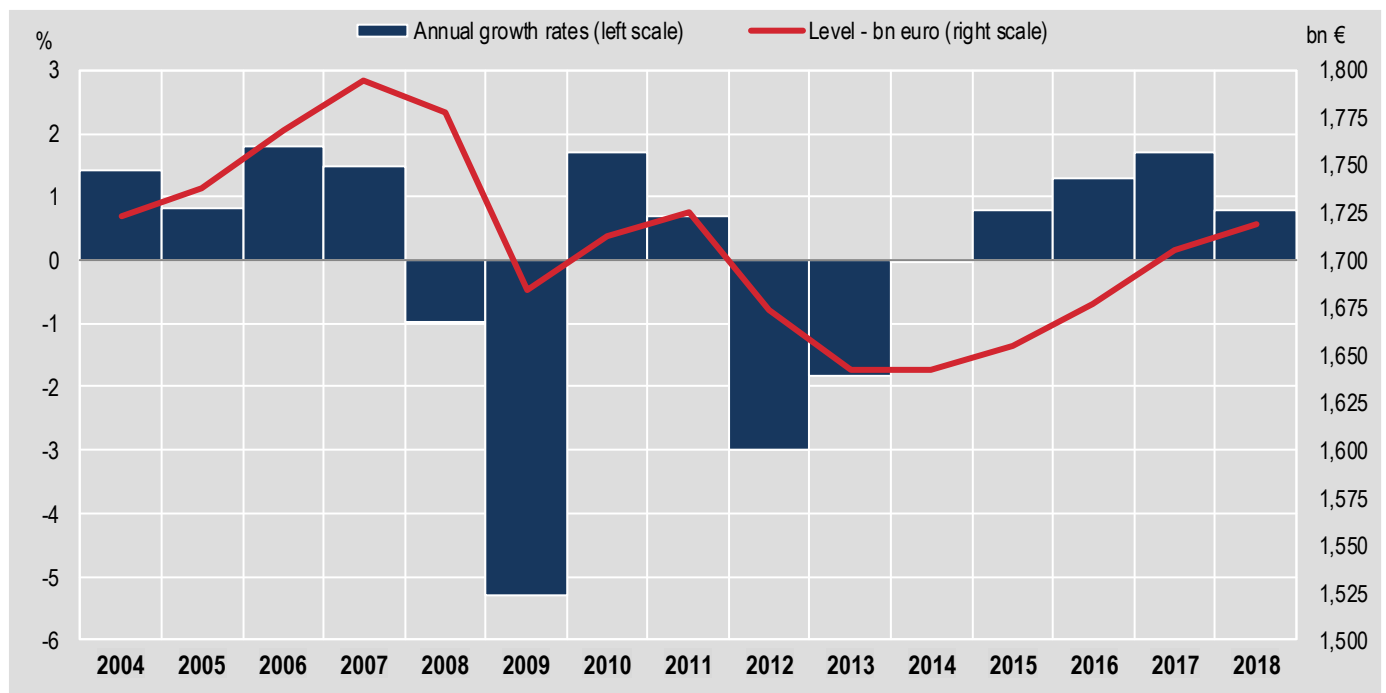
Years 1995 - 2018

## ANNUAL NATIONAL ACCOUNTS

- Istat publishes today the new national accounts data corresponding to the benchmark revision of methods and sources, 5 years after the introduction of ESA 2010, as recommended at the European level. The operation has been carried out for the reference year 2016, as for that year all the relevant structural information become available. Time series consistent with this benchmark estimate were compiled back to 1995 and are available on the data warehouse I.stat.
- In 2018 GDP at current prices increased by +1.7% (to 1,765,421 million euro) compared with the previous year. The chained volume measure of GDP increased by +0.8%.
- Gross fixed capital formation increased in volume by +3.2% and final consumption expenditure by +0.7%. Imports of goods and services increased by +3.0% and exports by +1.8%.
- National demand has contributed to GDP growth by +1.1 percentage points (+1.0 excluding changes in inventories) and net exports by -0.3 points.
- Value added in volume increased in all the main sectors: +2.0% in mining and quarrying, manufacturing and other industrial activities, +2.4% in constructions, +0.7% in agriculture, forestry and fishing and +0.6% in services activities.
- General Government net borrowing was -38,551 million euro: -2.2 % of GDP, compared with -2.4 % in 2017.
- Primary balance (General Government net borrowing net of interests) was +1.5 % of GDP (+1.3 % in 2017).

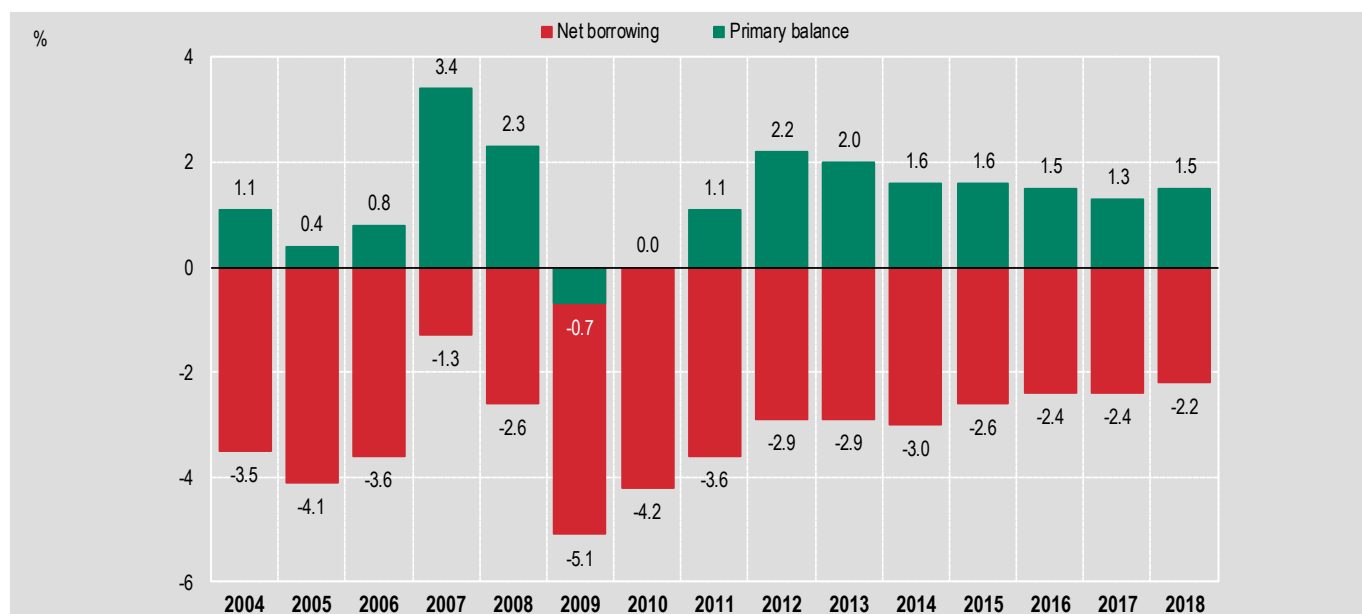
### CHART 1. GDP IN VOLUME

Years 2004-2018, billion euro (chain linked volumes, reference year 2015,) and annual percentage changes



**CHART 2. GENERAL GOVERNMENT BALANCES**

Years 2004-2018, annual percentage values on GDP


**TABLE 1. GDP AND EXPENDITURE COMPONENTS**

Year 2018, million euro (current prices, chain linked volumes - reference year 2015) and annual percentage changes

AGGREGATES	Current prices	Percentage changes 2018/2017	Chained volumes	Percentage changes 2018/2017
<b>Gross Domestic Product at market prices</b>	<b>1,765,421</b>	<b>+1.7</b>	<b>1,718,515</b>	<b>+0.8</b>
<b>Imports</b>	511,166	+5.6	502,438	+3.0
<b>Final Consumption Expenditure</b>	1,400,684	+2.0	1,360,399	+0.7
- Households final consumption expenditure	1,055,407	+1.7	1,031,807	+0.8
- Government final consumption expenditure	335,777	+2.7	319,084	+0.4
- NPISH final consumption expenditure	9,501	+0.2	9,568	-0.1
<b>Gross Fixed Capital Formation</b>	313,325	+3.8	310,883	+3.2
<b>Changes in inventories</b>	5,276	-	-	-
<b>Acquisitions less disposals of valuables</b>	2,017	+15.2	1,929	+15.1
<b>Exports</b>	555,286	+3.7	540,662	+1.8

**Table 2. CONTRIBUTIONS OF EXPENDITURE COMPONENTS TO GDP GROWTH**

Years 2014-2018, previous year prices

AGGREGATES	2014	2015	2016	2017	2018
National demand (excluding changes in inventories)	-0.4	+1.3	+1.6	+1.4	+1.1
- Final consumption expenditure	-0.0	+1.0	+0.9	+0.8	+0.5
- Households final consumption expenditure and NPISH	+0.1	+1.1	+0.8	+0.9	+0.5
- Government final consumption expenditure	-0.1	-0.1	+0.1	-0.0	+0.1
- Gross fixed capital formation and acquisitions less disposals of valuables	-0.4	+0.3	+0.7	+0.6	+0.6
Changes in inventories	+0.5	-0.1	+0.2	+0.2	-0.1
External balance of goods and services	-0.2	-0.5	-0.5	+0.1	-0.3
<b>Gross domestic product at market prices</b>	<b>-0.0</b>	<b>+0.8</b>	<b>+1.3</b>	<b>+1.7</b>	<b>+0.8</b>

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 2014-2018, annual percentage change on chain linked volumes (reference year 2015)

AGGREGATES	2014	2015	2016	2017	2018
<b>Gross Value Added</b>	<b>+0.1</b>	<b>+0.9</b>	<b>+1.4</b>	<b>+1.9</b>	<b>+0.9</b>
Agriculture, forestry and fishing	-2.3	+4.7	-0.1	-3.9	+0.7
Mining and quarrying, Manufacturing and Other industrial activities	-0.7	+1.2	+3.2	+3.9	+2.0
of which: Manufacturing	+0.2	+2.5	+3.1	+3.8	+2.2
Construction	-7.7	-2.4	+0.9	-0.2	+2.4
Services	+0.8	+0.9	+1.0	+1.6	+0.6
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	+1.8	+2.2	+2.7	+3.6	+1.5
Information and communication	+0.1	+1.2	+4.8	+4.3	-2.2
Financial and insurance activities	-0.6	-1.1	-0.6	-0.7	-2.4
Real estate activities	+0.7	+2.1	+0.1	+1.3	+2.0
Professional, scientific and technical activities; administrative and support service activities	+0.5	+0.9	+1.5	+1.8	-0.1
Public administration and defence; compulsory social security; education; human health and social work activities	+0.4	-0.8	-1.0	-0.5	-0.2
Arts, entertainment and recreation, repair of household goods and other services	+1.7	-0.7	+0.8	+1.6	+1.6

**Table 4. MAIN AGGREGATES BY INSTITUTIONAL SECTOR, Years 2016-2018, million euro**

	Non financial corporations	Financial corporations	Households and non profit institutions serving households			General government	Total
			Total	Of which producer Households	of which consumer Households		
<b>2016</b>							
Gross value added at basic prices	771,537	73,638	453,986	288,612	162,135	223,756	1,522,917
Gross operating surplus/Gross mixed income	336,435	37,437	396,820	257,874	138,420	47,876	818,568
Gross primary income/Gross national income	204,863	53,482	1,235,874	31,861	1,202,844	206,292	1,700,511
Gross disposable income	170,230	48,759	1,134,872	27,576	1,098,499	329,973	1,683,834
Gross saving	168,868	44,642	120,854	27,093	93,910	7,349	341,712
Gross fixed capital formation	159,590	5,429	87,683	26,379	60,662	38,478	291,179
Net lending (+)/Net borrowing (-)	13,376	41,642	27,198	2,680	23,888	-40,857	41,359
<b>2017</b>							
Gross value added at basic prices	806,712	70,343	456,047	289,326	163,337	224,730	1,557,833
Gross operating surplus/Gross mixed income	350,785	32,916	398,249	257,796	139,912	48,112	830,062
Gross primary income/Gross national income	217,028	51,235	1,261,560	31,880	1,228,509	216,453	1,746,277
Gross disposable income	182,351	46,470	1,157,574	27,338	1,121,023	344,482	1,730,876
Gross saving	179,905	42,628	117,015	26,818	90,464	17,589	357,137
Gross fixed capital formation	167,656	6,202	90,416	27,115	62,629	37,557	301,831
Net lending (+)/Net borrowing (-)	13,778	49,160	26,119	3,013	22,589	-42,047	47,010

2018							
Gross value added at basic prices	823,533	67,180	461,514	291,612	166,462	231,130	1,583,357
Gross operating surplus/Gross mixed income	347,934	30,662	403,749	260,244	142,946	48,616	830,960
Gross primary income/Gross national income	214,013	59,779	1,283,333	28,038	1,254,176	226,000	1,783,124
Gross disposable income	183,250	56,393	1,174,028	23,491	1,141,315	351,823	1,765,494
Gross saving	180,295	52,311	116,158	22,942	93,495	16,046	364,809
Gross fixed capital formation	175,110	6,400	94,214	28,166	65,355	37,602	313,325
Net lending (+)/Net borrowing (-)	13,630	47,476	20,982	-2,672	23,153	-38,551	43,537

The totals may not correspond to the sum of the components due to rounding effects

**TABLE 5. GENERAL GOVERNMENT MAIN AGGREGATES AND RATIOS**

Years 2015 - 2018

MAIN AGGREGATES AND RATIOS	2015	2016	2017	2018
Net lending (+) or Net borrowing (-)	-42,248	-40,857	-42,047	-38,551
<b>Net lending (+) or Net borrowing (-) / GDP (%)</b>	<b>-2.6</b>	<b>-2.4</b>	<b>-2.4</b>	<b>-2.2</b>
Primary balance (a)	25,845	25,376	23,250	26,111
<b>Primary balance/GDP (%)</b>	<b>+1.6</b>	<b>+1.5</b>	<b>+1.3</b>	<b>+1.5</b>
Total receipts from taxes and compulsory social contributions	709,476	715,366	725,901	738,598
<b>Tax burden (a)</b>	<b>42.9</b>	<b>42.2</b>	<b>41.8</b>	<b>41.8</b>

(a) see glossary

## The revision of GDP estimates for 2017 and 2018

The revision of GDP and the whole of National Accounts data published here includes two different components: the effects of the benchmark revision concerning in particular the level of all the aggregates in 2016, and those deriving from the routine revision process applied in the national accounts compilation that affect specifically the two most recent years. Here are reported the changes with respect to the previous release of GDP and main aggregates for 2017 and 2018 but it is worth pointing out that, due to the benchmark revision, the level of nominal GDP has been revised upward by about 5,8 billion euros (0,3%). For more details please refer to the Italian version of the methodological note, while the English one will be made available as soon as possible.

The rate of change of GDP in volume terms is unchanged for 2017 and is slightly revised downward for 2018 (from +0.9% to +0.8%) (Table 6). As for 2018, there are small revisions in the rates of change of fixed capital formation (+3.2 from +3.4%), of exports (from +1.9 to +1.8%) and of imports (from +2.3 to +0.7%).

**TABLE 6. REVISIONS TO ANNUAL PERCENTAGE CHANGE OF GDP AND ITS EXPENDITURE COMPONENTS**

Years 2017-2018, chain linked volumes (reference year 2015), vintage comparison (September 2019 versus April 2019)

AGGREGATES	2017			2018		
	September 2019 estimate a	April 2019 estimate b	Revisions a-b	September 2019 estimate a	April 2019 estimate b	Revisions a-b
	<b>Gross domestic product at market prices</b>	<b>+1.7</b>	<b>+1.7</b>	<b>0.0</b>	<b>+0.8</b>	<b>+0.9</b>
Imports	+6.2	+5.5	+0.7	+3.0	+2.3	+0.7
Final Consumption Expenditure	+1.1	+1.3	-0.2	+0.7	+0.5	+0.2
- Households final consumption expenditure	+1.4	+1.5	-0.1	+0.8	+0.6	+0.2
- Government final consumption expenditure	-0.2	+0.3	-0.5	+0.4	+0.2	+0.2
- NPISH final consumption expenditure	+7.2	+3.0	+4.2	-0.1	-0.3	+0.2
Gross Fixed Capital Formation	+3.3	+4.3	-1.0	+3.2	+3.4	-0.2
Exports	+6.0	+5.9	+0.1	+1.8	+1.9	-0.1

Concerning General Government account, the net borrowing of General Government remained almost unchanged for 2016 (+1,799 million) and 2017 (-762 million). As for 2018, there is a small increase in deficit (by -1,046 million) but the ratio to GDP is unchanged at -0.1 per cent.

**TABLE 7. REVISIONS TO GENERAL GOVERNMENT ACCOUNT**

Years 2016-2018, million euro current prices, vintage comparison (September 2019 versus April 2019)

AGGREGATES	2016			2017			2018		
	September 2019 estimate a	April 2019 estimate b	Revisions a-b	September 2019 estimate a	April 2019 estimate b	Revisions a-b	September 2019 estimate a	April 2019 estimate b	Revisions a-b
Market and for own final use output	41,776	37,821	+3,955	41,890	41,044	+846	42,034	41,836	+198
Current taxes on income, wealth, etc.	247,608	247,633	-25	250,373	250,642	-269	248,834	248,876	-42
Taxes on production and imports	241,788	242,016	-228	247,639	248,384	-745	253,253	253,607	-354
Social contributions receivable	220,610	220,648	-38	225,564	225,566	-2	234,941	234,964	-23
Other current revenues	31,064	31,098	-34	30,937	31,359	-422	33,148	33,138	+10
<b>Total current revenues</b>	<b>782,846</b>	<b>779,216</b>	<b>+3,630</b>	<b>796,403</b>	<b>796,995</b>	<b>-592</b>	<b>812,210</b>	<b>812,421</b>	<b>-211</b>
<b>Total capital revenues</b>	<b>7,046</b>	<b>6,804</b>	<b>+242</b>	<b>6,604</b>	<b>6,615</b>	<b>-11</b>	<b>3,841</b>	<b>3,692</b>	<b>+149</b>
<b>Total revenues</b>	<b>789,892</b>	<b>786,020</b>	<b>+3,872</b>	<b>803,007</b>	<b>803,610</b>	<b>-603</b>	<b>816,051</b>	<b>816,113</b>	<b>-62</b>
Compensation of employees	166,038	164,096	+1,942	166,810	166,683	+127	172,362	171,826	+536
Intermediate consumption	140,644	136,652	+3,992	144,053	141,744	+2,309	146,681	143,855	+2,826
Social benefits other than social transfers in kind	336,353	336,354	-1	341,403	341,258	+145	348,794	348,893	-99
Other current expenditures	132,462	134,141	-1,679	126,529	128,015	-1,486	128,327	130,679	-2,352
<b>Total current expenditures</b>	<b>775,497</b>	<b>771,243</b>	<b>+4,254</b>	<b>778,795</b>	<b>777,700</b>	<b>+1,095</b>	<b>796,164</b>	<b>795,253</b>	<b>+911</b>
<b>Total capital expenditures</b>	<b>55,252</b>	<b>57,433</b>	<b>-2,181</b>	<b>66,259</b>	<b>67,195</b>	<b>-936</b>	<b>58,438</b>	<b>58,365</b>	<b>+73</b>
<b>Total expenditures</b>	<b>830,749</b>	<b>828,676</b>	<b>+2,073</b>	<b>845,054</b>	<b>844,895</b>	<b>+159</b>	<b>854,602</b>	<b>853,618</b>	<b>+984</b>
Net lending (+) or Net borrowing (-)	-40,857	-42,656	+1,799	-42,047	-41,285	-762	-38,551	-37,505	-1,046
GDP	1,695,590	1,689,824	+5,766	1,736,602	1,727,382	+9,220	1,765,421	1,756,982	8,439
Net lending (+) or Net borrowing (-)/GDP	-2.4	-2.5	+0.1	-2.4	-2.4	0.0	-2.2	-2.1	-0.1
Tax burden (a)	42.2	42.4	-0.2	41.8	42.1	-0.3	41.8	42.1	-0.3

(a) See glossary

**Acquisitions less disposals of 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 volume** measure of national accounts aggregates referred to data net of price movements. For each aggregate and each observation, a volume index is calculated as the ratio between its value at previous year prices and that at current prices referred to previous year. These volume indices are chained together by multiplying (and dividing by 100) the consecutive indices starting from a value of 100 relative to the first year and then shifting the base to the year taken as reference (currently 2010). The result is a chain-linked index that multiplied for the current value of the reference year (and divided by 100) produces the chain-linked 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** 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 valued *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 expenditure made by 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 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 also 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:

- 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 outcome of the production activity of resident units. Sum of the values added by all activities producing goods and services, plus taxes less subsidies on products. Gross value added is the difference between output and intermediate consumption. GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, minus the value of imports of goods and services; it corresponds to the sum of primary incomes distributed by resident producer units.

**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 realized by the productive activity of producer or institutional units. Fixed assets are material and immaterial (as software) produced assets used in production for more than one year.

**Household final consumption expenditure** consists of expenditures incurred by resident 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 valued *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 non-financial 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:

- 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 accounts<sup>1</sup>, which includes a mandatory transmission programme of data.

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 building of national economic accounts are included in the National Statistical Plan (current edition: PSN 2017-2019, Update 2018-2019) approved by Presidential Decree of 20 May 2019.

## 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 available statistical sources are inadequate in deriving a direct estimate of gross operating surplus and mixed

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<sup>1</sup> The main characteristics of the first version of national accounts compiled in accordance with the criteria laid down by ESA 2010 have been described in the information note “*I nuovi conti nazionali in SEC 2010 – Innovazioni e ricostruzione delle serie storiche (1995-2013)*” (October 2014).

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 economy<sup>2</sup>.

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 former, 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.

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 (2015 since September 2019). 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). Information on the financial statements of companies operating in financial intermediation are provided by the supervisory authorities, that is 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 the survey on economic outcomes of agricultural holdings (RICA-REA) and the survey on the structure and output of agricultural holdings (SPA).

For the non-profit sector a dedicated data base 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).

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<sup>2</sup> 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 next dissemination is planned on the 15<sup>th</sup> of October and the note will include a detailed description of methodological innovations.

Concerning the General Government a very analytical approach is utilised, 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, provinces, 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, 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), data derive mainly 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.

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 2019 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 2016, identified as the benchmark year for the new level of the aggregates, and for the period 1995-2015 for which a retrospective reconstruction of the historical series was made. With regard to 2017 (the  $t-2$  of the normal cycle of revision) most of the structural information made available in recent months has been used, although the information set has been included in a simplified estimation procedure. As a consequence, the final version of 2017 data, which will be released next March, could incorporate other routine changes.

The following table summarizes the main changes affecting statistical sources used for the estimates related to years  $t-2$  and  $t-3$  with respect to the version of annual national accounts published on the web site ([www.istat.it](http://www.istat.it)) on April the 9<sup>th</sup>.

Aggregates	Reference years	New statistical sources and updates
Value added of agriculture	2017	Final results of surveys of crops and animal production. Final results of estimative surveys run by regional and/or provincial agriculture representative offices. Final results on technical equipment.
	2018	Provisional results of surveys of crops and animal production. Provisional results of estimative surveys run by regional and/or provincial agriculture representative offices. Provisional data on technical means of production (seeds, fertilizers, plant protection products, feeding stuff).
Value added of industry and market services	2016	New integrated database for the non-profit sector (market units). Final data on mutual funds.
	2017	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS).
Final consumption expenditure of NPISH	2016	New integrated database for the non-profit sector.
	2017	Update of Social Security Institute (INPS) administrative data on employees.
Household expenditure	2016	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, fuels and energy, transportation services. ISPRA data on municipal solid waste collection.
	2017	Data on expenditure for recreational services from the Italian Society of Authors and Publishers (SIAE). Data on expenditure for pharmaceuticals from the Medicines Utilization Monitoring Centre (OsMED) and on hospital services from the Ministry of Health. Data on students by level of education and on hotel stays. Provisional data on expenditure for fuels and energy; insurance and financial services; domestic services.
Gross fixed capital formation	2016	Update of estimates derived from the commodity flow method. Revision of data on car registrations. Incorporation of data from the survey on R&D in business enterprises and from the building permits survey.
Imports and exports of goods and services	2016	Final tax data (MOSS system, Mini One-Stop-Shop for VAT) on telecommunications, broadcasting and electronic services directly provided by non-resident units to resident consumers. Final data of the Balance of Payments.
	2017	Final data on processing services (Intrastat-services). Revision of the Balance of Payments.
Employment	2016 2017	Labour force survey integrated at the micro level with administrative sources (Social Security Institute data on employees, outworkers, domestic workers, workers in agriculture, separate management, etc.). Data on employment from the Business register (ASIA) and the ASIA-Agriculture 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. Data from the Non-profit institutions statistical register. 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 (LEED). Survey on the financial statements of large enterprises (SCI). Multipurpose survey on households: aspects of daily life. Data from Public institutions statistical register integrated with the annual account of General Government employees compensation.
Compensation of employees	2016	Final version of budget data of local units of General Government on personnel costs.
	2017	Final data of the integrated information system for the estimation of economic results of enterprises (Frame-SBS).
	2018	Social Security Institute data on employees. Provisional data on financial statements of corporations. Provisional database of business sector studies for small enterprises. Provisional data on banks and other financial intermediaries. Provisional budget data of General Government on personnel costs.

In principle, the revision of the General Government consolidated account covers a longer time span than the rest of the accounts, extending back to year  $t-4$ , in accordance with European rules concerning EDP statistics, that is data relevant for the excessive deficit procedure (Council Regulation No 3605/1993). In the specific case of the September 2019 edition, also the General Government account has been subjected to a benchmark revision, including methodological adjustments and improvements in basic data. Moreover, the perimeter of the General Government institutional sector has undergone significant changes.

The following table displays in a synthetic form the sources used to revise the estimates for the years  $t-3$  (2016),  $t-2$  (2017), and  $t-1$  (2018).

GG subsectors	New statistical sources and updates
<b>State</b>	<ul style="list-style-type: none"> <li>■ State budget recorded on a cash and legal commitments basis, provided by the State General Accounting Department (RGS) of the Ministry of Economy and Finance (MEF);</li> <li>■ State sector working balance (RGS);</li> <li>■ Analytic information provided by various MEF departments: treasury management of flows with the European Union due to Community programmes (RGS); revenue of state and local taxes centrally managed, by type of tax (Finance Department); interests and cash flows arising from public debt management (Treasury Department);</li> <li>■ Cassa Depositi e Prestiti S.p.A.: data on interest payments and interest earnings on loans provided to General Government.</li> </ul>
<b>Other central units</b>	<ul style="list-style-type: none"> <li>■ 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, companies under public control producing real and financial services: financial statements and Istat surveys on budget flows, integrated by specific detailed information provided by the units, survey of information, data and document for the classification of economic units within institutional sectors established by ESA (RIDDCUE).</li> </ul>
<b>Local government</b>	<ul style="list-style-type: none"> <li>■ Regions: financial statements of regional governments, integrated with specific detailed information provided by the units;</li> <li>■ Provinces and metropolitan areas: financial statement certificates – Ministry of the Interior;</li> <li>■ Municipalities, associations of municipalities and mountain communities: financial statement certificates – Ministry of the Interior.</li> </ul>
<b>Other local units</b>	<ul style="list-style-type: none"> <li>■ Local health agencies, hospital agencies, public research hospitals, university polyclinics: budget flows collected by the healthcare information system managed by the Ministry of Health;</li> <li>■ Local bodies producing economic services and regulating economic activities, or providing social care, recreational, cultural and sectoral regulation services: RIDDCUE survey on budget flows, profit and loss accounts and balance sheets;</li> <li>■ Universities: profit and loss accounts and balance sheets.</li> </ul>
<b>Social security institutions</b>	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>

Concerning the State and some national companies (Rai, Anas, RFI and other minor entities), for the year  $t-1$  (2018) all information recorded in the final documents (typically available for the year  $t-2$ ) is available in terms of preliminary 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 for the year  $t-1$  are calculated applying to the value of single economic items for each unit, as quantified for the previous year, 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 previously adjusted for the effects of concentrations of receipts or payments (e.g. arrear payments related to labour agreements signed in the previous year), which 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 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, incomes, 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 made available by expenditure function (62 purposes of the COICOP classification identified by 3-digit or 4-digit code) 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 revision policy adopted by Istat is aligned with European recommendations.

Revisions are classified as routine, extraordinary and other non-scheduled revisions. Revisions are defined as routine when they mainly derive from the update of data due to the availability of more up-to-date sources of information.

Revisions are defined as extraordinary when they are triggered by methodological changes in the treatment of basic data, extraordinary changes in the classification and/or definition of variables. In the context of national accounts, or by extraordinary revisions – usually introduced every five years – affect the whole time series of data, starting from the reference year for which the new estimate of the level of the aggregates is performed (defined as benchmark estimate). The previous general benchmark revision of national accounts, implementing the transition to the new ESA (from ESA95 to ESA 2010) with the ensuing methodological changes, has been published in September 2014. The results of the estimates of the 2019 benchmark revision of national accounts – with time series back to 1995 - have been disseminated on the 23<sup>rd</sup> of September. The revision has included in the estimation process new available sources, methodological innovations and improvements aimed at enhancing the quality of national accounts. As regards timing, the revision is coordinated with similar operations taking place in most European countries.

National accounts data are published twice a year, at the beginning of March and at the end of September. In March of every year (hereafter defined as year  $t$ ) final data for year  $t-3$  are disseminated, together with provisional data for years  $t-2$  and  $t-1$ . The September release fulfils the need to take into account with as much timeliness as possible information for years  $t-1$  and  $t-2$  that becomes available after the first annual release in March. Moreover, it allows the alignment between the estimates of the national accounts and those of the Balance of Payments.

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 time-series are re-published in the data warehouse [I.Stat](#). Users are duly informed through the institutional website.

Finally, the General Government consolidated account is subject to a revision covering a longer time span than the rest of the accounts, since it extends back to year  $t-4$ , in accordance with European rules concerning data relevant for the excessive deficit procedure (EDP, Council Regulation No 3605/93).



### 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 1<sup>st</sup> of March). Subsequent estimates are released approximately nine months after the end of the reference year (generally the 21<sup>st</sup> of September).

### Dissemination

Information on national accounts is available at <http://www.istat.it/en/national-accounts>.

For less recent information, click on the button “Archive” at the bottom of the page.

Time series of national economic accounts according to ESA 2010 are produced and disseminated in millions of 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 millions of euro at current prices.

The main 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 [I.Stat](#) 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.

The time series of General Government accounts are disseminated through the [I.Stat](#) data warehouse in section “National Accounts\General Government statistics” twice a year 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”.

[I.Stat](#) makes available time series according to ESA 2010 starting from 1995 for values at current prices and chain-linked values, from 1996 for values at prices of the previous year. In addition, in the section “National Accounts\Annual national accounts\Broken time series” it is possible to find time series according to ESA95 covering the period 1970 to 2013.