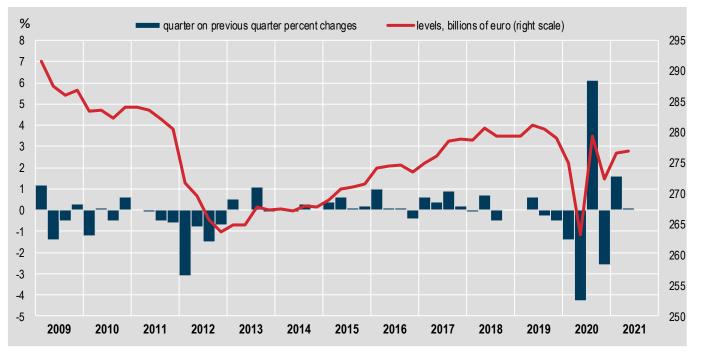


Il quarter 2021 QUARTERLY NON-FINANCIAL ACCOUNT OF GENERAL GOVERNMENT, INCOME AND SAVINGS OF HOUSEHOLDS AND PROFITS OF NON-FINANCIAL CORPORATIONS

- The Quarterly non-financial General Government (GG) account and the other figures presented in this press release are desumed from the Quarterly non-financial sector accounts. Data on Households and Nonfinancial corporations are commented in seasonally adjusted form, data on the GG are unadjusted.
- The annual sector accounts presented in the last press release (22 September 2021) were revised to incorporate a revision in Balance of payments data. A synthesis of revised data is given in this press release while the whole data set is available for download on the institutional data wharehouse.
- In the second quarter of 2021 the GG net borrowing to GDP ratio was -7.6% (-12.9% in the same quarter of the previous year). The primary balance was negative, its ratio to GDP standing at -3.6% (-8.7% in the second quarter of 2020). The current balance was also negative, with a GDP ratio of -1.0% (-8.0% in the same period of 2020).
- The tax burden ratio stood at 41.9% of GDP, 0.5 percentage points lower than the same quarter of 2020.
- Gross disposable income of consumer households increased by 0.5% with respect to the previous quarter. In real terms gross disposable income increased by 0.1% for the negative impact of price dinamics (+0.4% the implicit deflator of household final consumption expenditure). The saving rate was 12.9%, 4.1 percentage points lower than in the first quarter of 2021.
- The profit share of non-financial corporations was 42.2%, 0.4 percentage points lower than in the previous quarter. The investment rate of non-financial corporations was 22.2%, showing an slight decrease with respect to the previous quarter (-0.1 percentage points).

CHART 1. REAL GROSS DISPOSABLE INCOME OF CONSUMER HOUSEHOLDS

Q1 2009 – Q2 2021, billions of euros (chain linked values, reference year 2015) and quarter on previous quarter percent changes, seasonally adjusted data



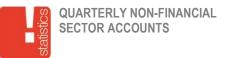
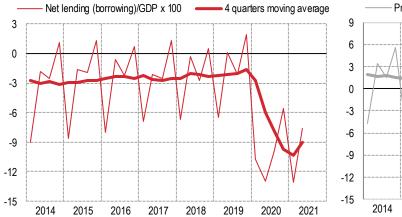




CHART 2. GENERAL GOVERNMENT BALANCES

Q1 2014 - Q2 2021, percentage values and four-quarter moving average, non-seasonally adjusted data



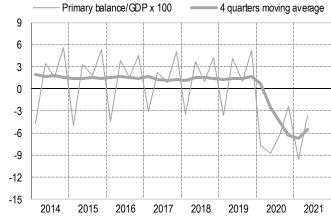


TABLE 1. INDICATORS FOR CONSUMER HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS

Q2 2021, percentage values and differences of percentage values, seasonally adjusted data

| | ll 2021 | ll 2021 minus I 2021 | II 2021 minus II 2020 | I-II 2021 minus I-II 2020 |
|---|---------|----------------------------|-----------------------------|---------------------------------|
| Saving rate of Consumer households (a) | 12.9 | -4.1 | -7.1 | -1.6 |
| Investment rate of Consumer households (b) | 6.3 | +0.2 | +2.1 | +1.5 |
| Profit share of Non-financial corporations (c) | 42.2 | -0.4 | +1.5 | +0.9 |
| Investment rate of Non-financial corporations (d) | 22.2 | -0.1 | +1.5 | +1.5 |

(a) Gross saving divided by gross disposable income adjusted for the change in the net equity of households in pension funds reserves; (b) Gross fixed capital formation divided by gross disposable income adjusted for the change in the net equity of households in pension funds reserves; (c) Gross operating surplus divided by gross value added at basic prices; (d) Gross fixed capital formation divided by gross value added at basic prices.

TABLE 2. MAIN INDICATORS FOR GENERAL GOVERNMENT

Q2 2021, percentage values and differences of percentage values, non seasonally adjusted data

| | ll 2021 | II 2020 | II 2021 minus II 2020 | I-II 2021 minus I-II 2020 | |
|--|---------|-------------------|-----------------------------|---------------------------------|--|
| | Percent | Percentage values | | Changes in percentage points | |
| Total revenues/GDP | 47.3 | 3 49.4 | -2.1 | -0.8 | |
| Total expenditures/GDP | 54.8 | 62.3 | -7.5 | -2.4 | |
| Total expenditures net interests/GDP | 50.9 | 58.1 | -7.2 | -2.4 | |
| Net lending (+) or Net borrowing (-)/GDP | -7.6 | -12.9 | +5.3 | +1.6 | |
| Current balance/GDP | -1.(| -8.0 | +7.0 | +3.1 | |
| Primary balance/GDP | -3.6 | -8.7 | +5.1 | +1.7 | |
| Tax burden (a) | 41.9 | 42.4 | -0.5 | 0.0 | |

(a) Ratio on GDP of the sum of current taxes on income, wealth, etc., taxes on production and imports, social contributions receivable and capital taxes.





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TABLE 3. QUARTERLY NON-FINANCIAL GENERAL GOVERNMENT ACCOUNT

Q2 2021, millions of euros at current prices, quarters on same quarters a year ago percent changes, non seasonally adjusted data

| | ll 2021 | II 2020 | <u>II 2021</u> II 2020 | <u>I-II 2021</u> I-II 2020 |
|---|-----------------|---------|---------------------------|-------------------------------|
| | EXPENDITURES | | | |
| Compensation of employees | 43,185 | 42,183 | +2.4 | +2.4 |
| Intermediate consumption | 26,325 | 25,843 | +1.9 | +4.0 |
| Social benefits other than social transfers in kind | 95,067 | 100,145 | -5.1 | -1.4 |
| Other current expenditures | 28,428 | 29,668 | -4.2 | +0.7 |
| Current expenditures net interests | 193,005 | 197,839 | -2.4 | +0.5 |
| Interests | 17,350 | 15,681 | +10.6 | +11.4 |
| Total current expenditures | 210,355 | 213,520 | -1.5 | +1.2 |
| Gross fixed capital formation | 11,955 | 10,481 | +14.1 | +14.4 |
| Other capital expenditures | 17,621 | 8,640 | +104 | +96.7 |
| Total capital expenditures | 29,577 | 19,120 | +54.7 | +47.2 |
| Total expenditures | 239,932 | 232,641 | +3.1 | +4.7 |
| | REVENUES | | | |
| Current taxes on income, wealth, etc. | 65,743 | 60,923 | +7.9 | +5.1 |
| Taxes on production and imports | 59,200 | 48,135 | +23.0 | +13.8 |
| Social contributions receivable | 57,874 | 48,939 | +18.3 | +8.8 |
| Other current revenues | 22,975 | 25,589 | -10.2 | -6.9 |
| Total current revenues | 205,791 | 183,585 | +12.1 | +7.3 |
| Capital taxes | 351 | 129 | +172.5 | +61.7 |
| Other capital revenues | 647 | 684 | -5.5 | +4.5 |
| Total capital revenues | 998 | 813 | +22.7 | +15.6 |
| Total revenues | 206,789 | 184,398 | +12.1 | +7.3 |
| | BALANCING ITEMS | | | |
| Current balance | -4,564 | -29,935 | | |
| Net lending (+) or Net borrowing (-) | -33,143 | -48,242 | | |
| Primary balance | -15,793 | -32,561 | | |

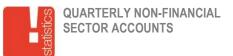
TABLE 4. CONSUMER HOUSEHOLDS, MAIN AGGREGATES

Q2 2021, millions of euros, quarter on previous quarter and quarters on same quarters a year ago percent changes, seasonally adjusted data

| | 11 2024 | Quarter on previous quarter | Quarters on same quarters a year ago | |
|---|---------|--------------------------------|--------------------------------------|------------------|
| | ll 2021 | <u>II 2021</u> | <u>II 2021</u> | <u>I-II 2021</u> |
| | | I 2021 | II 2020 | I-II 2020 |
| Gross disposable income | 286,253 | +0.5 | +6,0 | +3.2 |
| Gross disposable income in real terms (a) | 276,859 | +0.1 | +5.2 | +2.8 |
| Final consumption expenditure | 250,573 | +5.4 | +15.3 | +5.2 |
| Gross fixed capital formation | 18,045 | +4,0 | +57.4 | +36,0 |

(a) Gross diposable income in real terms, obtained deflating gross disposable income at current prices by the implicit deflator of households consumption expenditure (QNAs, chained linked values, reference year 2015).





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CHART 3. GROSS SAVING RATE OF CONSUMER HOUSEHOLDS AND QUARTER ON PREVIOUS QUARTER PERCENT CHANGES OF ITS COMPONENTS

Q1 2014 - Q2 2021, percentage values, seasonally adjusted data

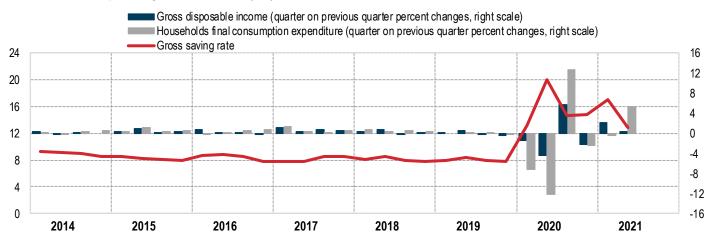


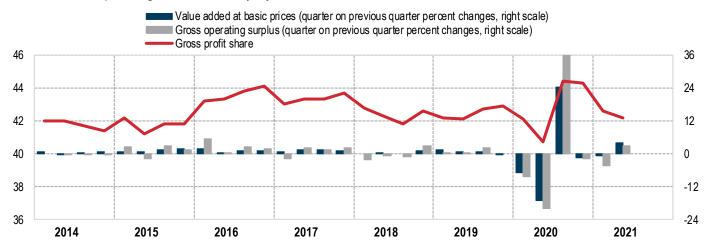
TABLE 5. NON-FINANCIAL CORPORATIONS, MAIN AGGREGATES

Q2 2021, millions of euros, quarter on previous quarter and quarters on same quarters a year ago percent changes, seasonally adjusted data

| | 11 2024 | Quarter on previous quarter | Quarters on same of | quarters a year ago |
|-------------------------------|---------|--------------------------------|---------------------|---------------------|
| | ll 2021 | <u>II 2021</u> | <u>II 2021</u> | <u>I-II 2021</u> |
| | | I 2021 | II 2020 | I-II 2020 |
| Value added at basic prices | 206,198 | +4,0 | +26.4 | +12.3 |
| Gross operating surplus | 86,972 | +2.8 | +31.1 | +14.8 |
| Gross fixed capital formation | 45,678 | +3.3 | +35.4 | +20.6 |

CHART 4. GROSS PROFIT SHARE OF NON-FINANCIAL CORPORATIONS AND QUARTER ON PREVIOUS QUARTER PERCENT CHANGES OF ITS COMPONENTS

Q1 2014 - Q2 2021, percentage values, seasonally adjusted data





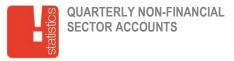
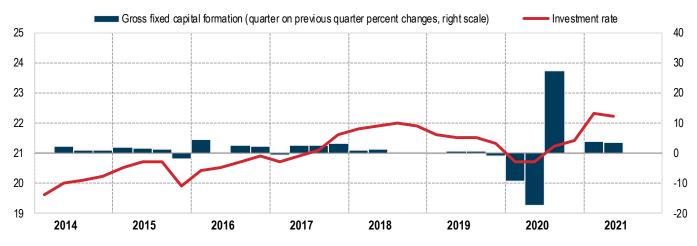




CHART 5. INVESTMENT RATE OF NON-FINANCIAL CORPORATIONS AND QUARTER ON PREVIOUS QUARTER PERCENT CHANGES OF GROSS FIXED CAPITAL FORMATION

Q1 2013 - Q2 2021, percentage values, seasonally adjusted data





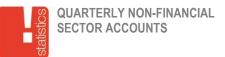




Table 6. MAIN AGGREGATES BY INSTITUTIONAL SECTOR, Years 2018-2020, million euro

| | Non Guancial | Financial | Households and non-profit istitutions serving households | | Concernel | | |
|--|-------------------------------|------------------------|---|------------------------------------|------------------------------------|-----------------------|-----------|
| | Non financial corporations | Financial corporations | Total | Of which producer Households | of which consumer Households | General Government | Total |
| | | | 2018 | | | | |
| Gross value added at basic prices | 821,790 | 70,138 | 465,898 | 296,267 | 166,082 | 231,750 | 1,589,576 |
| Gross operating surplus/Gross mixed income | 348,439 | 33,457 | 409,113 | 265,901 | 142,642 | 48,997 | 840,006 |
| Gross primary income/Gross national income | 218,840 | 59,606 | 1,287,744 | 31,600 | 1,255,114 | 224,764 | 1,790,955 |
| Gross disposable income | 188,478 | 56,379 | 1,178,892 | 27,352 | 1,142,228 | 349,808 | 1,773,557 |
| Gross saving | 185,442 | 52,245 | 119,895 | 26,823 | 93,358 | 15,354 | 372,936 |
| Gross fixed capital formation | 179,891 | 6,316 | 92,152 | 27,582 | 63,922 | 37,766 | 316,125 |
| Net lending(+)/Net borrowing (-) | 8,264 | 49,198 | 25,739 | 856 | 24,469 | -38,781 | 44,419 |
| | | | 2019 | | | | |
| Gross value added at basic prices | 844,951 | 71,096 | 461,378 | 289,894 | 167,822 | 232,229 | 1,609,655 |
| Gross operating surplus/Gross mixed income | 359,001 | 33,249 | 404,487 | 259,468 | 144,402 | 49,134 | 845,871 |
| Gross primary income/Gross national income | 216,360 | 60,439 | 1,297,987 | 31,445 | 1,265,560 | 235,663 | 1,810,449 |
| Gross disposable income | 184,657 | 56,777 | 1,187,282 | 27,085 | 1,150,815 | 364,605 | 1,793,321 |
| Gross saving | 182,051 | 52,819 | 119,036 | 26,578 | 92,913 | 29,995 | 383,901 |
| Gross fixed capital formation | 181,372 | 7,372 | 91,308 | 27,133 | 63,534 | 41,502 | 321,554 |
| Net lending(+)/Net borrowing (-) | 11,495 | 47,876 | 24,480 | 330 | 23,965 | -27,779 | 56,073 |
| | | | 2020 | | | | |
| Gross value added at basic prices | 763,855 | 67,514 | 428,366 | 259,117 | 166,045 | 233,383 | 1,493,117 |
| Gross operating surplus/Gross mixed income | 328,361 | 31,807 | 377,003 | 231,936 | 144,443 | 49,255 | 786,426 |
| Gross primary income/Gross national income | 202,731 | 61,985 | 1,202,530 | 31,082 | 1,170,555 | 206,398 | 1,673,644 |
| Gross disposable income | 172,436 | 58,357 | 1,152,043 | 26,818 | 1,117,721 | 271,557 | 1,654,393 |
| Gross saving | 170,389 | 54,564 | 201,457 | 26,364 | 175,757 | -73,817 | 352,594 |
| Gross fixed capital formation | 160,393 | 6,857 | 83,919 | 24,338 | 58,981 | 42,595 | 293,765 |
| Net lending(+)/Net borrowing (-) | 37,684 | 62,774 | 119,393 | 4,234 | 115,205 | -158,441 | 61,409 |

Totals may not correspond to the sum of the components as a result of rounding effects.

All the time series for Annual Sector Accounts will be disseminated through I.stat on 5 October 2021.





Quarterly non-financial sector accounts data and the indicators presented in this press-release are revised from the first quarter of 1999. In Table 7 below, today estimates of the main indicators referred to the first quarter of 2021 are compared with those published in the previous press-release (1 July 2021).

For more information on the revision policies adopted by Istat visit <u>https://www.istat.it/en/economic-trends/revisions</u>.

TABLE 7. THE MAIN INDICATORS IN THE TWO LATEST PRESS-RELEASES

Q1 2021, percentage values, seasonally adjusted data

| | l quarter 2021 | | | | |
|---|----------------|------------------------------------|----------|--|--|
| | Today estimate | Previous estimate (1 July 2021) | Revision | | |
| General government net lending (borrowing)/GDP (a) | -13.0 | -13.1 | +0.1 | | |
| Real gross disposable income of Consumer households (b) | +1.6 | +0.9 | +0.7 | | |
| Saving rate of Consumer households | 17.0 | 17.1 | -0.1 | | |
| Investment rate of Consumer households | 6.1 | 6.0 | +0.1 | | |
| Profit share of non-financial corporations | 42.6 | 42.6 | 0,0 | | |
| Investment rate of Non-financial corporations | 22.3 | 22.3 | 0,0 | | |

(a) Non seasonally adjusted data; (b) Quarter-on-quarter percentage change





Consumer households: individuals or groups of individuals who primarily act as consumers or producers of goods and non-financial services for exclusively own final use.

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

Final consumption expenditure: the expenditure of resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community.

Gross disposable income: the total amount of current income that households have available for spending and saving after subtracting income taxes and pension contributions.

Gross investment rate of Consumer households: the ratio between gross fixed capital formation of Consumer households and their gross disposable income (adjusted for the change in the net equity of households in pension fund reserves), in percentage terms.

Gross investment rate of Non-financial corporations: the ratio between gross fixed capital formation of non-financial corporations and their gross value added at basic prices, in percentage terms.

General government: institutional units that produce services and goods for individual or collective consumption mainly on a non-market basis and redistribute income and wealth. They raise funds mainly through compulsory transfers from other institutional units.

Gross fixed capital formation: resident producers' net acquisitions 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 produced assets used in production for more than one year. Consumer households' gross fixed capital formation exclusively consist of dwelling acquisitions and exceptional maintenance and repair expenses on dwellings.

Gross operating surplus: value added at basic prices less compensation of employees and net taxes on production and imports.

Gross profit share of Non-financial corporations: the ratio between gross operating surplus of Non-financial corporations and their gross value added at basic prices, in percentage terms.

Gross saving: Gross disposable income adjusted for pension entitlements minus final consumption expenditures.

Gross saving rate: gross saving divided by gross disposable income (in percentage terms) adjusted for the change in the net equity of households in pension fund reserves.

Households: individuals or groups of individuals as consumers and as entrepreneurs producing market goods and non-financial and financial services (market producers) provided that the production of goods and services is not by separate entities treated as quasi-corporations. It also includes individuals or groups of individuals as producers of goods and nonfinancial services for exclusively own final use.

Institutional sectors : institutional units are grouped together to form mutually exclusive institutional sectors, on the basis of their principal functions, behaviour and objectives. They include: Household sector, Non-profit institutions serving households sector, General government sector, Financial corporations sector, Non-financial corporations sector and the Rest of the world sector.

Net borrowing (lending) of General government: total revenue minus total expenditure of the non-financial General government account. When it is positive (lending) it means that the General government collects more revenues than expenditures; when it is negative (net borrowing), the General government needs to utilize financial resources generated by other sectors and non-residents.

Non-financial corporations: corporations whose main activity is the production of market goods or non-financial services. It includes: a) all resident non-financial corporations (as defined in the System of National Accounts and not restricted to legally constituted corporations), regardless of the residence of their shareholders; b) branches of non-resident enterprises that are engaged in non-financial production on the economic territory on a long-term basis; c) resident non-profit institutions that are market producers of goods or non-financial services.

Non-profit institutions serving households: nonprofit institutions which are separate legal entities, which serve households and which are private non-market producers. Their main resources are voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by General government and from property income. They include the following institutions that provide non-market goods and services to households: trade unions, professional or learned societies, consumers' associations, political parties, churches or religious societies (including those financed but not controlled by governments), and social, cultural, recreational and sports





glossary

clubs; charities, relief and aid organisations financed by voluntary transfers in cash or in kind from other institutional units.

Other General government current revenue: market output, output for own final use, payments for the other nonmarket output; property income, current transfers from households, enterprises and rest of the world.

Other General government capital revenue: investment grants; capital transfers from households, enterprises and rest of the world.

Other General government current expenditure: subsidies on products and on production; social transfers in kind; current transfers to households, enterprises and rest of the world; other minor expenses.

Other General government capital expenditure: investment grants; capital transfers to households, enterprises and rest of the world; acquisitions less disposals of non-produced non-financial assets.

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

Producer households: non-financial sole proprietorships, informal and de facto partnerships with 5 or less employees and self-employed.

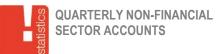
Real gross disposable income: gross disposable income in real terms, obtained by deflating gross disposable income at current prices by the implicit deflator of households' final consumption expenditure.

Seasonally adjusted data: data adjusted to eliminate the effect of seasonality (weather patterns, administrative measures, social, cultural events) and, if statistically significant, calendar influences. The seasonally adjusted data allow for a meaningful comparisons of economic conditions from period to period.

Tax burden: total tax revenue of the General government as a percentage of GDP. Total tax revenue is defined as the revenues collected from Current taxes on income, wealth, etc., social security contributions, Taxes on production and imports and capital taxes.

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.





Covid-19 sanitary emergency and the estimate of the quarterly non-financial sector accounts

Specific data sources for compiling the accounts of Households, GG and Corporations, have revealed shortness in measuring the economic effects of both the ongoing COVID-19 health emergency and of the measures settled by the GG to mitigate them.

In some cases, ISTAT has undertaken specific interventions, in line with the guidelines issued by Eurostat with the aim of guaranteeing greater international comparability¹. In this respect, Istat has exploited additional data sources, in particular for approximating as much as possible the accrual principle in the recording of the measures taken by the GG to counter the negative effects of the ongoing health emergency.

Concerning seasonal and calendar adjustment, in line with the guidelines issued by Eurostat for guaranteeing international comparability the treatment of discontinuities in the time series in (see https://ec.europa.eu/eurostat/documents/10186/10693286/Time series treatment guidance.pdf), additive outliers in the last observations were introduced where needed, in a few cases fixed seasonal factors were applied. This temporary solution allowed minimizing the impact of the discontinuities in the time series on the seasonality of the past periods. In correspondence of the annual revision of seasonal adjustment models (release of the second quarter of 2021), the analysis of the results of this strategy brought to the modification of the deterministic components of some time series, while the seasonal factor approach was completely abandoned re-specifying the deterministic component of pre-covid seasonal adjustment models. Yet, the correct identification of seasonal factors will only be possible when more observations are available.

In line with the current revision policy, today's data will be revised in next calendar releases in order to take into account updates in the data sources. Due to the exceptional circumstance, these revisions are expected to be larger than usual.

Introduction and regulatory framework

'Quarterly non-financial sector accounts' (QSA) is the sequence of non-financial accounts of the institutional sectors processed at quarterly frequency. They are processed by Istat, while the corresponding financial accounts are compiled for Italy by the Bank of Italy².

Quarterly non-financial accounts of the institutional sectors describe, in a quantitative form, the functioning of the economic system of the country, highlighting the role of each institutional sector in the different phases of production, distribution, redistribution and use of income, and of acquisition and disposals of non-financial assets.

The data relating to the General government are also presented in the form of 'Quarterly non-financial General government account', according to the scheme provided by ESA 2010 (paragraphs 20.68-20.72). This account reports total revenues and total expenditures at the following detail level: on the revenue side, Taxes (indirect and direct), Actual social contributions, Other current revenues and Revenues from capital taxes and Other capital revenues; on the expenditures side, Intermediate consumption, Compensation of employees, Social benefits other than in-kind social transfers, Interests, Other current expenses, Gross fixed capital formation, Other capital expenses. Current Balance, Primary Balance and Net Borrowing/Lending are also reported.

Non-financial quarterly sector accounts and the Quarterly non-financial account of the General government are distinctly included in the National Statistical Programme 2017-2019. Update 2019 (only available in Italian), published in the Ordinary Supplement n. 8 of Official Journal of the Italian Republic - general series - n. 35 11 February 2019.

The compilation of QSA follows the criteria defined in the ESA 2010 manual and, for General government, in the <u>Manual on Government Deficit and Debt</u> (2019 edition). The methodological provisions established therein constitute a set of strict rules for countries of the European Union, ensuring comparability of the estimates at an international level. The Quarterly sector accounts adopt principles, definitions and structure of the Annual sector accounts (ASA), with some specific characteristics due to the limited amount of information available at quarterly frequency with respect to the annual frequency.

The European system of national and regional accounts (ESA 2010)³, application at the European level of the System

³ The ESA 2010 was adopted with Eu Regulation no 549/2013, implemented in Italy in September 2014.



¹ Methodological guidelines are available and regularly updated on the Eurostat website and accessible from the dedicated page <u>Covid-19 and</u> <u>European Statistics</u>.

² The Financial sector accounts provide information on the stocks and flows of financial assets and liabilities of the institutional sectors, as a result of the economic transactions registered in the non-financial accounts. For further information see https://www.bancaditalia.it/pubblicazioni/conti-finanziari/index.html?com.dotmarketing.htmlpage.language=1.



of national accounts of the United Nations (SNA 2008), identifies and defines six institutional sectors as essential for describing the functioning of an economy: Non-financial corporations (S11), Financial corporations (S12), General government (S13), Households (S14), Non-profit institutions serving households (S15) and the Rest of the World (S2), namely the group of non-resident subjects. Being the Italian production system characterized by a large number of small and very small firms that according to ESA 2010 are in the households sector, within the latter Istat distinguishes two sub-sectors: Consumer households and Producer households. This distinction allows to better characterize the behavior of consumers. The transmission programme of the ESA 2010 (ESA 2010 TP) sets out the merging of the two sectors of Households and of Non-profit institutions serving households into a single sector (S1M is the code used in the ESA). Istat disseminates the entire sequence of the quarterly sector accounts according to the sector breakdown required by the ESA 2010 TP, and also provides the estimate of some flows and indicators relating to the Consumer households⁴.

The sequence of non-financial accounts is composed of the Production account/External account of goods and services, the Primary distribution of income account, the Secondary distribution of income account, the Redistribution of income in kind account, the Use of disposable income account and the Capital account. The Production account leads to the Gross Domestic Product/value added at basic prices while the External account of goods and services leads to the External balance of goods and services. The Primary distribution of income account allows the determination of the Operating surplus and mixed income (Generation of income account) and the Balance of primary income/Gross national income (Allocation of primary income account). The Secondary distribution of income account determines the Gross disposable income while the Use of disposable income account determines the Gross saving and the Current external balance. The Capital account, which is part of the Accumulation accounts, closes the sequence of non-financial accounts of institutional sectors determining their net lending (+)/borrowing (-).

Data processing: process, instruments and techniques

The Quarterly sector accounts adopt principles, definitions and structure of the annual sector accounts (ASA) but, due to the lower availability of quarterly information, they are estimated at a lower level of detail and using econometric temporal disaggregation techniques for some aggregates. Among the available temporal disaggregation techniques, Istat mainly uses the so-called 'optimal' estimation methods which are regression methods that make use of quarterly reference indicators (indirect approach) to estimate the infra-annual dynamics of the aggregates. These methods rely on the hypothesis that the relation between the aggregate of interest and the reference indicator at the annual level is valid also at the quarterly level and allow both the disaggregation of the annual series across the quarters of a year and the extrapolation of the values for the most recent quarters (that is, those subsequent to the latest complete available year).

The Quarterly sector accounts consist of an integrated system of accounts. They are fully consistent with the Quarterly national accounts⁵ (QNA) processed at 60 days from the end of the reference quarter⁶. These, in fact, enter the estimates of Quarterly sector accounts with the dual role of source and of constraint: as a source, they are used as reference indicators to estimate the aggregates that are common to the two accounts; as a constraint, since the sum of the quarterly estimates over the resident institutional sectors coincide with the corresponding QNA estimates⁷. Quarterly sector accounts are also consistent with ASA, i.e. the sum of quarterly estimates over the year coincides, except for rounding, with the corresponding estimates of ASA.

Transactions involving the General government (S13) are estimated according to the same rules adopted in annual accounts, and are coherent with ESA 2010 and the Manual on the deficit and debt (2016 edition). In general, flows are recorded on accrual basis (ESA 2010, "[...] that is when economic value is created, transformed or extinguished, or when claims and obligations arise, are transformed or are cancelled"). In order to align quarterly estimate to ESA 2010 principles, some adjustments on basic data are needed. In general, when information is available, these adjustments are the same as those applied to the annual estimates (i.e. time lag adjustments for taxes). In some cases, simplifications are necessary and consistency with ESA improves as information is gathered over time (i.e as the annual constraints become available). The progress in the availability of information causes subsequent data revisions.

With regard to the flows generated by transactions with the Rest of the world (S2), the estimates in the Quarterly

⁷ The estimate of Final consumption expenditure, of Imports and Exports of goods and services in the Quarterly national accounts is fully integrated in the QSA.



⁴ At a yearly level, Istat disseminates the entire sequence of the accounts separately for Consumer households, Producer households, Non profit institutions serving households.

⁵ See the methodological note annexed to the 'Quarterly national accounts' press release.

⁶ At t+90 for the second quarter.



(and annual) sector accounts processed by Istat are consistent with the registration of the same operations in the Balance of Payments compiled by the Bank of Italy⁸. This is possible also thanks to the consistency between the accounting rules at the basis of the two processes, defined respectively in the ESA 2010 and in the BPM6 Manual. With minor exceptions, any discrepancies between the estimates of the National Accounts and the Balance of Payments are attributable either to misalignments in the timing of updates of the estimates or to different revision policies. The operations between the General government and the Rest of the world are registered consistently in the two dominions thanks to the close collaboration and to the continuous exchange of information between the two Institutions.

When compiling Quarterly sector accounts, the estimate of the transactions related to the General government and to the Rest of the world, processed according to the principles and methods briefly described above, are assumed as given to estimate the flows of the other sectors.

The Quarterly sector accounts are processed at current prices, both in non-seasonally and seasonally adjusted form⁹. The estimate of the sequence of quarterly seasonally adjusted sector accounts follows the same principles valid for the estimation of the unadjusted sequence, but is processed at a lower detail level¹⁰. The seasonal adjustment of the transactions estimated in both QSA and QNA is indirect, in the sense that the seasonally adjusted series of QNA are used as indicators to estimate the corresponding seasonally adjusted series by sector. For the other aggregates, the same information used to estimate the unadjusted series is used but in seasonally adjusted form. Where this is not possible, direct seasonal adjustment of the unadjusted QSA time series is carried out. The seasonally adjusted balances are obtained indirectly as the sum of seasonally adjusted components. The seasonally adjusted indicators are obtained as ratios of seasonally adjusted series.

The seasonally adjusted series are also calendar adjusted where calendar effects are statistically significant. The time series in which the calendar component is significant are benchmarked to calendar adjusted annual data, and are therefore not consistent with the unadjusted Annual sector accounts disseminated by Istat.

Main sources

The estimation of Quarterly sector accounts makes use of numerous sources, both internal and external to Istat and to the Directorate of National Accounts.

The sequence of the accounts of the Rest of the world is completely derived from the Balance of Payments¹¹.

The General government account estimates are primarily derived from financial statements of institutions belonging to the General government sector and from other administrative records. When a direct or quasi-direct estimation approach cannot be accomplished, temporal disaggregation techniques are performed using one or more quarterly indicators. In general, quarterly data are collected by the Ministry of Economy and Finance (MoF) on a cash basis for all the public entities (Central, Local and Social Security Funds). MoF provides also monthly data on the tax revenues (assessments and cash) and on interests paid by the State, according to a methodology consistent with ESA 2010 and agreed on with Istat. Since 2001, the Ministry of Health collects direct information on an accrual basis from quarterly accounts compiled by Local Public Health Units. MoF provides data on transfers from and to the Rest of the world which is also used by the Bank of Italy for the compilation of the Balance of Payments. Cassa depositi e prestiti provides data on the flows on loans contracted by the General government. In addition, quarterly information on a cash basis are gathered through the Operative System of public entities' transactions (SIOPE), whose data are used to integrate the other sources of Local governments.

Given the estimates of the flows generated from the General government and from the non-resident units, the estimates of the transactions of the other sectors are based on numerous other sources. Such sources are either used directly to produce the estimates (direct estimation) or used to construct reference indicators to be used for the temporal disaggregation of the corresponding annual aggregates (indirect estimation).

The estimates of the Value added and of Compensation of employees are obtained by combining the information by industry in QNA and the information on the structure by branch of activity and institutional sector available at annual frequency.

The Taxes/Subsidies on products received/paid by the General government and by the Rest of the world have the fictitious sector 'Not sectorized' as counterpart sector. The balance Taxes on products minus Subsidies on products

¹¹ Imports and exports of goods and services are tied to the data published in the quarterly economic accounts at t+60 days.



⁸ For further information on the Balance of Payments, see <u>http://www.bancaditalia.it/pubblicazioni/bilancia-pagamenti/</u>.

⁹ For the seasonal adjustment, TRAMO-SEATS for Linux (version September 2017) software is used.

¹⁰ The dissemination of the seasonally adjusted series concern a sub-group of the currently processed time series.



is by definition the value added of this sector, that is added to the value added of the other resident sectors in order to obtain the GDP.

The amount of Other taxes on production paid by the resident sectors, given by Other taxes on production received by the General government and by the Rest of the World minus those paid from this last sector, are attributed to the counterpart sectors on the basis of the information on the type of tax, and on the value added by institutional sectors. The same approach is followed to estimate the counterpart flows of Other subsidies on production paid by the General government and by the Rest of the World, net of those received by the latter.

Property income is estimated by distinguishing Interests and Other property income, which in turn are distinguished in Distributed income of corporations, Re-invested earnings on foreign direct investments, Other investment income and Rent. The estimates are obtained by integrating the estimates of the operations of the General government and of the Rest of the world with information from different sources, the main being quarterly and annual financial accounts, the Accounts matrix and the Supervisory reporting by the banks to the Bank of Italy, IVASS (Italian Insurance Supervisory Authority) and Cassa Depositi e Prestiti SpA.

The flows of the Current taxes on income, wealth, etc. paid by the resident sectors as counterpart of those received by the General government and by the Rest of the world, net of those paid by the latter, are estimated using additional information on the type of tax and the estimates of the tax base.

Since no information on Net social contributions received by sectors other than the General government and the Rest of the world is available at quarterly frequency, a deterministic trend is used as indicator in temporal disaggregations to estimate Net social contributions received by Financial and Non-financial corporations and by Households and non-profit institutions serving households. It should be noticed, however, that the amount of net social contributions estimated using a trend is small as approximately 90% of net social contributions received by the resident institutional units are received by the General government (2016 data). The only paying sector for this transaction is Households (Consumer households).

Also for Social benefits other than social transfers in kind, the estimates of the flows originating from the General government constitute the main source of information on the resident sectors, representing the totality of earnings and approximately 90% of expenditures.

Social transfers in kind received by Consumer households coincide with Actual individual consumption and are paid by the General government and by Non-profit Institutions serving household. The estimates of these transactions in the quarterly sector accounts are deduced from the Quarterly economic accounts.

The estimate of the Net non-life insurance premiums is mainly based on data from the Household budget survey conducted by Istat and on data from IVASS.

The transactions in Current international cooperation and VAT – and GNI – based EU own resources originates from operations between the General government and the Rest of the world, and, not involving other sectors, their estimate does not require additional information. Differently, the counterpart flows of the Other current transfers paid and received by the non-resident units and by the General government are estimated on the basis of detailed information in the Balance of payments and of the General government estimates of these flows by subsector.

For the estimate of the Adjustment for the change in pension entitlements, there is no source at quarterly level and a deterministic trend is used. The flow, however, is small, and does not affect the dynamics of gross disposable income used to compute the saving rate and the investment rate.

The estimate of Final consumption expenditure of Households, of Non-profit institutions serving households, and of the General government are entirely deduced from the Quarterly national accounts.

The Capital taxes received by the General government and by the Rest of the world, net of those paid by the latter, are used as an indicator to estimate those paid by the Households. The latter constitutes approximately 85% of the total paid by resident sectors. Operations between the General government and the Rest of the world are treated consistently.

For Investment grants and other capital transfers, available quarterly indicators allow to estimate the counterpart flows generated by the operations of the General government and the non-resident units.

The Gross fixed capital formation by institutional sector, net of the General government, is estimated combining the estimates of Gross fixed capital formation by asset type of the QNA and the annual estimates of gross fixed capital formation by institutional sector and industry.

The Changes in inventories, the Net acquisition of valuables and the Consumption of capital by institutional sector, net of the General government, are estimated using the corresponding estimates in QNA as indicators.





Net acquisitions of non-produced assets of the economy as a whole coincide (with opposite sign) with that of the Rest of the world. The latter, given the estimate of net acquisitions of the General government, is used as a reference indicator in temporal disaggregations to estimate the flows originating from the other resident sectors as no other quarterly information is available.

It is worth noting that if information on specific operations of the General government and/or non-resident operators is available at the time of the estimate, the operation is consistently registered in the counterpart sector. These operations most often concern taxes and subsidies on production, capital transfers, and net acquisitions of non-produced assets.

Data revisions

Quarterly non-financial sector accounts are subject to both ordinary and extraordinary revisions. Ordinary revisions occur every quarter due to the update of the quarterly sources of information used in the estimation procedure, to the implementation of new annual constraints (second and fourth quarter) and to the use of econometric models for the temporal disaggregation and seasonal adjustment (for seasonally adjusted data). Extraordinary revisions of the quarterly series occur jointly with extraordinary revisions of the annual data (benchmark revisions) and incorporate changes in international accounting standards, classifications and definitions, as well as improvements of sources and methods used in the estimation procedure.

The revision policy adopted by Istat for QSA is the same as that adopted for QNA (at t+90 days for the second quarter, and at t+60 days for the other quarters) and it is in line with the European recommendations regarding the revision cycle. With respect to QNA, however, the compliance of the QSA with the European recommendations on the revision policy may result of difficult application in occasion of the release of the fourth quarter as both ASA and the General government account are revised for a larger number of years than Annual national accounts.

Coverage and territorial breakdown

The estimates in the quarterly non-financial sector accounts are referred the whole economy, without any territorial breakdown.

Timeliness

The ESA 2010 establishes a programme of obligatory data transmissions, according to which the deadline of transmission to Eurostat for the Quarterly non-financial sector accounts is fixed at 85 days from the end of the reference quarter. The data is then issued at a national level at approximately 90 days from the end of the reference quarter.

Dissemination

Quarterly sector accounts are processed and disseminated at current prices. The data is processed in both unadjusted and seasonally adjusted form, although just a subgroup of the seasonally adjusted series is published. The time series begin in the first quarter of 1999.

Quarterly sector accounts and the General government quarterly account are disseminated at the national level through two main channels: the <u>press release</u> and the institutional data warehouse – <u>I.Stat.</u>

In particular, the unadjusted and seasonally adjusted time series of the Gross saving rate, of the Investment rate, of Final consumption expenditure, of Gross disposable income at current and chained linked prices (the latter being a measures of purchasing power), and of Gross fixed capital formation of Consumer households and of Households and non-profit Institutions serving households are annexed to the press release, as well as the Profit share, the Investment rate, the Gross value added at basic prices, the Gross operating surplus and the Gross fixed capital formation of non-financial corporations. Moreover, through the press release are disseminated the unadjusted time series of General government quarterly account and the following quarterly indicators of public finance: total revenues/GDP, total expenditures/GDP, total expenditures/GDP, total expenditures/GDP, total expenditures.

On <u>I.Stat</u>, the section 'National accounts/Quarterly economic accounts and aggregates of the institutional sectors' contains the time series of the items of the sequence of accounts of institutional sectors in unadjusted form, a subset of seasonally adjusted time series, and the indicators for Non-financial corporations, Consumer households and Households and non-profit institutions serving households in unadjusted and seasonally adjusted form. The section





'National accounts/Economic accounts and aggregates of the General government/Quarterly account' of I.stat contains the time series of the items of the General government quarterly account and the public finance indicators. All General government data are in unadjusted form.

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