statistiche report

Istat | Istituto Nazionale di Statistica

NON-FINANCIAL WEALTH IN ITALY | YEARS 2005-2019

Stable the non-financial wealth in Italy in 2019

In 2019, the total value of real assets owned by resident institutional sectors was around 10,377 billion euros.

The slight decrease compared to 2018 (-0.1%) is in line with the one registered in the last three years and it is much lower than the contraction recorded in previous years (-1.3% on an annual average in the period 2011-2017).

Prices on the real estate market still decreased, reducing the value of the stock of real wealth, partially offset by the increase in the value of other fixed assets (+ 1.9%).

-0,2%

The decrease in the value of dwellings in 2019

It is the lowest decline since 2012

+2,3%

The 2017-2019 average annual growth rate of other fixed capital assets owned by non-financial corporations

An acceleration compared to the previous period (+ 0.3% in the period 2011-2017)

+1,5%

The increase of consumer durables owned by Households in 2019

The stock of durables recovered (+ 1.2%) in the period 2017-2019 (- 1.1% in 2011-2017)

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Improvements in the estimates of the value for the main non-financial assets

Non-financial wealth expresses the value of the tangible and intangible assets held by the institutional sectors of non-financial corporations, financial corporations, general government, households and non-profit institutions serving households (the data relating to the last two institutional sectors are published together).

The value of real assets, estimated by Istat, together with the value of financial assets and liabilities, published by the Bank of Italy, represents the total wealth held by institutional sectors.

The data presented here relate to the value of different types of non-financial assets: dwellings; non-residential buildings; other structures; land improvements; machinery and equipment and weapons systems (including transport equipment and ICT equipment); cultivated biological resources; intellectual property products (mainly research and development and software); inventories; land under cultivation.

The assessment of the stock of non-financial assets is not yet complete, as in other EU countries, due to the unavailability of data on certain assets that are more difficult to measure, such as monuments, valuables and some non-financial non-produced assets (e.g. natural resources other than land).

The estimation process benefits from the collaboration of the Real Estate Market Observatory (OMI) of the Revenue Agency, the Treasury Department of the Ministry of Economy and Finance and the Bank of Italy.

The series of the value of non-financial stocks owned by the institutional sectors included in this report have been revised, with the aim of introducing innovations and improvements in methods and data sources. Therefore the current estimates are not inconsistent with the previous ones, published on 1 February 2019.

The report presents the average annual changes calculated taking into account the entire reference period of the data (2005-2019) and some sub-periods that have characterized the economic trend in recent decades. The data for 2019 have to be considered preliminary as they are still based on partial information.

The estimates are consistent with the latest release of annual sector accounts.

NON-FINANCIAL ASSETS BY INSTITUTIONAL SECTOR
Year 2019, million euro and annual annual rates of growth

Asset	Total economy	Non financial corporations	Financial corporations	General government	Households	Households as consumers
Dwellings	5,587,568	352,654	9,706	47,234	5,177,974	4,525,799
Non-residential buildings	2,183,365	1,097,081	108,537	311,369	666,378	-
Other structures and land improvements	979,117	381,607	-	565,461	32,049	-
Other fixed assets	961,753	743,862	10,206	123,624	84,061	-
Inventories	403,494	381,565	25	3,275	18,629	-
Land under cultivation	261,557	19,689	38	10,658	231,173	52,680
Total	**10,376,855**	**2,976,459**	**128,513**	**1,061,620**	**6,210,263**	**4,578,479**
Consumer durables	*553,037*	*-*	*-*	*-*	*553,037*	*553,037*
2019/2018						
Dwellings	-0.2	-2.3	3.8	-0.6	-0.0	*-0.1*
Non-residential buildings	-0.6	-1.1	7.4	0.3	-1.5	
Other structures and land improvements	-0.5	-1.4		0.2	-2.7	
Other fixed assets	1.9	2.2	3.7	1.5	-0.4	
Inventories	-0.3	-0.3	0.4	5.6	-1.0	
Land under cultivation	-0.3	-0.3	-0.4	-0.3	-0.3	*-0.2*
Total	**-0.1**	**-0.4**	**6.8**	**0.4**	**-0.2**	***-0.1***
Consumer durables	*1.5*				*1.5*	*1.5*

Non-financial wealth continues to decline but very slowly

At the end of 2019, wealth in non-financial assets in Italy was 10,377 billion euros, substantially stable compared to the value recorded in 2018 (-0.1% the rate of change).

The negative dynamic of the last three years (-0.1% on an annual average) was significantly lower than in previous years (-1.3% on an annual average in the period 2011-2017).

The value of buildings decreased in 2019 (-0.2% and -0.6% respectively for dwellings and non-residential buildings) following the contained decline in the prices recorded on the real estate market.

In 2019 the value of other structures also decreased (-0.5%), in particular for the sector of non-financial corporations (-1.4%) which owned about 40% of the total; it increased for general government, even if slightly (+ 0.2%).

The stock of other fixed assets increased (+ 1.9%), both tangible and intangible.

In 2019, the value of inventories held by institutional sectors at the end of the year was slightly lower than the previous year (-0.3%). The value of the land under cultivation also remained almost unchanged (-0.3% in 2019) in the last three years.

For non-financial corporations, the increase in other fixed assets (+ 2.2%) partially offset the loss in value of constructions owned by the sector (-1.4%, total buildings and other structures).

The non-financial wealth of households is substantially unchanged: the contraction recorded for all types of assets owned by the sector leads to a loss of wealth equal to just over 13 billion euros (-0.2%).

The stock of assets of general government increased slightly (+ 0.4%), mainly due to the increase in other structures and machinery and equipment.

Financial corporations is the sector recording the greatest growth in the real assets value (+ 6.8%), mainly supported by the activity of real estate investment funds.

FIGURE 1. NON-FINANCIAL ASSETS BY INSTITUTIONAL SECTOR
Years 2005-2019, average annual rates of growth
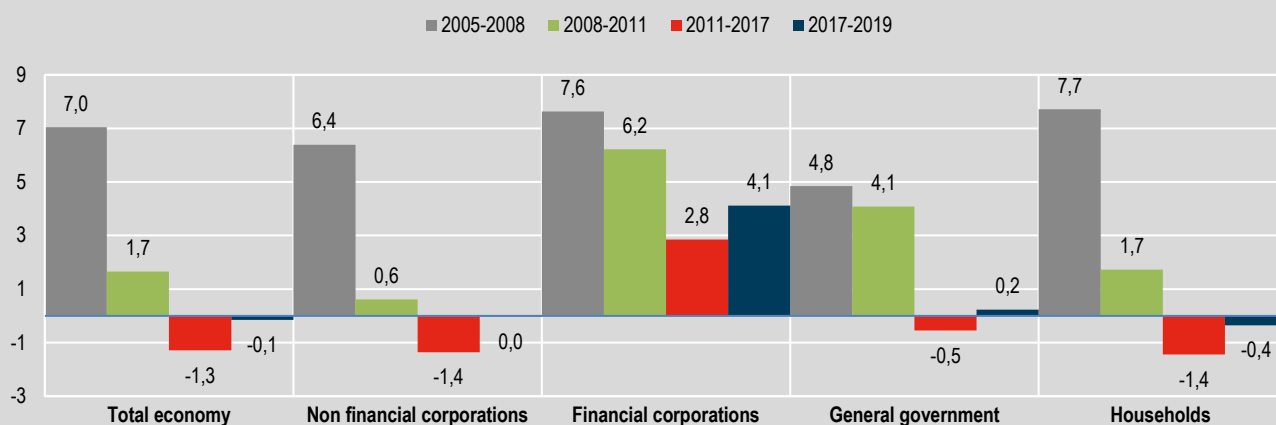
Dwellings mainly owned by households

Dwellings represent 54% of the stock of non-financial assets, 21% are non-residential buildings and 9% are other structures. Other fixed assets, tangible and intangible, account for 9% of the total, inventories are 4% and land under cultivation is less than 3%.

Real wealth owned by non-financial corporations is mainly composed of non-residential buildings (37%) and other fixed assets used for production (25%). More than 77% of the stock of other fixed assets is owned by this sector, while small enterprises, included in the household sector, own less than 9%; as a matter of fact, units classified in this sector operate mainly in service activities, characterized by a low capital intensive production.

Inventories represent a relatively large share (about 13%) of the real assets owned by non-financial corporations, while they play no or marginal role for all other institutional sectors. The share of inventories held by the non-financial corporations sector is approximately 95% of the total and it is growing constantly.

The main component of the real wealth for financial corporations are non-residential buildings (about 85% of the total); they are largely held for investment purposes.

About 34% of the non-financial assets owned by general government is represented by buildings, 54% by other structures and about 12% by other fixed assets.

Household own 93% of dwellings. They account for 84% of the real wealth for this sector; other buildings are 11%, while capital goods used for production purposes by small enterprises represent just over 1% of the total. This sector also holds 88% of the total value of land under cultivation; it accounts for almost 4% of the total assets owned by households. It is land mainly used by small farms to carry out their production activities; the share owned by households as consumers (20% of the total) refers to land leased to other institutional units as well as to kitchen gardens, i.e. land cultivated by families for self-consumption.

FIGURE 2. NON-FINANCIAL ASSETS BY INSTITUTIONAL SECTOR
Year 2019, percentages
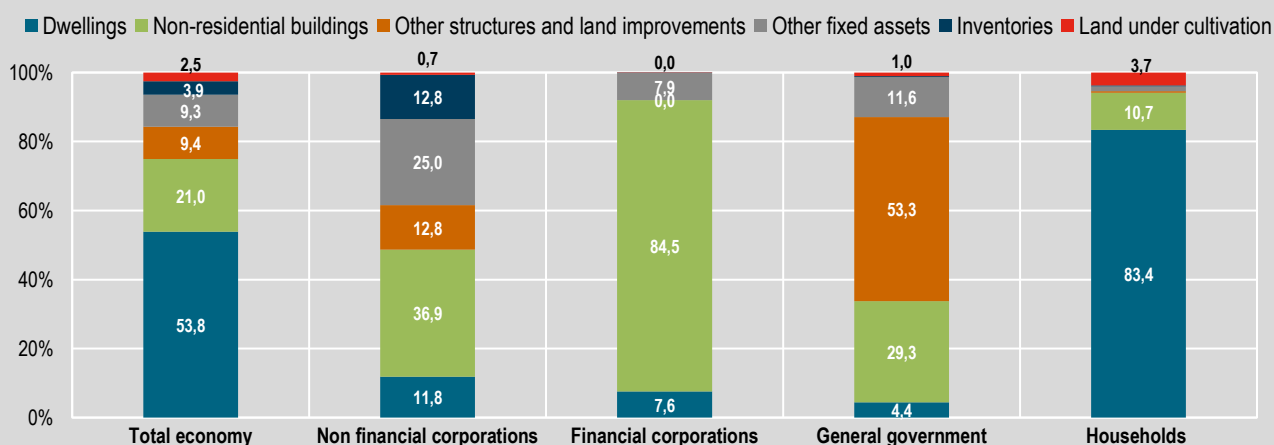
Buildings: the decline in value slows down

In 2019, prices on the real estate market continued to decline, leading to a further reduction in the average value of dwellings and non-residential buildings.

However, the real estate market is characterized by a positive trend in sales which partially balances the effect of the reduction in prices.

The value of dwellings, which has been decreasing since 2012, decreased by 0.2% in 2019 (after the 0.5% decline in 2018) and was about 10% lower than in 2011, the year in which the highest level in the time series is recorded. The value of non-residential buildings fell by 0.6% (-1.2% in 2018).

In 2019, households as consumers own 81% of the value of the residential buildings: these are owner-occupied dwellings or second homes (especially for holidays).

The remaining approximately 12% owned by households is represented by dwellings held by natural persons for investment purposes and rental activities, assigned to households, consistently with the classification rules for national accounts.

Non-financial corporations own just over 6% of the total value of dwellings while general government hold less than 1%. The share of residential units owned by financial corporations is far below 1%, despite the activity of real estate investment funds.

The stock of non-residential buildings is very heterogeneous, including commercial, manufacturing and other types of buildings (for example, offices). These properties can be both instrumental, i.e. used by enterprises for production, and held for investment purposes.

The largest shares in the value of non-residential buildings are held by non-financial corporations (almost 50% in 2019) and by households (about 31%). The real estate units owned by households include both non-residential buildings held by small businesses for production and non-residential buildings acquired by natural persons in order to rent them (mainly offices, studios and shops).

The larger real estate units (industrial warehouses, shopping centers, etc.) are mainly owned by non-financial corporations. In 2019, non-residential buildings owned by general government represented 14% of the total.

The weight of financial corporations in terms of non-residential buildings (5%) is growing in the time series (5%), mainly due to the real estate investment funds; in 2019 the value of non-residential units owned by this sector increased by more than 7% with respect to the previous year; compared to 2005, this value more than doubled.

FIGURE 3. DWELLINGS AND NON-RESIDENTIAL BUILDINGS BY INSTITUTIONAL SECTOR
Years 2005-2019 (index 2015=100)
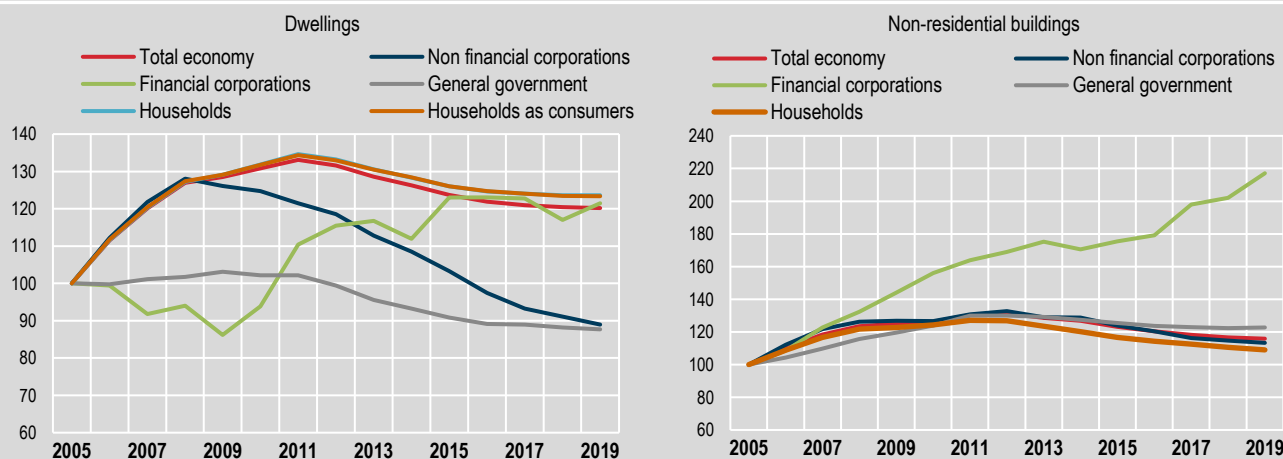
The value of other fixed assets has increased over the last three years

The stock of fixed assets other than real estate and other constructions includes both tangible assets (such as machinery and equipment, transport equipment, ICT equipment, furniture, weapons systems), and intangible assets (mainly software and research and development).

In the last year, the value of other fixed assets has grown by 1.9%.

Non-financial corporations recorded an annual growth rate for these assets equal to 2.3% in the three-year period 2017-2019, an acceleration compared to the previous period (in 2011-2017 the average annual change was + 0.3%).

Contrary to other sectors, these fixed assets owned by small businesses (included in the household sector) declined, even if at a slower pace: the contraction of the last year (-0.4%) is lower than both the average of the 2017-2019 period (-0.8%) and, above all, the one of the previous period (-2.5% between 2011 and 2017).

For financial corporations, the stock of other fixed assets consists largely in intellectual property products (58%, 40% is represented by software).

For non-financial corporations and households, the main component is represented by machinery and equipment (around 60% for both sectors), followed by transport equipment (over 15% for non-financial corporations and 19% for households).

Also for general government, the stock of machinery and equipment, which includes weapons systems, has a significant weight (over 52% of this group of fixed assets).

The value of research and development represents 12% of these fixed assets, for the total economy, and is mainly held by non-financial corporations (just over 10% of their fixed assets other than real estate and constructions) and, with much higher weight, from general government (about 33%).

FIGURE 4. OTHER FIXED ASSETS BY INSTITUTIONAL SECTOR
Years 2005-2019, average annual rates of growth
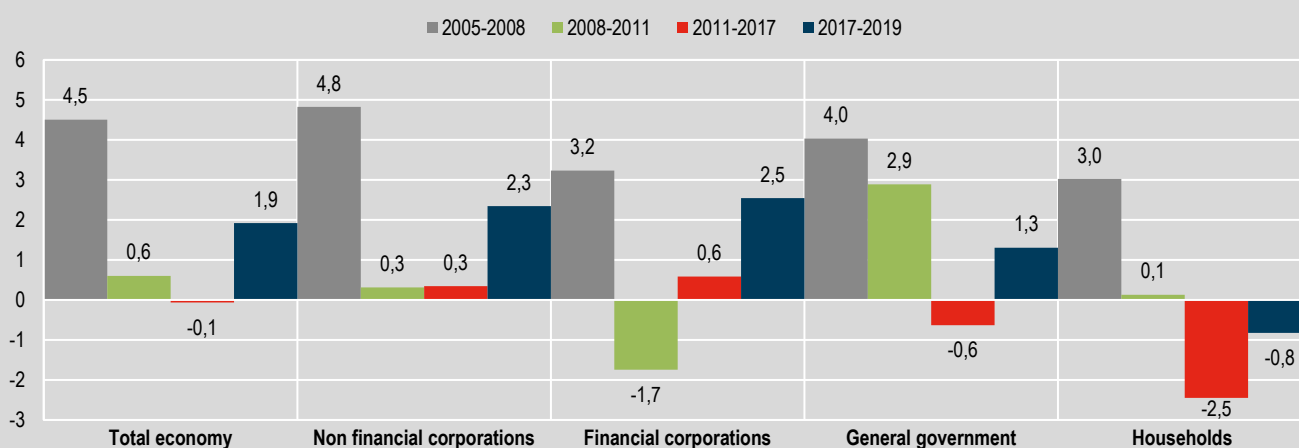
The value of consumer durables owned by households continues to grow

Consumer durables are comparable, in economic terms, to capital assets as they are used by households repeatedly over periods of time of more than one year (for example, the car), but they are classified as final consumption in the National Accounts.

In 2019, the stock of durables amounted to 553 billion euros.

In the years between 2005 and 2008, the growth rate of durables was sustained, with an average annual increase of 3.7%. In the following three years, the stock increased further, even if at a slower pace (between 2008 and 2011 the average annual growth was 2.0%).

After the contraction between 2012 and 2015, the stock continued to grow moderately between 2016 and 2018 and more significantly in the last year (+1.5% in 2019), thanks especially to acquisitions of vehicles.

FIGURE 5. CONSUMER DURABLES OWNED BY HOUSEHOLDS
Years 2005-2019, average annual rates of growth
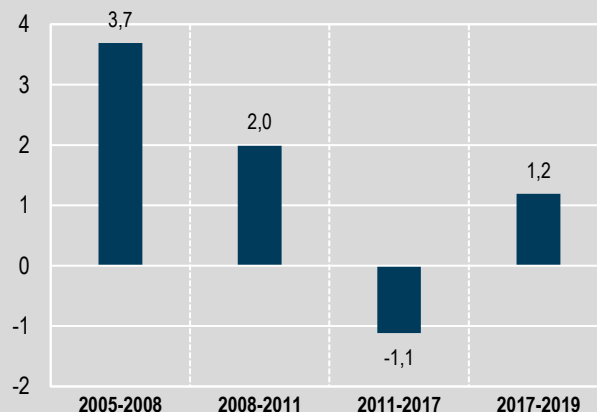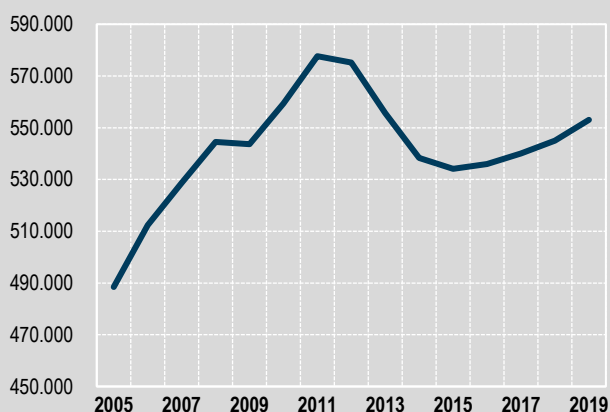
Glossary

Balance sheet: a balance sheet is a statement, drawn up for a particular point in time, of the values of assets owned and liabilities owed by an institutional unit or group of units. The positive balance is called net worth. The stocks of assets and liabilities recorded in the balance sheet are valued at the relevant prices, which are usually the market prices prevailing on the date to which the balance sheet relates, but for some categories at their nominal values. A balance sheet is drawn up for resident institutional sectors and subsectors, the total national economy and the rest of the world. The balance sheet completes the sequence of accounts, showing the ultimate effect of the entries in the production, distribution and use of income, and accumulation accounts on the stock of wealth of an economy.

Changes in inventories: they 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.

Computer software e databases: computer programs, program descriptions and supporting materials for both systems and applications software. Files of data organised to permit resource-effective access and use of the data.

Consumer durables: consumer durables are durable goods used by households repeatedly over periods of time of more than one year for final consumption. They are included in the balance sheets as memorandum items. They are excluded from the main balance sheet because they are recorded as a use in the household sector's use of income account that is consumed in the period of account, and not gradually used up. The stocks of consumer durables held by households as final consumers — transport equipment and other machinery and equipment — are valued at market prices in the memorandum item, net of the equivalent accumulated charges for consumption of fixed capital. Durable goods, such as vehicles, are classified as either fixed assets or as consumer durables depending on the sector classification of the owner and the purpose for which they are used.

Consumption of fixed capital: it is the decline in value of fixed assets owned, as a result of normal wear and tear and obsolescence. The estimate of decline in value includes a provision for losses of fixed assets as a result of accidental damage which can be insured against.

Cultivated biological resources: livestock for breeding, dairy, draught, etc. and vineyards, orchards and other plantations of trees yielding repeat products that are under the direct control, responsibility and management of institutional units.

Dwellings: buildings that are used entirely or primarily as residences, including any associated structures, such as garages, and all permanent fixtures customarily installed in residences. The purchasers' costs of transferring ownership of dwellings are included in the balance sheet value. In this note, the value of dwellings includes the value of the land underneath the dwellings.

ESA - European System of Accounts: ESA 2010 is an internationally compatible accounting framework for a systematic and detailed description of a total economy, its components and its relations with other total economies. ESA 2010 is consistent with the System of National Accounts (SNA) 2008, but adapted to the circumstances and needs of the European Union. It has legal status in the European Union.

Financial corporations: Financial corporations consist of all resident corporations or quasi-corporations principally engaged in financial intermediation or in auxiliary financial activities which are closely related to financial intermediation: the central bank, deposit-taking corporations except the central bank and other financial intermediaries (*Testo Unico delle leggi in materia bancaria e creditizia,* 1° January 1994), financial auxiliaries with at least 1 employee, insurance corporations, pension funds and non-profit institutions serving financial corporations (for example, IVASS, Consob).

Fixed assets: produced non-financial assets that are used repeatedly or continuously in production processes for more than one year.

Gross capital stock: the stock of assets surviving from past investment and revalued at purchasers' prices of new capital goods in the current period.

Gross fixed capital formation: 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 realised by the productive activity of producer or institutional units.

Gross wealth: financial and non-financial assets at the disposal of an institutional unit or sector as shown in the balance sheet. The assets involved in this category generate or have the potential to generate future income.

Households: the household sector consists of individuals or groups of individuals as consumers and as entrepreneurs producing market goods and non-financial and financial services (market producers): own account workers and sole proprietorships (imprese individuali) and simple partnerships (società semplici and società di fatto) with up to 5 employees; and financial auxiliaries with no employees. Producer households are market-oriented units; actual rents are a market production included in the output of producer households also with reference to dwellings and non-residential buildings owned by natural persons and acquired in order to rent them (a market output of households is identified).In this note, households also include non-profit institutions serving households.

ICT equipment: information and communication technologies (ICT) equipment: devices using electronic controls and the electronic components used in the devices. Examples include products in Classification of Products by Activity 2008 (CPA 2008) groups 261: electronic equipment and boards, and 262: computers and peripheral equipment.

Intellectual property products: fixed assets that consist of the results of research and development, mineral exploration and evaluation, computer software and databases, entertainment, literary or artistic original works and other intellectual property products intended to be used for more than one year.

Institutional sector: a grouping of institutional units. Institutional units are economic entities that are capable, in their own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities. The institutional units are grouped into sectors on the basis of the type of producer they are and depending on their principal activity and function, which are considered to be indicative of their economic behavior:

1) Non-financial corporations;
2) Financial corporations;
3) General government;
4) Households and non-profit institutions serving households (NPISHs);
5) Rest of the world.

Inventories: produced assets that consist of goods and services that came into existence in the current period or in an earlier period held for sale, use in production or other use at a later date. They consist of materials and supplies, work-in-progress, finished goods and goods for resale.

Land improvements: the value of actions that lead to major improvements in the quantity, quality or productivity of land, or prevent its deterioration. Examples include the increase in asset value arising from land clearance, land contouring, creation of wells and watering holes.

Land under cultivation: land on which agricultural or horticultural production is carried out for commercial or subsistence purposes, including, in principle, plantations, orchards and vineyards.

Machinery and equipment and Weapons systems: transport equipment, information and communication technologies (ICT) equipment, and other machinery and equipment, other than that acquired by households for final consumption. Machinery and equipment such as vehicles, furniture, kitchen equipment, computers, communications equipment, etc., that are acquired by households for final consumption are not treated as an asset. They are instead included in the memorandum item "consumer durables" in the balance sheet for households. Weapons systems are vehicles and other equipment such as warships, submarines, military aircraft, tanks, missile carriers and launchers etc. Most single-use weapons they deliver are recorded as military inventories but others, such as ballistic missiles with highly destructive capability, that are judged to provide ongoing deterrence against aggressors are classified as fixed assets.

Market price: the amount of money willing buyers pay to acquire something from willing sellers.

Net capital stock: The stock of assets surviving from past investment adjusted for price changes and depreciation and other volume changes.

Net wealth: the difference between gross wealth (financial and non-financial assets) and financial liabilities.

Non-financial assets: non-financial items over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding, using or allowing others to use them over a period of time. Consists of produced non-financial assets and of non-produced non-financial assets.

Non-financial corporations: in Italy it includes all incorporated enterprises (*Società per azioni, Società in accomandita per azioni, Società a responsabilità limitata, consorzi*) and cooperatives, together with all partnerships (*società in nome collettivo, società in accomandita semplice*) and sole proprietorships with more than 5 employees, whose economic behaviour is consistent with the definition of a quasi-corporation. The sector also includes Non Profit Institutions serving non-financial corporations (for instance, trade associations like Confindustria and Confcommercio), and market NPIs.

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.

Non-produced non-financial assets: non-financial assets that come into existence other than through processes of production. Non-produced assets consist of natural resources, contracts, leases and licenses, and goodwill and marketing assets.

Non-profit institutions serving households: non-profit institutions serving households (NPISHs) are private non-market producers such as cultural associations, sports associations, foundations, political parties, trade unions and religious bodies that serve households. In this note, data for NPISHs are included in the household sector estimates.

Non-residential buildings: buildings other than dwellings. Examples of non-residential buildings include warehouses and industrial buildings, commercial buildings, buildings for public entertainment, hotels, restaurants, educational buildings, healthcare buildings. The purchaser's costs of transferring ownership of non-residential buildings are included. In this note, the value of the land underlying non-residential buildings is included.

Other machinery and equipment and Weapons systems: machinery and equipment not elsewhere classified. Examples include products other than parts, installation, repair and maintenance services included in Classification of Products by Activity 2008 (CPA 2008) division 26: computer, electronic and optical products (except groups 261 and 262), division 27: electrical equipment, division 28: machinery and equipment n.e.c., division 31: furniture, and division 32: other manufactured goods. Weapons systems are vehicles and other equipment such as warships, submarines, military aircraft, tanks, missile carriers and launchers etc. Most single-use weapons they deliver are recorded as military inventories but others, such as ballistic missiles with highly destructive capability, that are judged to provide ongoing deterrence against aggressors are classified as fixed assets.

Other structures: structures other than residential and non-residential structures. Examples include highways, streets, roads, railways and airfield runways; bridges, elevated highways, tunnels and subways; waterways, harbours, dams and other waterworks; long-distance pipelines, communication and power lines; local pipelines and cables, ancillary works; construction for mining and manufacture; and construction for sport and recreation.

Produced non-financial assets: non-financial assets that are outputs of production processes. Produced non-financial assets consist of fixed assets, inventories and valuables.

Research and development: consists of the value of expenditure on creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humanity, culture and society, and use of this stock of knowledge to devise new applications.

Rest of the world: a grouping of units without any characteristic functions and resources; it consists of non-resident units insofar as they are engaged in transactions with resident institutional units.

Transport equipment: equipment for moving people and objects. Examples include products other than the parts included in the Classification of Products by Activity 2008 (CPA 2008) division 29: motor vehicles, trailers and semi-trailers, and division 30: other transport equipment.

Utilized agricultural area: the pool of arable land cover, agricultural woody crops, kitchen gardens, perpetual meadow and pasture and fruit chestnut woods. The mushrooms cultivation in caves and in buildings is excluded.

Methodological notes

Introduction

Annual institutional sector accounts show the breakdown of national accounts of a country into those of institutional units grouped into sectors. They 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.

Institutional sector accounts 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.

Within the national accounting framework, balance sheets record stocks of financial and non-financial assets. Total assets, financial and non-financial, are also defined as gross wealth: by subtracting financial liabilities from the latter, we obtain net wealth.

The unit of analysis

Institutional units are economic entities that are capable, in their own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities.

They generally have a structured accounting system; an exception are households, considered institutional units by convention.

In relation to their economic behavior, their main function and the prevalent type of resources used, ESA 2010 identifies and defines six institutional sectors as essential for describing the functioning of an economy: non-financial corporations, financial corporations, general government, households, non-profit institutions serving households and the rest of the world, 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: households as consumers and households as producers. This distinction allows to better characterize the behavior of consumers and to re-aggregate the activities of all producers regardless of their size.

Balance sheets in the national accounts framework

The national accounts framework, as defined by ESA 2010, is built around a sequence of interrelated accounts. The full sequence of accounts for the institutional sectors consists of current accounts, accumulation accounts and balance sheets (Fig1). This way it is possible to describe, in a coherent and complete framework, not only all the flows generated by current economic activities but also the accumulation process that stems from them. Institutional units use their savings accumulating financial and non-financial assets whose value at the end of the accounting period is shown in their balance sheet. Therefore balance sheets present the value of the wealth in non-financial and financial assets and liabilities owned by institutional units; the balancing item in a balance sheet is called net worth.
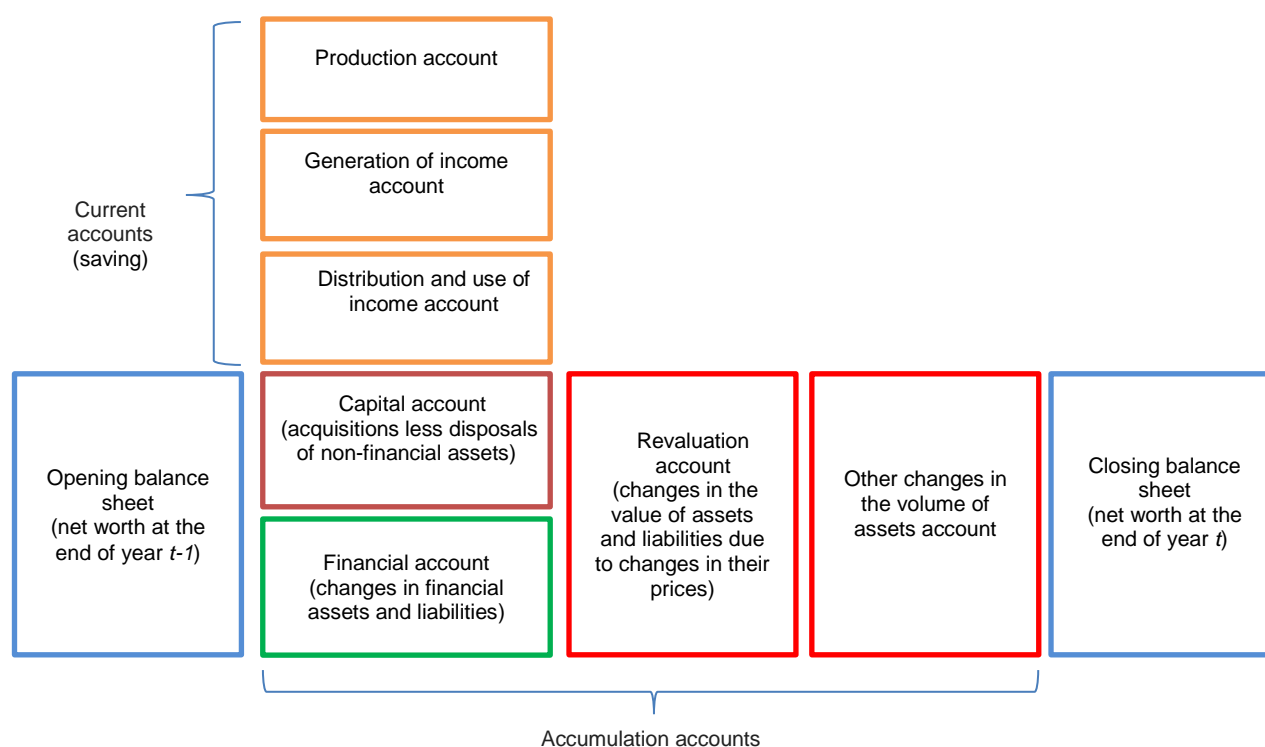
CHART A. SEQUENCE OF ACCOUNTS

Chart A. presents the sequence of accounts. From left to right, starting from the opening balance sheet, all changes in the values of assets and liabilities occurring in the accounting period (one year, in the statement) are recorded. Current accounts cover production and the associated generation, distribution and redistribution of income and its use in the form of final consumption. The income not directly used for final consumption is revealed in the item 'savings', which is used for acquisitions of real and financial assets. Transactions in non-financial assets and in financial assets and liabilities are shown respectively in the capital account and in the financial account. If no other events occur, it would be possible to calculate the net worth at the end of the period by just adding all these transactions to the initial net worth figure. However, changes other than economic transactions may occur that affect the final value of assets and liabilities. Two types of other changes are distinguished. The first one is through nominal holding gains and losses, that is, increases or decreases in the asset's value accruing to its economic owner as a result of increases or decreases in its price; these flows are recorded in the revaluation account. The second change concerns other changes in the volume of assets, including flows other than transactions, such as external events that are not economic in nature (for example catastrophic losses); they are recorded in the other changes in the volume of assets account. The ultimate effect of all these flows which occurred in the relevant period on the value of the initial stock is recorded in the closing balance sheet.

In Italy, information on some types of non-financial assets defined by ESA 2010 is not available: to date, the measurement of real wealth does not cover assets such as monuments, valuables, natural resources other than land, and other non-produced non-financial assets. It does not compromise the information content of the estimates. Furthermore, the value of residential and non-residential buildings includes the value of the underlying land, in contrast to the classification of assets defined by ESA 2010.

Non-financial assets are valued at current prices, based on prices observed on the market (such as dwellings, some types of non-residential buildings and land under cultivation, by multiplying quantities by prices) or through indirect estimation methods (for example, some types of non-residential buildings and other fixed assets; the latter are estimated by means of the perpetual inventory method; also Consumer durables are calculated by the perpetual inventory method).

Main sources used for the estimates

Data on buidings (number, surface, price) provided by the Real Estate Market Observatory, Revenue Agency (Osservatorio del mercato Immobiliare, Agenzia delle Entrate).

General government buildings census carried out by the Treasury Department of the Ministry of Economy and Finance (law 191/2009), integrated with estimates of the value for the surveyed buildings, according to the methodology developed by the Department of the Treasury in collaboration with Sogei.

Supervisory reporting by the banks, other financial intermediaries and collective investment undertakings to the Bank of Italy.

Financial statements of banks operating within the economic territory provided by ABI, the Italian Banking Association.

Financial Statements of Insurance Corporations provided by Insurance Supervisory Authority (Istituto per la Vigilanza sulle Assicurazioni - IVASS).

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) - 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).

Financial Statements of enterprises

Annual sector accounts, Istat

Annual national accounts, Istat

Household Expenditure Survey, Istat

The survey on the structure and output of agricultural holdings (SPA), Istat.

6° General Agricultural Census, Istat.

Census of Population and Housing, 2001 and 2011, Istat.

Estimates of unauthorized dwellings, as compiled by CRESME (Centro Ricerche Economiche, Sociologiche e di Mercato per l'Edilizia e il territorio)

Survey on the Land Market, CREA (Italian Board for the research in agriculture and the analysis of agricultural economics - Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria).

The new estimate of non-financial wealth by institutional sector: main revisions

The series of the value of non-financial stocks at the end of the year, included in the closing balance sheets presented here, were produced following an extraordinary revision, aimed at introducing innovations and improvements in methods and sources.

The data, therefore, show a discontinuity with the previous estimates, published on 1 February 2019.

The main revisions (total and by sector) are:

- new estimates in national accounts and in annual sector accounts compiled on the occasion of the general revision of the National Accounts (September 2019). This revision, agreed at the European level five years after the transition to the new SEC 2010 Regulation and in accordance with international recommendations, concerned aggregates that are the main inputs of the perpetual inventory method, used for the calculation of fixed capital stocks and durables, i.e. gross fixed capital formation and household consumption, respectively. Furthermore, on the occasion of the general revision of the National Accounts, the service lives used in the perpetual inventory method for some types of assets (hardware, communications equipment, furniture and plant and machinery) were revised with a non-negligible impact on the estimates of the stock by asset;
- new methods for estimating buildings owned by general government, which affects the distribution among sectors, in particular the value of the buildings owned by non-financial corporations;
- new estimates for dwellings prices and surfaces calculated by the Real Estate Market Observatory (OMI – Osservatorio del mercato immobiliare, Revenue Agency);

- revisions of the tax values ("cadastral rent"/rendita catastale[1]) for some non-residential buildings (units classified as "group D" in Italian cadastral registers), according to new rules (2016 Stability, Act No. 208/2015). The new criteria for calculating the tax values are more consistent with SEC 2010 definitions and classifications, excluding from the value of buildings some kinds of assets classified as "other machinery and equipment" in the national accounts. This revision impacts on the total estimate of non-residential buildings and, in particular, for non-financial corporations.

Dwellings estimation

The value of dwellings is calculated by means of a 'quantity x price approach'. The methodology is applied on an annual basis, at the regional level (NUTS-2[2]).
The quantity is calculated by multiplying the average surface in square meters by the number of dwellings.
The number of dwellings for the years 2001 and 2011 stems from the 14th Population and Dwellings Census (2001) and the 15th Population and Dwellings Census (2011). For the extra-census years, the number of dwellings is calculated by updating census data with the number of new constructions (both registered and unauthorized) estimated by using the outcomes of the ISTAT survey on building permits together with information provided by CRESME (Centre for Social and Economic Research on Construction and Territory). The number of units is adjusted to take into account the unification of several units into one and the partition of one unit into several ones: this information derives from cadastral data. Then, the number of dwellings demolished every year is subtracted.

The average surface and the average market price are both provided by the Observatory of the Real Estate Market (OMI), a Directorate of the Revenue Agency. Average surfaces in square meters are derived from cadastral registers (D.P.R. 23 March 1998 n. 138, annex C) and they are intended to be gross, as they also include accessory, external areas and perimeter walls.

The average price per gross in square meters is an average market price[3]. It is calculated mainly based on actual purchaser's prices of all units traded during the relevant year, included in the deeds of sale. In order to be representative of all the existing dwellings (traded and not traded in the year), these market prices are weighted to different types of residential buildings located on the territory, as recorded on cadastral registers, in particular taking into account their distribution (at micro-level) and their features[4].

To complete the estimate of the combined value of dwellings, for the sake of exhaustiveness, another adjustment is needed: the value of units that are de facto accessory areas of dwellings but that are recorded in cadastral registers with separate code (mainly garages and deposits) is added; their value is obtained by multiplying quantities for prices (number, average surface and average market price) provided by OMI.

The estimates of the stock of dwellings include by construction the value of underlying land: land and any structure connected to it are typically sold together in a single transaction and therefore market prices refer to this combined asset.

The value of dwellings is estimated from 2001 onward, given the available data sources.

Non-residential buildings estimation

As to buildings other than dwellings, the methodology hinges upon on the availability of suitable information, which, in turn, is strictly connected to the type of non-residential units.

For some types of non-residential buildings (offices, shops, arts and crafts workshops, garages and deposits), the value is estimated through a 'quantity x price approach', as for dwellings, based on information (number, surface, price) provided by OMI.

The number of units labelled as "dwellings" in Cadastral registers in 2001 and in 2011 was around 5% (2001) and 9% (2011) higher than the one resulting from the 14th and 15th Population and Dwellings Census, despite the coherence in definitions and even if cadastral data do not include unauthorised buildings. As a matter of fact, some units are recorded in cadastral registers as residential buildings while they actually are exclusively used for production purposes (such as private offices and studies).

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[1] It is a value used for fiscal purposes, fixed by the Revenue Agency on the basis of some parameters (mainly surface, location, type of building).
[2] The NUTS classification (Nomenclature of territorial units for statistics) is a geocode standard for dividing up the economic territory of the EU for statistical purposes. For each EU member country, a hierarchy of three NUTS levels is established by Eurostat.
[3] Since 2010 Istat publishes regularly a RPPIs index (IPAB), referred to dwellings acquired by households. As long as the distribution of transactions by stratum is not representative for the stock distribution, for compiling balance sheets OMI prices calculated on the stock are used.
[4] Methodological notes in "Gli immobili in Italia", 2017 and 2019,
http://www.agenziaentrate.gov.it/wps/content/Nsilib/Nsi/Agenzia/Agenzia+comunica/Prodotti+editoriali/Pubblicazioni+cartografia_catasto_merca to_immobiliare/Immobili+in+Italia/

Consequently, the number of offices in cadastral registers results to be underestimated and it has to be increased by the number of units that are incorrectly registered as dwellings. This amount has been estimated for the years 2001 and 2011 on the basis of Census data. The difference between the number of all types of units included in residential buildings and the number of dwellings included in these buildings has been calculated; by subtracting the number of units registered in cadastral registers as offices, the number of units registered as dwellings but that actually are used for productive purposes is estimated and therefore modelled for estimate extra-census years.

These units are valued by applying superficies and prices available for offices and dwellings.

For other types of non-residential buildings (for example, factories, hotels, shopping centres, schools, hospitals), an alternative approach has been studied as, for some of these buildings, no information exists on their surfaces in cadastral registers and, moreover, for all of them no representative prices are available, as these typologies are traded on thin markets, characterized by a low number of transactions, and because of the high variety of buildings to evaluate.

The only information available is a tax value ("cadastral rent - rendita catastale") that is a value used for fiscal purposes, fixed by the Revenue Agency based on some parameters (mainly surface, location, type of building). As these values are not market prices, an adjustment is needed to be coherent with ESA 2010 definitions, using information available for others units (non-residential buildings of the first group, evaluated through the quantity x price approach): the ratio between the value at the market prices and the tax value is calculated for buildings for which both values are available; this ratio is then multiplied by the tax values of buildings for which the market value is not available (non-residential buildings of the second group).

The estimates obtained through the described two approaches include the value of underlying land: market prices or adjusted market prices are used, so they refer to the combined asset (non-residential buildings and underlying land).

The value of non-residential real estate is estimated from 2005 onward, given the available data sources[5].

Allocation of buildings among sectors

Data on non-financial assets are produced for each institutional sector.

To split the value of dwellings and non-residential buildings among institutional sectors, cadastral data on the market value of buildings owned by "Private persons" (the so called "persona fisica", mainly individuals or very small sized enterprises) and "Others" ("altro") are used as an indicator.

Buildings of Private persons are assigned to households.

Buildings whose owner is classified as "Others" have to be assigned to non-financial corporations, financial corporations, general government and NPISHs.

The real estate value of financial corporations (both residential and non-residential) is mainly estimated from their financial statements (in particular for banks and for insurance corporations), from supervisory reports collected by the Bank of Italy for banks, financial intermediaries and collective investment undertakings, in particular real estate investment funds, whose weight in terms of total buildings owned by the sector is very significant.

The main source of information used to measure the value of buildings owned by General government is the "General government buildings census" carried out by the Treasury Department of the Ministry of Economy and Finance (law 191/2009), integrated with estimates of the value for the surveyed buildings, according to the methodology[6] developed by the Department of the Treasury (DT) in collaboration with Sogei[7].

DT does not impute values for non-respondents and exclude some types of buildings whose value is difficult to measure. Moreover, the domain of this census does not perfectly overlap with the set of units classified in the General Government sector according to national accounts. The completeness of the estimate is obtained by integrating the DT estimates through an imputation procedure carried out with the price-by-quantity method, using median surfaces and prices calculated in reference strata on data provided by respondents[8]. For some missing units the value of buildings was taken from their financial statements.

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[5] Cadastral data on non-residential units have been supplied from 2005 onwards.
[6] Methodological details are available on the following website:
http://www.dt.mef.gov.it/it/attivita_istituzionali/patrimonio_pubblico/censimento_immobili_pubblici/modello_di_stima_del_valore_del_patrimonio_immobiliare_pubblico
[7] Sogei (Società Generale d'Informatica) is the 100% Information Technology company of the Ministry of Economy and Finance.
[8] Two stratifications are carried out:
- First stratification: median surfaces and prices are computed by type of institutional unit, type of building, geographical distribution and size class of the municipality (in terms of population)
- Second stratification:

Because of a lack of information (no data exist from statistical surveys nor from administrative sources), the value of buildings owned by NPISHs is calculated applying the share of this sector on total economy in term of Gross Fixed Capital Formation (GFCF).

When the value is obtained for financial corporations, general government, and NPISHs, real estate of non- financial corporations is obtained as a residual from the total value attributed to "Others".

Estimation of other structures, land improvements, other fixed assets

Other structures, land improvements, machinery and equipment (transport equipment, ICT equipment, other machinery and equipment, weapons systems), cultivated biological resources (tree, crop and plant resources yielding repeat products), research and development, computer software and databases, other intellectual property products are all estimated through the Perpetual Inventory Method (PIM)[9].

The PIM generates an estimate of capital stock by cumulating past flows of gross fixed capital formation (GFCF) of assets over their estimated service life. In order to implement the PIM and to calculate gross and net values of stock, assumptions are needed about the type of retirement and depreciation functions, service lives and depreciation rates.

In Italy we assume a straight line model of depreciation and a truncated normal distribution for retirements for all assets and sectors, except for R&D and Weapons systems: a geometric depreciation function is used for them.

For Animal resources yielding repeat products, PIM is not used: capital stock is obtained through a direct approach (price x quantity).

Inventories estimation

The value of stock of inventories is calculated for the year 2016. This level has been estimated at a micro level, for each statistical unit:

1. directly for around 88% of all units, using information from accounting and tax documents (financial statements and business sector studies),
2. indirectly, for units for which there are no direct sources (around 12% of the total). For them, the value of inventories was calculated by multiplying the value of production by the average ratio between inventories and production calculated for units of point 1. The basic assumption is that the value of inventories is commensurate with the volume of production. To estimate the stocks of agricultural enterprises, the ratio between production and inventories is calculated on the basis of information provided by the sample survey on the economic results of agricultural holdings (Rica-Rea survey) ISTAT/CREA

The estimated inventory at the end of 2016 thus calculated is updated for the following years and backcasted for the previous years using the annual value of the change in inventories and the estimate of capital gains and losses accrued in the year (by type, industry and institutional sector).

Land under cultivation estimation

The value of land under cultivation is calculated applying a quantity by price approach, using statistical sources.

The quantity is the utilized agricultural area, collected in the 6° Census of agricultural holdings (2010) and in the survey on the structure and output of agricultural holdings (SPA), carried out by Istat.

Average market prices are collected by INEA (National Institute of Agricultural Economics), which carries out the annual "Survey on the land market". In this survey average market prices of 11 kinds of crops in 794 agricultural regions (territorial areas more detailed to those considered in NUTS3 classification) are collected.

The land market prices collected by INEA do not include other assets such as buildings or cultivated biological resources (tree, crop and plant resources); they refer only to the value of land under cultivation.

Estimates are obtained for 5 types of land (arable land, permanent meadows and pasture, fruit trees and citrus plantations, live plantations, vineyards) and at NUTS3 level.

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a) median surfaces are computed by type of institutional unit, type of building
b) median prices are computed by type of building, geographical distribution and size class of the municipality
Surfaces and prices of non-respondents are imputed on the basis of the data of the first or second stratum according to the significance of information of the strata (number of observations).
[9] Measuring Capital OECD Manual, SECOND EDITION, 2009, https://www.oecd.org/sdd/productivity-stats/43734711.pdf

The legal form of the units was merged with the available statistical registers in order to allocate the value of land underlying cultivation to institutional sectors.

The value of kitchen gardens is also calculated: they are not related to farms, therefore they are outside the scope of the census and the SPA survey.

Consumer durables estimation

Consumer durables are durable goods used by households repeatedly over periods of time of more than one year for final consumption. They are excluded from the main balance sheet because they are recorded as a use in the household sector's use of income account as being consumed in the period of account, and not gradually used up value.

The value of durables is obtained by applying the perpetual inventory method, assuming constant average service lives, truncated normal distribution of retirements and linear depreciation function. Average lives have been identified for different types of goods, taking into account the empirical evidence, other country practices and expert advice.

Data used are the time series of household consumption expenditure on goods identified by the COICOP[10] classification as consumer durables consistency with ESA 2010.

Dissemination and data revision policy

Information on the value of real assets is taken from statistics on the stock of non-financial assets by institutional sector published by Istat twice a year, in April and December[11].

Istat periodically releases a statistical report on non-financial wealth (Non-financial wealth in Italy') as well as a joint note with the Bank of Italy on the total wealth (financial and non-financial) of the institutional sectors.

Estimates are revised in accordance with the policy of revisions of annual accounts by institutional sector[12].

For technical and methodological information

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[10] Classification of Individual Consumption by Purpose
[11] Estimates are available in the data warehouse I.Stat.
[12] The annual economic accounts by institutional sector are published twice a year, in April and September. Estimates included in this report are consistent with the national accounts published on 01 March 2021 https://www.istat.it/it/archivio/256457.