

# **Italy**

# ANNUAL NON-FINANCIAL ACCOUNTS BY INSTITUTIONAL SECTOR INVENTORY (ESA 2010)

**May 2019** 

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SEC	CTION	N A. GENERAL OVERVIEW	6
	1.	Organisational aspects	6
		1.1. Description of the organisation and responsibilities for the compilation of non-financial ASA and related datasets	
		1.2. Organisation chart	7
	2.	ASA compilation overview	10
		2.1. Data Sources	10
		2.2. Methods	24
		2.2.1.1. The main approaches taken with respect to exhaustiveness	26
		2.3. Estimation of backward data (if relevant)	29
	3.	ASA consistency with related data sets	29
		3.1. ASA consistency between financial and non-financial annual accounts	
		3.2. ASA consistency with non-financial QSA data	29
		3.3. ASA consistency with other data sets	29
	4.	Release policy	29
	5.	Revision policy	30
	6.	Some specific features of institutional sector accounts in Italy	30
	7.	Future plans	31
	ANN	NEX A.1 - Correspondence between 98 industries and NACE Rev.2 codes	33
	ANN	NEX A.2 -The estimate of value added generated by undeclared labour input	36
	ANN	NEX A.3 - Under-reporting of value added (N6)	37
SEC	CTION	N B - SECTOR DELINEATION	41
	1.	List of the (sub)sectors	41
	2.	Importance of institutional sectors in domestic economy	42
	3.	Sector allocation of institutional units	42
	4.	Matrix 'Industries – (sub)sectors'	45
SEC	CTION	N.C. DATA SOURCES	48
SEC	CTION	D. DESCRIPTION BY TRANSACTION	65
	1.	P1 - Output	65
	2.	P.11 – Market output	
		2.1. Description of compilation procedures	68
		2.2. Balancing adjustments across all sectors	77
	3.	P.12 – Output for own final use	
		3.1. Description of compilation procedures	77
	4.	P.13 – Non-market output	80
		4.1. Description of compilation procedures	80
	5.	P.119 – Financial intermediation services indirectly measured, FISIM	
		5.1. Description of compilation procedures	
		5.2. Allocation of imported FISIM by institutional sector	
		5.3. Additional details: internal and external reference rates	

6.	P.2 – Intermediate Consumption	86
	6.1. Description of compilation procedures	86
	6.2. Balancing adjustments across all sectors	93
7.	P31 - Individual final consumption expenditure	93
	7.1. Description of compilation procedures	93
8.	P.32 - Collective consumption expenditure	
	8.1. Description of compilation procedures	
9.	P.51G – Gross fixed capital formation	97
	9.1. Description of compilation procedures	
10.	P.52 – Changes in inventories	
	10.1. Description of compilation procedures	104
11.	P.53 – Acquisitions less disposals of valuables	107
	11.1. Description of compilation procedures	107
12.	P.51C – Consumption of fixed capital	108
	12.1. Description of compilation procedures	108
13.	NP – Acquisitions less disposals of non-produced assets	111
	13.1. Description of compilation procedures	111
14.	P.61 – Exports of goods	113
	14.1. Description of compilation procedures	113
15.	P.62 – Exports of services	114
16.	P.62F – Exports of FISIM	115
	16.1. Description of compilation procedures	115
	16.2. Additional details	116
17.	P.71 – Imports of goods	116
	17.1. Description of compilation procedures	116
18.	P.72 – Imports of services	117
	18.1. Description of compilation procedures	117
19.	P.72F – Imports of FISIM	118
	19.1. Description of compilation procedures	118
20.	D.1 – Compensations of employees	119
21.	D.11 – Wages and salaries	120
	21.1. Description of compilation procedures	120
22.	D.12 – Employers' social contributions	124
23.	D.121 – Employers' actual social contributions	125
	23.1. Description of compilation procedures	125
24.	D.122 – Employers' imputed social contributions	128
	24.1. Description of compilation procedures	128
25.	D.21 – Taxes on products	130
	25.1. Description of compilation procedures	130
26.	D.29 – Other taxes on production	131
	26.1. Description of compilation procedures	131
27.	D.31 – Subsidies on products	134
	27.1. Description of compilation procedures	135

28.	D.39 – Subsidies on production	.135
	28.1. Description of compilation procedures	.136
29.	D.41g – Total interest before FISIM allocation	.138
	29.1. Description of compilation procedures	.139
	29.2. Balancing adjustments across all sectors	.144
30.	D.41 – Interest	.144
	30.1. Description of compilation procedures	.145
31.	D.421 – Dividends	.146
	31.1. Description of compilation procedures	.146
	31.2. Balancing adjustments across all sectors	.149
32.	D.422 – Withdrawals from the income of quasi-corporations	.149
	32.1. Description of compilation procedures	.149
33.	Other income distributed by corporations	.151
	<i>33.1.</i> Description of compilation procedures	.151
34.	D. 43 - Reinvested earnings on foreign direct investments	.153
	34.1. Description of compilation procedures	.153
35.	D. 441 – Investment income attributable to insurance policy holders	.156
	35.1. Description of compilation procedures	.156
36.	D. 442 – Investment income payable on pension entitlements	.159
	36.1. Description of compilation procedures	.159
37.	D. 443 – Investment income attributable to collective investment fund	
	shareholders	.160
	<i>37.1.</i> Description of compilation procedures	
38.	D. 45 – Rent	
	38.1. Description of compilation procedures	
39.	D.51 – Taxes on income	.164
	<i>39.1.</i> Description of compilation procedures	.164
40.	D.59 – Other current taxes	
	40.1. Description of compilation procedures	
41.	D.611 – Employers' actual social contributions	.170
	41.1. Description of compilation procedures	
42.	D.612 – Employers' imputed social contributions	.171
	42.1. Description of compilation procedures	.171
43.	D.613 – Households' actual social contributions	.172
	43.1. Description of compilation procedures	.172
44.	D.61SC – Social insurance scheme services charges	.173
	44.1. Description of compilation procedures	.173
45.	D.62 – Social benefits other than social transfers in kind	
	45.1. Description of compilation procedures	.175
46.	D.63 – Social benefits in kind	
	46.1. Description of compilation procedures	.177
47.	D.71 – Net non-life insurance premiums	
	47.1. Description of compilation procedures	.178

48.	D.72 – Non-life insurance claims	180
	48.1. Description of compilation procedures	180
49.	D.74 – Current international cooperation	181
	49.1. Description of compilation procedures	181
50.	D.75 – Miscellaneous current transfers	183
	50.1. Description of compilation procedures	183
51.	D.76 – VAT-and GNI-based EU own resources	186
	51.1. Description of compilation procedures	186
52.	D.8 – Adjustment for the change in pension entitlements (D.8)	187
	52.1. Description of compilation procedures	187
53.	D.91 – Capital taxes	189
	53.1. Description of compilation procedures	
54.	D.92 – Investment grants	191
	54.1. Description of compilation procedures	
55.	D.99 – Other capital transfers	193
	55.1. Description of compilation procedures	194
56.	EMP – EMPLOYMENT	196
	56.1. Description of compilation procedures	196
Ann	ex D.1 - Share of estimates per transaction/sector	202
Ann	ex D.2 - List of abbreviations used	205

#### Section A. General overview

# 1. Organisational aspects

# 1.1. Description of the organisation and responsibilities for the compilation of nonfinancial ASA and related datasets

In Italy, responsibilities for annual and quarterly accounts, financial accounts and Balance of payments are shared between the National Statistical Institute (Istat) and the National Central Bank (the Bank of Italy), according to the table below.

	Istat	Bank of Italy
ANA	X	
QNA	X	
QSA for S11,S12,S14,S2	X	
ASA for S11,S12,S14,S2	X	
QSA for S.13	X	
ASA for S.13	X	
QFA		X
AFA		X
ВоР		X

The relationship with the Bank of Italy is mainly managed through a "Memorandum of Understanding" that was signed in 2011 by Istat and the central bank for the cooperation in the field of research and the exchange of statistical information. It is a formal memorandum, signed by both parties. It has been recently renewed until 2020.

Through the Memorandum Istat and the Bank of Italy aim at enforcing the collaboration in the research on topics of common interest and the exchange of statistical information initiated with an old agreement signed in 1996. A Coordinating Committee, composed of three members (and three deputy members) and a secretary for each of the two Institutions, has been established to oversee the activities covered by the memorandum. Both parties are interested in ensuring that the exchange of statistical data is realized by means of advanced ICT technologies that guarantee high standards of efficiency, security and simplicity of use.

The Coordinating Committee has promoted the discussion of methodological issues of common interest or otherwise relating to the spheres of national and international statistical collaboration. It has also facilitated the activities of exchange of statistical data between the parties, promoting the synergic use of the existing sources, defining and regulating the timetable and the contents of data exchanges in specific statistical domains, including ASA.

The Coordinating Committee may set up specialized sub-committees, to which delegate specific functions and where outside experts may participate, and task forces to which outsiders may also contribute.

In Istat NA Directorate, non-financial annual sector accounts for S.11, S.12, S.14, S.15 and S.2 are compiled in in the Division "Supply side estimate of GdP- National Accounts by Institutional Sector - Regional Accounts" (DCCN/CNA)<sup>1</sup>. Annual accounts for S.13 are compiled in the Division "Compilation of government finance accounts". The synthesis of ASA and the compilation of Table 800 is performed by CNA.

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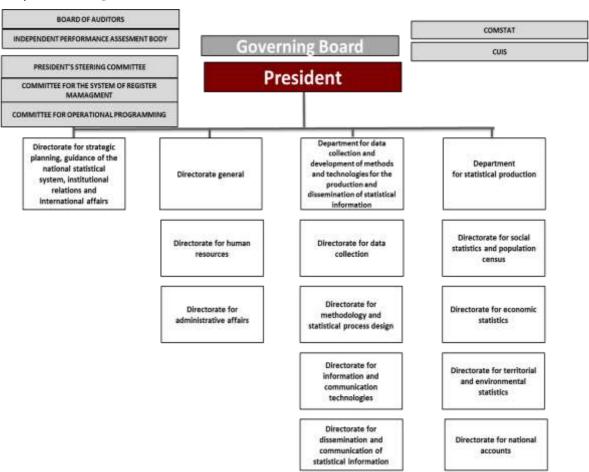
<sup>&</sup>lt;sup>1</sup> An organisation chart of NA Directorate is provided in par.1.2.

Quarterly sector accounts (QSA) are compiled in NA Directorate, too, under the responsibility of the Unit "Quarterly National Accounts".

In the routine Istat revision process (see par. 4 below for details), annual national accounts (ANA) data are released twice a year, on March 1st and on September 23rd. The cycle of production and dissemination of ASA proceeds in parallel with ANA: in the first release they are compiled by the end of March and published in April; in September they are disseminated together with ANA<sup>2</sup>. The above timetable has been arranged to seek full consistency across the different statistical domains.

# 1.2. Organisation chart

# **Major Istat Organisation chart**



The tasks assigned to the Directorate of National Accounts, defined in the organizational documents of the Institute<sup>3</sup>, are the following:

 design and implementation of the system of national and territorial economic accounts, at annual and quarterly frequency, aligned to international standards and to criteria set by the European System of Accounts (ESA), which aims at providing a systematic and detailed description of the functioning of the economic system and its

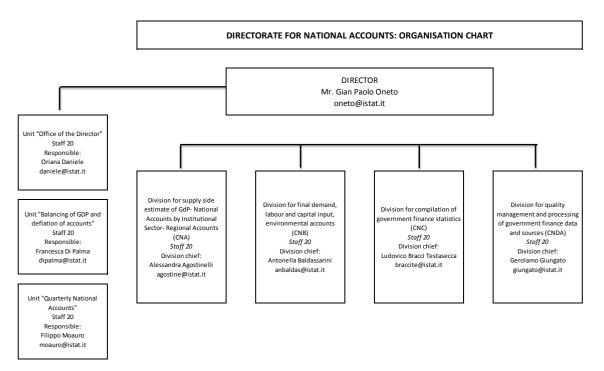
<sup>&</sup>lt;sup>2</sup> A specific press release for ASA is scheduled every year in April (see <a href="http://www.istat.it/it/archivio/198858">http://www.istat.it/it/archivio/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/it/archivio/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/en/archive/198860</a> for the short version in English); it also includes a methodological note and a glossary. In September ANA and ASA are included in a same press release. The data are available in I.stat, the warehouse of statistics currently produced by the Italian National Institute of Statistics.

<sup>&</sup>lt;sup>3</sup> Official Act of General Organisation (AOG1/2016).

interrelations with the rest of the world, as well as the behaviour of the economic agents;

- development of the general government accounts as defined by the ESA and of the aggregates that fall under the excessive deficit procedure (EDP);
- definition and statistical analysis of the list of units included in the General Government institutional sector (to be maintained in collaboration with the Directorate for economic statistics);
- design and implementation of environmental accounting and development of satellite accounts.

The total staff of the National Accounts Directorate includes about 140 people organised in 4 Divisions and 3 staff units reporting directly to the Director:



The current organizational structure of the Directorate defines the integration of different phases of the compilation process of National Accounts within two separate Divisions; at the same time, it defines the activities concerning Government Finance Statistics by separating two functions: the compilation of annual and quarterly accounts of the General Government, as well as of EDP aggregates; the collection, processing, verification and quality management of source data and procedures to be utilised in the compilation of GFS and EDP statistics. The design is completed by two activities managed in a staff position: the coordination of quarterly accounts (with the exception of General Government quarterly accounts); the finalisation of annual estimates via the SUT balancing procedure and the coordination of the deflation system.

The Division "Supply of goods and services and institutional sector accounts - Regional accounts" manages the estimation of supply variables of industry and services sectors, as well as the agricultural sector accounts. It manages the activities concerning accounts of financial companies, of NPISH institutions, and of the rest of the world, compiling institutional sector accounts. It develops the measures of the distribution of household income and compiles the estimates of compensation of employees. It handles the estimate of regional accounts and the development of local economic indicators coherent with the national accounts framework.

The Division "Final demand, labour and capital inputs, environmental accounts" manages the activities concerning the annual estimate of the aggregates of the domestic demand and the construction sector, the estimate of non-financial assets and the estimate of foreign trade of goods and services. It compiles the estimates of capital stock, capital consumption, the labour input variables, and productivity indicators. It manages the production of environmental accounts of material flows, atmospheric emissions and environmental taxes as well as the implementation on new environmental account modules.

The Division "Compilation of government finance accounts" is in charge of the compilation of annual and quarterly accounts of General Government and its sub-sectors, it manages the procedures concerning the EDP notification and oversees the application of the relevant methodologies. It manages the compilation of the accounts of social protection (ESSPROS) and Health accounts (SHA). It compiles estimates of aggregates related to General Government included in the national accounts.

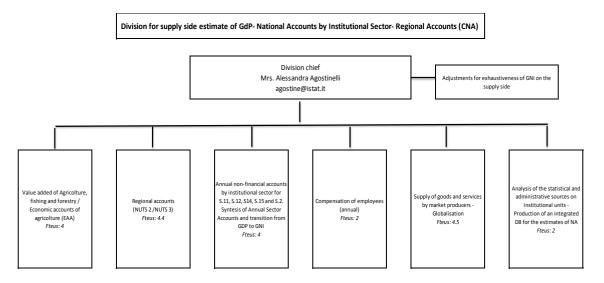
The Division "Treatment and verification of the quality of public finance data" provides analysis for the verification of the perimeter of General Government (S.13) and manages its ongoing updating. It defines and develops the procedures of processing and verification of the quality of basic data for the compilation of government finance statistics. It manages the activities for developing quality management procedures and robust accounting methods in the administrations that provide the sources of public finance.

The Office of the Director acts as the secretariat of direction, taking care of institutional relationships. Manages the planning procedures in the framework of the Institute strategic and operational planning and monitors the interaction affecting the annual budget; takes care of the documentation regarding data confidentiality and handling rules. It handles relationships with Eurostat and international bodies.

The Unit "Balance and deflation of the accounts" is in charge of the synthesis of the different components of the central accounts, managing the balancing of supply and use tables at current prices, from preliminary estimates of supply and demand produced by other units of the Directorate. The unit is responsible for the estimate at current prices of the intermediate inputs table (domestic production), and manages the deflation of the aggregates of the supply of goods and services and GDP, developing a balancing system at constant prices.

The Unit "Quarterly National Accounts" coordinates the compilation and dissemination of quarterly economic accounts, including flash estimates of GDP; it carries out quarterly estimation of market value added, gross fixed investment, labour input and compensation of employees, prices and volumes measures. The unit is in charge of managing the compilation and dissemination of quarterly institutional sector accounts, excluding the General Government accounts.

In particular, the Division CNA is organised as follows:



The compilation of sector accounts involves about 4,5 FTEs.

# References of the person coordinating the drafting of the Inventory:

# Alessandra Agostinelli

Division chief, Supply side estimate of GdP- National Accounts by Institutional Sector- Regional Accounts Istat- Italian National Statistical Institute

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# 2. ASA compilation overview

#### 2.1. Data Sources

The description of the data sources provided below refers to the final and semi-final version of the accounts, it is to say to year t-3 for ASA published in April of year t and to year t-2 and t-3 for ASA published in September of the same year.

The information provided in the present Inventory, most extensively refer to S.11, S.12, S14 and S.15.

S.13 and S.2: in fact, present peculiar features. The estimates for General Government are processed in compliance with ESA 2010 and the specific provisions for the sector contained in the Eurostat (MGDD) "Manual on Government Deficit and Debt." The sources and methods, are subjected to a careful control and validation process within the context of the "Excessive Deficit Procedure" (EDP), and, as established by Council Regulation 479/2009 and subsequent modifications, are described in detail in the EDP Inventory

(http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

<sup>&</sup>lt;sup>4</sup> Within the context of the European procedures for controlling and validating the quality and consistency of public finance statistics, it is established that the individual Member States are to compile an Inventory

To compile S.2 accounts, data stemming from the Balance of Payments (BoP) are mainly used: in fact the compilation of the BoP complies with the standards of BPM6, that, in turn, comply with ESA2010. The only correction needed to ensure consistency with the rules defined by the ESA 2010 is related to interbank FISIM between resident and non-resident operators.

S.13 and S.2 accounts are, in turn, the main source for most of the entries of the secondary distribution of income account for S.11, S.12, S.14 and S.15: in fact, the procedures they are compiled upon allow to provide a breakdown of each entry detailed enough to ensure a correct individuation of the counterpart institutional sector. Of course, this makes it necessary to go beyond the synthetic figures registered in the template of Table 800. As for S.13 non-financial accounts, they are compiled inside the same Istat Directorate, so that any operational issue has been agreed upon; at the same time, institutional agreements exist with BoP compilers (see par.1.1) that secure the closest cooperation.

Given the above, going beyond the rationale "account/item" used for the other sectors, for the sake of completeness, an overall description of the main data sources for S.13 and S.2 are reported in special sections (2.1.8, 2.1.9).

Of course, the compilation of ASA grounds for the most part of the integrated DB produced as a basis for all the NAs by the dedicated unit inside CNA Division, that is already adjusted to meet ESA2010 definitions: the compliance is assessed during the GNI control cycle.

Specific assessments to bridge data to ESA2010 concepts have been carried out for Financial intermediaries and Insurance corporations and pension funds, in close coordination with the supervisory authorities, it is the Bank of Italy, IVASS and COVIP.

#### 2.1.1. Production account

The estimate of production, value added and compensation of employees (PAY) in Italia National Accounts develops at the same time by institutional sector and by KAUs (Kind-of-Activity Units). KAUs that make up the institutional units are classified in 98 industries (branches), which derive from the aggregation of NACE Rev.2 groups that also constitute the breakdown at which the SUT tables are compiled. As a consequence, annual values are available at the same time by institutional sector and by industry.

Of course the statistical and administrative data sources only provide information on observed activities. To account for non observed economy (NOE) specific adjustment must be introduced. All the exhaustiveness adjustments are registered by institutional sector and by industry. An overview of the procedures to account for NOE is reported in 2.2.1.1

Thus the description of the data sources provided below only refers to observed/regular activities.

of the sources and methods of the estimates underlying the national accounts of public administrations. In particular, art. 9 of Council Regulation no. 479/2009 states: "Member States shall provide the Commission (Eurostat) with a detailed inventory of the methods, procedures and sources used to compile actual deficit and debt data and the underlying government accounts. The inventories shall be prepared in accordance with guidelines adopted by the Commission (Eurostat) after consultation of CMFB. The inventories shall be updated following revisions in the methods, procedures and sources adopted by Member States to compile their statistical data".

For institutional units classified in the sector of Non-financial corporations (S.11) and of Households as producers<sup>5</sup>(S.14P), operating in sectors other than Agriculture, the estimate of value added and its components totally relies on microdata: the data source is Frame-SBS<sup>6</sup>, a statistical register that contains individual information on financial statements for the whole population of enterprises active in a given year included in the ASIA-Enterprises Business register (about 4.4 million units); this data base is compiled in order to produce structural business statistics (SBS) according to Regulation 295/2008 of the European Parliament and of the Council. The compilation of the register is based on the massive use of administrative and fiscal data as primary source of information, complemented by statistical survey data. The register also includes the "Cooperative sociali" (Social cooperatives) that are classified as Non-profit institutions (NPIs) in S.11. Economic data reported in the Frame-SBS result from a complex harmonization and integration process and are consistent with the definitions of the economic account of the statutory financial statements according the 4th EU Directive. Along with the standardisation and the harmonization of the definitions, the integration process includes an analysis of the outlier and imputation procedures for a limited number of units (about 5%) for which no consistent economic information has been recorded. Quality analysis of the harmonization and of the integration process is carried out through comparison between administrative data and survey data.

In the majority of cases, the accounting information available in Frame-SBS allows a correct transition from business accounting to national accounts, through a proper aggregation of the entries of the P&L/Balance sheet account. Nonetheless, some specific actions are needed to comply with ESA2010 definitions: this is the case of borderline cases of inclusion/exclusion in transactions or that need specific adjustments, expressly listed in ESA2010, that require specific procedures (Durable goods of small value, major repairs and renovations, valuation of inventories, software and entertainment, literary and artistic originals, research and development, insurance service charges, production and allocation of FISIM, leasing): such procedures are extensively described in the GNI Inventory.

Production and value added for institutional units classified in Nace Rev. 2 section A (Agriculture, fishing and forestry), out of the scope of SBS regulation, are estimated through a quantity and price approach. The main sources are the 6th General Census of Agriculture in 2010, that served as a benchmark, the Farm Structure Survey (FSS) used for the inter-censual years, the survey on Economic outcomes of agricultural holdings (RICA-REA), together with a wide number of sectorial statistical surveys run by Istat (on crops, livestock, intermediate consumption such as fertilizers, feeding stuffs, plant production products, etc.) and (over 100) specialised surveys designed to provide very detailed area and output data, such as the annual survey on the Economic performance of agricultural holdings. ISTAT surveys are supplemented by specific administrative data (e.g. Agricultural subsidies agency (Agenzia per le erogazioni in agricoltura – AGEA) for information on EAGGF subsidies).

For <u>Financial corporations</u> (S.12) (other than Financial auxiliaries) the estimates of production, intermediate consumption and value added are based on the financial

<sup>&</sup>lt;sup>5</sup> In Italy separate accounts are compiled for the producers and the consumers units classified in S.14. Total S.14 accounts result from the consolidation of the two sectors. The assumptions underlying this partition and the relevant methodologies are illustrated in par.6.

<sup>&</sup>lt;sup>6</sup> A detailed description of Frame-SBS is reported in section C.

statement data of the operators, surveyed by the supervisory authorities and made available in aggregate form to Istat, according to institutional agreements. The financial statement data are provided by Bank of Italy for the institutional units included in the following sub-sectors: Central bank (S.121), Deposit institutions excluding the central banking authorities (S.122), Money market funds (S.123), Non-MMF investment funds (S.124), Other financial intermediaries, excluding insurance corporations and pension funds (S.125) and Captive financial institutions and money lenders (S.127); as for Holding corporations (included in S.127) information on the financial statements is gathered from the InfoCamere archive. The data for Insurance corporations (S.128) are provided by IVASS (Istituto per la vigilanza sulle assicurazioni - the Italian insurance supervisory authority), and for Pension funds (S.129) by COVIP (Commissione di vigilanza sui fondi pensione – Supervisory commission on pension funds).

Data for Holding corporations are gathered from the Archive of companies' financial statements (InfoCamere archive), an information system on the profit and loss accounts and the balance sheets of corporations and the related documentation (Notes, statutes...), provided by the Association of the Italian Chambers of Commerce.

For institutional units with up to 99 persons employed classified in division 66 of section K (Auxiliary activities of financial service and of insurance activities), data are gathered from Frame-SBS<sup>7</sup>. For the larger units of this division information are gathered from administrative data (Financial statements /Balance sheets available in a DB made available for consultation by the Chambers of Commerce).

There are several different statistical sources used in the <u>General Government</u> (S.13)<sup>8</sup> accounts. The system is mainly based on administrative sources, that provide information for almost each single unit included in the sector, but it also includes ad hoc surveys conducted by Istat, financial statements and accounting documents of each unit.

As for the administrative sources, data flows are regulated by formal agreements, mainly with the State General Accounting Department (RGS in Italian), the Ministry of Economy and Finance, the Ministry of Interior and the Ministry of Health that have defined with Istat specific Memoranda of Understanding or other formal agreements detailing the content and the characteristics of the data flows, their formats, dissemination procedures and timing.

RGS is the main data source of the State and other Central Government, but it also supplies data and information about the whole General Government sector. The main data about local bodies are collected and supplied by the Ministry of Interior; data on Local health care units are provided by the Ministry of Health.

As for the data on the remaining institutional units not covered by the above sources, Istat conducts ad hoc surveys within the National Statistical Programme (PSN in Italian), and in residual cases proceeds to collect the accounting information directly from the single institutional units. For each type of institutional unit included in the S.13 list, all sources are detailed in the Inventory of methods, procedures and sources used to produce statistics on deficit and debt and on public finance accounts according to the ESA 2010 rules.

<sup>8</sup> According to art.1 par.3 of Law 196/2009 (Legge di contabilità e finanza pubblica) Istat is required to publish every year on the Italian Official Journal the list of the institutional units classified in S.13.

13

<sup>&</sup>lt;sup>7</sup> Division 66 is out of the scope of SBS, but an agreement exists with the Directorate responsible of SBS to extend the collection of financial statements of these units for the sake of the compilation of NA.

S.13 data are gathered in a detail wide enough to provide information on the counterpart sectors for the main distributive transaction activated by S.13 units (taxes, subsidies, social contributions and social benefits, current and capital transfers).

<u>Households as consumers (S.14C)</u> are the private producers of goods and services for own final use. Their production includes:

- a) Production of services of owner-occupied dwellings (imputed rents). The estimate follows the approach indicated by Commission Regulation (EC) No. 1722/2005 of 20 October 2005: the stock of owner-occupied dwellings is appropriately stratified and valuated on the basis of the average market rental prices as derived from the Household Budget Survey.
- b) *Production of agricultural products for own final use.* The value of this component is included in that of the total output of the farm sector (Sect. A NACE Rev.2), which is exhaustive by construction, as it is estimated through a procedure that calls for evaluating the entire quantity of product generated (whether or not offered on the market).
- c) Construction activities of households for own final use. Production by households for own gross fixed capital formation, includes dwellings built or enlarged by the households themselves, and own-account construction, including communal construction undertaken by groups of household (ESA 2010, §3.22). Since this is not market-oriented production, in compiling national accounts this activity is assessed with an indirect estimation procedure and is included as an adjustment for exhaustiveness in category N3 (producer is not required to register because it has no market output);
- d) *Production of services by paid domestic staff,* made equal to the compensation of employees paid, both declared and undeclared. The main sources upon which the estimate relies are:
  - National Social Security Institute (INPS) Archive of domestic work relationships;
  - INPS-Uniemens archive, for doormen;
  - Labour Force survey, for the estimate of compensation of undeclared employees.

The main source used to estimate the aggregates of NPIs other than social cooperatives, both market (included in S.11 and S.12) and non-market (S.15) is the Census of Non-profit Institutions (CISINP), carried out by Istat in 2012 within the 9<sup>th</sup> Census of Industry, Services and non-profit institutions with reference to the year 2011. CISINP did not cover the activity of religious organizations in their worship practice. Therefore, for this set of units, the census source was integrated with information taken from report, established by art. 44 of Law no. 222 of 20 May 1985, regarding the use of amounts received in 2011 by the Central Institute for the Sustenance of the Clergy and the Italian Episcopal Conference, under Articles 46 and 47 of the same law. Such statements are transmitted annually by the Italian Episcopal Conference to the State Authority and published in the "Bulletin of the Italian Episcopal Conference", official department of the Conference, and provide information on the total amount intended for the support of the clergy, and on the number of priests to whom these sums are allocated.

For units not covered by CISNP and for which no admin data are available, a labour-based model is applied: the average hourly values of each aggregate, calculated by industry and by enterprise's size class for NPISHs surveyed by

CISINP, are grossed up to non-surveyed institutions.

All in all, in 2011, the benchmark year for the transition to ESA2010, 86% of production and 66% of the value added generated by NPISHs has been estimated using the census data; 3.4% of production and 12% of value added has been estimated from administrative sources and refer to religious organizations in the practice of their worship; 10.5% of production and 21.9% of the value added is estimated via extrapolation and/or models.

Data for the years following 2011 are extrapolated through a labor-based method that will be illustrated in paragraph 4 of Section D.

#### 2.1.2. Generation of income account

The estimate of Compensation of employees is carried out by industry, separately for each individual component (wages and salaries, and social contributions, actual and imputed).

In general, the data sources for Compensation of employees paid are the same as for value added.

For S.11 and S.14P the estimates of the declared component are carried out at the micro level (for each employer): the data source is Frame-SBS.

For S.12 (excluding financial auxiliaries), the data used are drawn predominantly from reports to the supervisory bodies that are also used to estimate output and intermediate consumption. Information, where required, are supplemented by the data from financial statements of financial corporations. Data for Cassa Depositi e Prestiti S.p.A. (not included in the data of the banks) and for the Bank of Italy are estimated through direct information gathered from their financial statements. For insurance corporations (S.128) supervisory data provided by IVASS are integrated with information on persons employed and labour costs provided by ANIA (National Association of Private Insurance Corporations).

As for sector S.13, the data base for the estimate of compensation of employees is the same used for all the other production components, i.e. financial statements and census type surveys, as well as extra-balance sheet information or additional sources. Wages and salaries are derived, for each unit, directly from the sources with adjustments introduced only to ensure consistency with the ESA definitions and compliance with the accrual principle.

Total Employers' actual social contributions are estimated from the side of the receiving sectors, it is S.13 and S.129 (Pension funds). In addition to actual contributions collected by social security funds and pension funds, actual contributions also include the sum that remain within the employers' accounts, it is the provision for severance fund (TFR), also called settlement or severance pay, which in Italy constitutes a portion of wages and salaries that the employer pays directly to the employee upon termination of the work relationship. Employers must set aside yearly the amounts that form the fund needed to pay the severance indemnity<sup>9</sup>. This part of contributions is estimated using information from enterprises (the same sources used to estimate wages and salaries, according to the economic sector).

Flows to/from the Rest of the World (S.2) are drawn from the Balance of Payments. Information on Taxes (D21, D29) and on Subsidies (D31, D39) are provided by

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<sup>&</sup>lt;sup>9</sup> As defined by the Legislative decree 252/2005.

S.13 accounts compilers and by BoP. Data on D29 and D39 rec/paid by S.13 are supplied in a detailed breakdown by kind of tax/subsidy, which allows to distribute them to the institutional sectors as much correctly as possible.

# 2.1.3. Allocation of primary income account

#### D.41 Interest

Annual gross interest flows are estimated through a quite detailed procedure: as a general rule whom-to-whom matrices for financial assets and liabilities in a very detailed breakdown (instrument/sector) are derived from Financial Accounts (FA), compiled by the Bank of Italy, and appropriate interest rates are applied.

Total interest paid and received by S.2 and S.13 are a constraint; the same is true for S.121+ S.122 (Central bank + banks), whose data are provided by the Bank of Italy (Supervisory data), and for Insurance corporations (Supervisory data).

Interest matrices are balanced through a Stone-based method. Interest are then adjusted for FISIM.

# Main sources:

- Financial accounts: source Bank of Italy
- Actual interest rates on deposits, loans and bonds, by institutional sector: source Bank of Italy
- Supervisory data on the balance sheets of financial intermediaries: source Bank of Italy
- Balance of Payments: source Bank of Italy
- Balance sheet of the Bank of Italy
- Balance sheet of the Cassa Depositi e Prestiti S.p.a.
- S.13 accounts
- Supervisory data on Insurance corporations: source IVASS

#### D.421 Dividends

# Main sources:

- Frame-SBS
- IRAP tax return form (a Regional Tax on Productive Activities that applies at the regional level)
- Supervisory reporting by the banks and other financial intermediaries to the Bank of Italy
- Financial Statements of Insurance Corporations
- S.13 accounts
- Balance of Payments

# D.422 Withdrawals from income of quasi-corporations

In Italy, sector S.11 includes corporations employing self-employed workers (see Section A, par. 6 "The level of the profit share in Italy"). In order to represent the remuneration of self-employed workers in corporations, the same methodology applied for quasi-corporations is used (see Section D, par. 32 and 33). In the national publication, this income is disseminate as "Other income distributed by corporations" with the code D.423.

# Main sources:

- Frame-SBS
- Statistical archive of active enterprises (ASIA-Enterprises)

# • Information system on Employment (ASIA-Employment)

It is an integrated system of administrative archives on employment LEED-type (Linked Employer Employees Database), that allows every individual worker to be linked to the company he/she works for via their working relationship, classified according to the type of occupation in compliance with international standards. ASIA-Employment includes individual data on employees and self-employed (employers, outworkers, partners, etc.,), and highlights their relationships with the Legal Units. For instance, an individual can be associated with the enterprise he/she is employed by, or with the one he/she owns and in which he/she also works (as a working partner or family member). Such an integrated structure includes the features of the working relationship itself, as well as some demographic features of the worker, associated with a specific period of time (week, month, year). The total labour force of an enterprise is divided into an internal component, represented by all the persons employed, whether employees or self-employed, and an <u>external component</u>, represented by those persons participating in the production process as outworkers and temporary workers. Outworkers have working arrangements based on contracts of collaboration, continuous in time (co.co.co) or based on a more occasional nature, bounded to a project (co.co.pro) or not; moreover they can carry out working activities with or without the existence of a VAT number. Other types of contracts exist, such as voucher contracts, administrators/managers, temporary agency work (temp contract workers). The use of such an archive allows the whole labour input "used" by a single economic unit to be measured and analyzed.

# D.43 Reinvested earnings on F.D.I.

<u>Main source</u>: Balance of Payments. FDI stock and flows data is collected on a sample basis for non-financial and insurance companies and on a census basis for financial intermediaries.

D.441 Investment income attributable to insurance policy holders

Main source: Financial Statements of Insurance Corporations: source IVASS

D.442 Investment income payable on pension entitlements

Main source: Supervisory data on Pension funds: source COVIP

D.443 Investment income attributable to collective investment fund shareholders

Main source: Balance of payments and Supervisory data of Bank of Italy

D.45 Rents

<u>Main sources:</u> S13 accounts for rents paid and received by General Government; Frame-SBS for rents paid and received by enterprises; Council for Agricultural Research and Economics (CREA) data for rent of agricultural land.

# 2.1.4. Secondary distribution of income account

D.5 Current taxes on income, wealth, etc.

In general, for all kind of taxes levied by General Government extremely detailed information is available in the accounting records of the units included in the sector. As for Central Government, (State) detailed tax revenues are collected by the Department of Finance (MEF) and transmitted to ISTAT; the report contains data detailed by type of tax and by collection method (direct or roll procedure). As for Local Governments, both information from Department of Finance (MEF) and budget reporting are used. The information is comprehensive enough to allow a one-to-one matching between the kind of tax and the paying sector.

#### D.61 Social contributions and D.62 Social benefits

#### Main sources:

- Inps (National institute of social insurance) budget reporting;
- Annual reports of other public social security funds;
- Statistical survey on final budgets of Social security funds named "Rilevazione dei bilanci consuntivi degli enti previdenziali", codified as IST-00233 in the PSN (National Statistics Programme)
- Supervisory data on pension funds (source: COVIP)
- Frame –SBS and supervisory data on banks and other financial intermediaries for provision for severance fund (TFR), also called settlement or severance pay, which in Italy constitutes a portion of wages and salaries that the employer pays directly to the employee upon termination of the work relationship

D.71 Net non-life insurance premiums and D.72 Non-life insurance claims

#### Main sources:

- Financial Statements of Insurance Corporations: source IVASS.
- Frame-SBS
- Households Budget Survey (HBS)
- S.13 accounts
- Balance of Payments

D.74 Current international cooperation and D.76 VAT- and GNI-based EU own resources

#### Main sources:

- Italian Ministry of the Economy and Finance (MEF):
- State General Accounting Department
- General Inspectorate for Public Accounting and Public Finance (IGECOFIP)
- General Inspectorate for Financial Relations with the European Union (IGRUE)

#### D.75 Miscellaneous current transfers

#### Main sources:

- S.13 accounts
- Balance of Payments
- 2011 Census of non-profit institutions (CISINP)
- Financial Statements of Insurance Corporations
- Financial Statements of Bank of Italy
- Supervisory reporting by the FIs to the Bank of Italy
- Statistics on income e living conditions (Eu Silc)
- 15th General Population and Housing Census

#### 2.1.5. Use of income account

P.3 Final consumption expenditure

# Households final consumption

#### Main sources:

- Household Expenditure Survey (HBS)
- Census of Population and Housing
- Survey on aspects of daily life

- Other Istat surveys
- Commodity-flow method
- Administrative and other sources.

The 2011 Census of Population and Housing has collected updated information on the Italian resident population as well as the population currently present. The following units were measured: households, cohabitants, persons temporarily present, dwellings and buildings. The survey has been organized in a questionnaire dedicated to collect a set of information on buildings, while another questionnaire was mainly devoted to collect information on population and dwellings.

The definition of a new housing stock and the detailed information on the characteristics of buildings and dwellings collected in the Census (among which occupied, not-occupied, owned or rented dwellings, surface classes in square meters, year of construction, type of heating, etc.), together with the use of other sources, allowed a new benchmark estimate both of household spending for actual and imputed rentals, and of unauthorized dwellings for the estimate of gross fixed capital formation in residential construction.

Istat has implemented a methodology for back-calculating inter-census population using the results of the Post Enumeration Survey (PES), a compulsory survey that provides information on over-estimation or under-estimation effects in population results (Regulation n. 1151/2010). The new population quarterly estimates for 2010-2011 have affected the households final consumption through the sampling coefficients of the corresponding main sources of information (respectively the Labour Force Survey and the Household Budget Survey).

# NPISHs final consumption

# Main sources:

- 2011 Census of Non-profit Institutions (CISINP)
- National Institute for Social Security (INPS) data
- Frame-SBS

# S.13 collective consumption

The estimation is based on an exhaustive micro-data base (i.e. information for each single institutional unit) which ensures that all goods and services provided by S.13 sector can be correctly classified and allows to identify current revenues separately from capital revenues (see 2.1.7)

The final consumption expenditure is estimated from direct sources (census or administrative) for 94.1% of the amount, and only the remaining 5.9% is estimated using extrapolation models.

# D.8 Adjustment for the change in pension entitlements Main sources:

- Supervisory data on Pension funds: source COVIP
- Frame-SBS (for entitlements on provisions to severance fund (TFR) made by enterprises for their employees)
- Supervisory reporting by the banks and other financial intermediaries to the Bank of Italy
- Financial Statements of Insurance Corporations

# 2.1.6. Change in net worth due to saving and capital transfers account

D.91 Capital taxes, D.92 Investment grants and D.99 Other capital transfers

Main sources: S.13 and S.2 accounts

# 2.1.7. Acquisition of non-financial assets account

P.51G Gross Fixed Capital Formation

# Main sources:

- Frame-SBS
- Data on real estate transaction provided by Tax and Revenue Agency (Agenzia delle Entrate)
- Survey on building permits
- Households budget survey
- Census of Population and Housing, 2001 and 2011
- Survey run by Istat and CREA (ex INEA) on the economic performance of agricultural enterprises (RICA-REA survey) (for land improvements)
- notes to the financial statements of the corporations operating in the railway transport and land transport of passengers

#### P.52 Changes in Inventories

#### Main sources:

- Frame-SBS
- S13 accounts

#### P.53 Acquisitions less disposals of valuables

The estimate of the capital formation in valuables is obtained through the commodity-flow approach

NP Acquisitions less disposals of non-produced assets

# Main sources:

- S.13 accounts
- S.2 accounts
- Data on real estate transaction provided by Tax and Revenue Agency (Agenzia delle Entrate)

# 2.1.8. Main sources for S.13

In general, the database used for the estimation of S.13 accounts is strictly analytical and thorough. Different data items are gathered for each institutional unit included in sector S.13 by means of specific surveys or by processing the institutions' final financial statements. In case of lack of information, additional data from sources other than the balance sheet is used, for instance the Athena database for the independently managed school institutions; or individual payment orders for the analysis of specific expense categories of the State Budget, etc. In this way the exhaustiveness of the estimations in terms of units is assured, and it is possible to detail each transaction concerning the production activity and the sector's non-financial account.

The estimate is carried out at institutional unit level or at homogeneous institutional group level. The General Government sub-sectors are composed as follows:

- Central government:
  - The State (Ministries, Prime Minister's Office), Fiscal Agencies, Constitutional Bodies and Other Bodies of constitutional status (Court of Auditors, Prime Minister Office, Regional Administrative Court; State Council)
  - National Economic Entities (EEN), such as economic activities regulatory bodies, economic service producers, independent administrative authorities, associative-type bodies
  - Research bodies (EDR)
  - Institutions providing cultural assistance services (ENA)
- Local government:
  - Regions and Autonomous Provinces
  - Provinces
  - Municipalities (including Municipalities' Unions)
  - Local economic entities (EEL) including Mountains Development Bodies, Chambers of Commerce, Port Authorities, Tourism bodies, Regional Development bodies, Employments Services Agencies, Other bodies at local level, Water Services Regulatory Authorities, and Other bodies
  - Local Assistance entities (EAL), including Regional Health Agencies, Institutions
    Providing Education, Cultural Services and Assistance at a local level, Universities,
    University studies aiding bodies, Concert institutions, and similar bodies,
    Consortiums for university research, Nature park bodies, and Regional bodies for
    research and environment
  - Producers of Health services at local level (ESL), including Local Health Agencies, Hospital Agencies, Public Research Hospital, University Hospitals
- Social Security Funds (EDP)

In the table below the main statistical data sources used for different public bodies are listed.

Table A - Main statistical sources used for the estimates of S.13 sector

Entity/Entity group	Main statistical sources
State	State budget (Rendiconto generale dello Stato), reports on the budget results of minor units included in the State definition
Other central units	Financial statements of entities and Istat surveys
Regions and autonomous Provinces	Cenus survey on the financial statements of regions and autonomous provinces
Provinces and municipalities	Certificates of final balance from Istat-Ministry of Interior survey
Local Healthcare units	Survey of local health care units profit and loss accounts/balance sheets (CE form)
Other local units	Units' financial statements and Istat survey on the units' financial statements
Social Security units	Istat Surveys and units' financial statements

For the Central government, the statistical sources are the final or pre-final financial statements of the units.

For the State, the main source is the State budget ("Rendiconto generale dello Stato") recorded on a cash and legal commitments basis, provided by the State General Accounting Department (RGS in Italian) of the Ministry of Economy and Finance. This document is ruled by the accounting and financial Law n.196, dated 31st December 2009, and it reports the results of the financial statements of the State in the previous financial year. The "Rendiconto generale dello Stato" is submitted to the Parliament to be approved as law by the 30th June of every year. Before the submission, the document must be officially assessed by the Court of

Audit, by the end of May ("giudizio di parificazione"), comparing the State's outcomes with what reported by the Court of Audit when monitoring State accounts.

For fiscal Agencies and for the other constitutional bodies included in the State definition, direct sources are used, i.e. the financial statement reported by the authorities themselves. For constitutional bodies estimates are based on a statistical survey carried out by Istat on units of S.13 sector not included in other data sources (PSN IST-02.538 Survey of Information, Data and Documents necessary for the Classification of Economic Units - RIDDCUE).

The State budget is also integrated through additional information to ensure a correct and complete recording of transactions that in the public accounts are not consistent with ESA definition.

For the main units of the EEN group (ANAS, Equitalia, Italia Lavoro, Gestore dei Servizi Energetici – GSE, and others), the basic data sources are the budget reporting documents (profits and losses accounts, balance sheets and explanatory notes detailing important transactions). Such documents are on accrual basis according to the private accounting rules and are available after the internal approval (typically, 120 days from the end of the financial year).

For EEN, ENA and EDR the main data source is the RIDDCUE survey that covers a wide range of units belonging to the sub-sectors of central and local government. However, for units not covered, alternative sources are used. Moreover, a standard procedure of total or partial imputation of missing values is applied if alternative sources are not available.

For the local government, sub-sector estimates are based on surveys of the final statements of the entities. In particular, Regions are covered by the census survey carried out by Istat. The survey aims at collecting directly by Regions the budget reports containing all revenue and expenditure items of each Region, codified for each category of transaction according to the economic and functional (for expenditure) classification scheme (SIR) agreed among Regions and detailed for legal accrual (assessments/commitments) and cash data. The collection of Regions data through the survey mentioned above is exhaustive.

For Provinces, Municipalities and Municipalities' Unions, the final\_account certificates are collected by the Ministry of Interior and then transmitted to Istat. The certificates contain all revenue and expenditure items of each unit, codified for each category of transaction according to the economic and functional (for expenditure) classification on legal accrual (assessments/commitments) and cash data.

For the Chambers of Commerce estimation are based on a specific Istat census survey on final profit and loss accounts/balance sheet. For universities, the source called "Omogenea redazione dei conti delle Università Statali e non" is used. This survey is regulated by the Inter-Ministries Decree dated 1st March 2007, approved by the Ministry of University and Research and the Ministry of Economy and Finance. The survey run by MIUR is administered through CINECA, a MIUR support organization; it covers all Italian Universities on annual basis and records all financial statement items.

For the Entities for Rights to University Education (DSU in Italian) a Istat census survey is carried out (PSN IST-00235).

Since 2001, for Local Healthcare Units, the Ministry of Health collects LHUs' profit and loss accounts in a standardized model ("modello CE") in order to assure homogeneous and comparable data. The units involved in the survey as Local Health Units are: Local Health Agencies (ASLs) Hospital Units (AOs), Scientific Institutes for Research, Hospitalization and Health Care (IRCCSs) and University

Polyclinics (POLs). Standard classification of data according to accounting rules and the description of their content are set by law as the schedule of data transmission. These data, consolidated at regional level, are transmitted by every LHU to the NSIS System (Nuovo Sistema Informativo Sanitario) of the Ministry of Health, at quarterly and annual frequency and then to Istat, as defined in the institutional agreement between Istat and the Ministry of Health.

Other Local Government units include a wide range of bodies with different accounting systems (public accounting or profit and loss accounts). Hence, according to the type of body both budget reporting and financial statements are used as sources, collected through a dedicated Istat surveys, referred to year T-2 through a standard form. Data are on legal commitments/ cash basis, or profits and losses accounts and balance sheets. Data are detailed by units and by category of transaction, according to economic and (for expenditure) functional classification.

As for Social Security units, the main data source is a census survey carried out yearly by Istat on financial statements. Data are checked and integrated with information based on accounting documents (final statements and correspondent statistical attachments and/or explanatory notes). Moreover, for INPS and INAIL, which represent the largest institutional units among the social security entities, further additional information are provided by the units themselves.

#### 2.1.9. Main sources for S.2

In general the flows registered in RoW accounts are taken over from the BoP (current and capital account) that, in turn, includes data on Imports and Exports of goods collected by Istat (Directorate for Economic Statistics, DCSE). Import and exports of services are compiled by the Bank of Italy. All additional breakdowns necessary to properly compile S2 accounts are provided by BoP compilers.

BoP data are provided to NA by the Bank of Italy according to a scheduled timetable, which satisfies the requirements both for ANA/QNA and ASA/QSA domains. Data transmission is regulated by the "Memorandum of Understanding", signed by the National Institute for Statistics (Istat) and the Bank of Italy (see par.1.1).

The main sources for the compilation of the BoP may be summarized as follows:

- Direct reporting sample survey on enterprises, (https://www.bancaditalia.it/statistiche/raccolta-dati/direct-reporting/index.html)
- Sample surveys on tourism and transport
- Supervisory reports of banks
- Data on import and export of goods provided by Istat
- Payments made by the Bank of Italy on behalf of General Government
- Internal accounting of the Bank of Italy for its transactions with the RoW
- Survey on money transfer operators (MTOs)
- Data on pension funds by COVIP
- Administrative data provided by Tax and revenue agency (Agenzia delle entrate) and National institute for social security (INPS).

#### 2.1.10. Main sources for the year t-1 (provisional year)

As for ANA, the estimates of ASA for the provisional year t-1 mostly rely on quarterly information provided by QNA and QSA.

Direct information only exist for:

- BoP:
- the transactions included in S.13 accounts;
- S.121, S.122 and S.129.

A first estimate of FISIM and Interest is also compiled, grounded on data provided by the Bank of Italy.

#### 2.2. Methods

The procedural path along which annual national accounts are compiled starts with the estimation of GDP and GNI, mainly accomplished through the production approach, and continues with the compilation of institutional sector accounts: the two estimations are strictly interconnected.

Annual data are released twice a year: the first time Annual National Accounts (ANA) are released on the 1<sup>st</sup> of March together with S.13 accounts, and Annual Sector Accounts (ASA) are published by mid-April; at the end of September ANA and ASA are published altogether. The September release takes into account the statistical sources that become available after February.

If no significant adjustment to the year t-4 is deemed necessary, in the release of February/April of year t a final estimate is published for the year t-3, while a provisional estimate for the year t-2 and a first estimate for the year t-1 are compiled, both through a simplified approach based on quarterly estimates (QNA/QSA). Then, in the September (of year t) release data are revised for the year t-2, drawing upon the statistical sources that have become available and again for the year t-1, updating the QNA/QSA-based simplified approach.

For the final version of each year the same data sources are processed at the meantime by industry and by institutional sector, which guarantees the maximum consistency between GDP and its components as registered in ASA and ANA. As for the provisional estimates based on quarterly estimates, similarly, the same consistency that is ensured by construction between QNA and QSA, is transferred to ANA/ASA.

In both annual releases, a most updated version of S.13 accounts is incorporated in ASA.

#### 2.2.1. Compilation procedures: the methodological approach to compile ASA

S.13 accounts are compiled in the division « Compilation of Public finance statistics » and are incorporated in the system of institutional sector accounts connecting each transaction/operation to the counterpart sector(s). The accounts for S.11, S.12, S,14, S.15 and S.2 are compiled inside the division « Supply side estimate of GDP - National Accounts by Institutional Sector - Regional Accounts», that also collates the accounts and draws up ESA2010 Table 800.

No subsectors are compiled, except for S.14, which is subdivided into Consumer Households (S.14C) and Producer Households (S.14P).

All the components of GDP are compiled at the same time by industry and by institutional sector, except for GFCF that is estimated by product in the SUT system and is attributed to the owner sectors in a second phase. In fact, institutional units are classified at the same time in the institutional sectors and are subdivided into KAUs (Kind-of-Activity Units), according to a specific level of NACE Rev.2/ATECO 2007. KAUs that make up the institutional units are grouped in 98

industries (branches)<sup>10</sup>, which derive from the aggregation of NACE Rev.2 groups and represent the level of aggregation of economic activities used in estimates of the supply of goods and services. All the necessary conceptual adjustments to business accounting necessary to comply with ESA2010 requirements and all the data validation treatments are implemented at this stage, at the same time by industry and by institutional sector. For the final and quasi-final years, in general, the estimates for producers of market goods and services follow an additive procedure: the observed activities that are directly measured in the data sources are complemented with the main components of Non-observed Economy (NOE).

The adjustments made to ensure exhaustiveness of GDP are briefly reported in par.2.2.1.1 below.

The compilation of *production account and of generation of income account* for all sectors stems from the compilation of GDP/GNI components.

Where the estimates for S.11 and for market units included in S.14 are based on the economic results available for each unit at the micro-level, and data from the financial statements provided by the supervisory authorities are used for S.12, the estimates for S.15 (NPISHs) and some market NPIs included in S.11 are rather based on modelling, since to date direct information is only available for the census year 2011. A survey on non-profit sector has been run for 2015 and a specific Register is being compiled: the results will be included in the estimates by 2019.

The output of NPISHs is measured by summing the costs of production, whereas the value added is defined as the sum of compensation of employees, taxes on production less subsidies and consumption of fixed capital. Compensation of employees paid by NPISHs surveyed in CISINP is based on census survey data, while for active NPISHs not included in CISNP it is estimated from information provided by administrative sources or indirect estimation models. Since the census survey does not provide any information for a direct estimation of taxes and subsidies on production, an indirect estimation model is used. Consumption of fixed capital is obtained by applying the PIM to the capital stock and it is distributed by industry using the breakdown of GFCF

In the years different from the benchmark year, extrapolation methods based on the labor input method are used to compile the flows of NPIs, both market and non-market (NPISHs), excluding Social cooperatives, that are included in the scope of Frame-SBS. As a matter of fact, not any annual survey exists for these units and an indirect approach is performed, through a labour-input based model.

Every year labor input in terms of jobs and hours worked is estimated for NPI, separately for market and non-market units.

As for market NPIs output and intermediate consumption in year t are estimated as follows:

- average values per hour worked for market NPIs are calculated for the year t-1, by industry;
- they are then updated through the annual dynamic of SMEs in the relevant industries, as derived from Frame-SBS data;
- the updated average values per hour worked for the year t are then grossed up through labour input.

As for NPISHs, a similar approach is adopted to update the components of output, it

 $<sup>^{10}</sup>$  The list of the 98 branches and their relationship with the NACE classification is reported in Annex 1 to this section..

is compensation of employees and intermediate consumption. In particular:

- average wages and salaries are updated by means of Social Security Institute data (Uniemens archive) and grossed up through labour input;
- the same contribution rate (employers' social contributions to wages) of enterprises in the same domains is applied;
- average values per hour worked of intermediate consumption are calculated for the year t-1, by industry;
- they are updated through the ratio Intermediate consumption/compensation of employees calculated for market NPIs in the same domains.

All the procedures and IT applications used within the system of national accounts are developed according to the standards set by the Directorate for information and communication technologies. In particular ASA compilation relies on the use of the applications SAS and Modeleasy, that run under the OS UNIX; Windows Microsoft Excel is also widely used. All he releases of ASA are stored in an ORACLE data base.

The procedures for the compilation of sector accounts are based on adequate standards to allow identification of the sources of information, the treatment of the sources, the process of compilation of single variables and aggregates, the definition of the final output. Stages of control are defined so as to avoid identified risks, and to ensure the completeness and coherence of the estimates.

A system of checks on horizontal and vertical consistency is integrated in the compilation procedure. It verifies:

- the coherence of ASA and ANA:
- the coherence of ASA and GG accounts;
- the coherence of ASA and BoP.

An analysis of the revisions and the year to year changes is performed through the compilation of a set of tables and graphs; a number of key indicators are monitored. This also allows the economic interpretation of the results, and is the main tool to draft the press release.

Since most part of data sources are available every year, in the compilation of ASA extrapolation procedures grounding on indicators are only used for NPIs.

# 2.2.1.1. The main approaches taken with respect to exhaustiveness

According to Commission Decision 94/168 on exhaustiveness, to ensure the exhaustiveness of the GDP/GNI estimates, a number of adjustments to value added are improved in national accounts, to account for underground (presence of areas of under-coverage of production units; tax and contribution evasion phenomena; avoidance linked to the payments non-required to the relevant institutions), illegal activities, production for own use and income in kind.

Such an integration is needed for private producers of market goods and services or for own final use; no NOE activities are deemed to exist in General Government, both for the nature itself of the sector and for the very exhaustive data sources used. A summary presentation of the main methods used in the production approach is provided below according to the categories N1-N7, generally used to represent NOE.

*N1* (producer fails to register in order to avoid tax and social security obligations). This category includes:

- the value added generated through the undeclared labour input, both employees

and self-employed. As a general rule, the average value of the output/value added per working hour, re-evaluated to include the under-reporting of production and value added, is applied to the number of hours worked by unregistered workers. More details are provided in Annex 2.

#### **Institutional sectors affected:** S.14, S.11, S.126

the rents paid by undeclared entrepreneurs who carry out their activities in an irregular manner, i.e., evading the administrative, fiscal and social security obligations for the buildings where they exercise their productive activity. It is plausible to assume that, while for those who exercise a regular activity there is no advantage in concealing the rents paid, this does not apply to entrepreneurs who exercise undeclared activities. More details are provided in Annex 2.

#### **Institutional sectors affected:** S.14

(N2) (Illegal producer): total value added includes the estimate of those activities that, although illegal from the juridical standpoint, contribute to determine the income of a country (drug trafficking, prostitution, smuggling). The estimate of the value added and the other aggregates is based on methodological approaches agreed at the European level, and are based on demand indicators, where data sources allow. In this case the estimates mainly consider information regarding the final users of the illegal goods or services and their consumption behaviour. In other cases indicators of supply are used, that allow to estimate the value of the production starting from information on the goods seized or on the production units involved. As suggested by Eurostat, Istat has identified the illegal economic aggregates to be estimated, according to their actual significance in terms of domestic production, trading and international trade; for instance, the smuggling of alcohol and the international prostitution is not considered significant in Italy.

#### **Institutional sectors affected:** S.14

N3 (producer is not obliged to register because it has no market output); this category includes the production of Households for own GFCF, i.e. dwellings, or extensions to dwellings produced by households and own-account construction, including communal construction undertaken by groups of households (ESA 2010, §3.22). In this case the estimate is based on the use of indirect indicators on the hours worked as recorded in the Use of Time survey, as well as of direct information on some aggregates of the output of small enterprises (1–5 persons employed) operating in the sector, provided by Frame-SBS.

#### **Institutional sectors affected:** S.14

*N4* (registered legal person not included in statistics). This category includes:

Units not included in the SBS scope of observation, but included in the ASIA-Enterprises Business register, it is: the units active for less than six months in the year and Financial auxiliaries (Division 66) with 100 persons employed and more. Information on the economic aggregates has been taken from any available administrative data (mainly from the InfoCamere archive). For units active for less than six months, since direct data are not always available, the value added has been estimated through an indirect method, based on the average output and value added resulting in admin data for the cluster they belong to (stratifying according to economic activity and size class), applied to the relevant labour input.

# **Institutional sectors affected:** S.11, S.14, S.126

- SPEs (Special Purpose Entities).

#### **Institutional sectors affected:** S.11, S.12

<u>N5 (Registered entrepreneur not included in the statistics).</u> This category includes two types of integrations:

- some marginal, non-structured micro-enterprises, that can be identified with the entrepreneur himself and that are out of the scope of the BR. They operate in economic activities where the incidence of non-observed economy is quite substantial (Construction, and in some services activities, such as Trade, Support services and Health care). As for these units, the Labour force sample survey provides information on the hours worked, both for primary and secondary job; no information is available on their economic aggregates. The value added generated by them is estimated by applying to the total amount of hours worked the average value per hour worked as detected for very small enterprises operating in the same economic activity sectors.
- production generated by the activity of para-subordinate workers, that are not included in the BR. These para-subordinate workers are not considered as employees of the enterprise for whom they work/provide a service, and their remuneration is included in the intermediate consumption.

#### **Institutional sectors affected:** S.14P

<u>N6 (mis-reporting)</u> This category includes two types of integrations:

- the adjustment to value added for income deliberately concealed by enterprises to tax authorities, either by overstating costs or understating revenues: in these cases a similar behaviour has been detected in official statistical surveys. The availability of a micro-founded database such as Frame-SBS enables to improve the consistency between estimation models and features of the different types of enterprises and to widen the number of units analyzed. The population includes all active enterprises with less than 100 persons employed, with the exclusion of those units that cannot be processed by the models. For such production units a stratification scheme has been set up, based on economic/organizational criteria, which allowed the definition of different estimation models for each cluster. The estimation procedure enables to separate the phase concerning the identification of the under-reporting enterprises from that of the correction of value added. Since the analysis is performed at a micro level, the resulting estimates have a high level of reliability and accuracy, also at a sectorial and territorial breakdown. The estimation methodology is more extensively described in Annex 3.
- a further integration of value added that occurs when comparing estimates on the supply and on the demand side, before the SUT enter the balancing procedure. This integration includes non-quantifiable purely statistical effects as well as a share of non-observed economy, not detected through the other adjustments performed. Since the estimate of output is influenced by the behaviour of the economic units that conceal part of their profits, in some cases the estimates on the demand side prove to be more reliable than those on the supply side; an adjustment is thus needed, in particular for Freight transport by road, for which the information on the supply side is not exhaustive enough.

# Institutional sectors affected: S.11, S.14P, S126

# N7 (statistical deficiencies in the data): This category includes:

tips: for some economic activities (mainly hotels and restaurants, hairdressing, taxi operation, removal services and condominium concierges; sections H, I, S and T) the output (and the compensation of employees) is adjusted to include in the employer's output tips paid to his employees by customers, that will then be

distributed as compensation of employees.

Institutional sectors affected: S.11, S.14

- meals and drinks provided free of charge to employees in food and beverage service activities are added to output and to compensation of employees.

**Institutional sectors affected:** S.11, S.14P

- food and accommodation of domestic staff serving households.

**Institutional sectors affected:** S.14C

own account production of Research and Development, software and original works of art and literature made by enterprises

**Institutional sectors affected: S.11**, S.14P, S.126

#### 2.3. Estimation of backward data (if relevant)

Backward calculation of time series are generally necessary only in the occasion of benchmarking revision.

# 3. ASA consistency with related data sets

# 3.1. ASA consistency between financial and non-financial annual accounts

A working group has been set up between Istat and the Bank of Italy, to study and try to solve the inconsistencies between financial and non-financial sector accounts. To start with, the inconsistencies between BoP and Financial accounts are being analysed, and some step forward have already been made, that, in a whom to whom perspective, help the consistency of the flows among S.2 and the other sectors. At the same time sector S.12 is being examined: some evidences arose concerning a possible non adequate treatment in the manuals of Provisions and Holding Gains, whose relevance is increasing in the banking industry.

The working group produces a documentation and refers its progress to the Coordinating Committee quoted in par.1.1.

# 3.2. ASA consistency with non-financial QSA data

QSA is benchmarked on ASA

# 3.3. ASA consistency with other data sets

Please refer to 2.2.1

# 4. Release policy

ASA are released twice a year:

- at the beginning of April (t+65 days after the reference year): year t-3 final; t-2 and t-1 provisional;
- on 22/23 September (t+9 months) year t-3 final; t-2 semi-final and t-1 provisional.

All table 800 is published, together with some key indicators.

Time series start from 1995 and are available in the data warehouse I.stat.

A paper publication is released, too: in April it is totally devoted to ASA11, while at end September the results for sector accounts are included in the press release on national accounts<sup>12</sup>.

#### 5. Revision policy

In the routine Istat revision process, annual national accounts (ANA) data are released twice a year, on March 1<sup>st</sup> and on September 23<sup>rd</sup>. The cycle of production and dissemination of ASA proceeds in parallel with ANA: in the first release they are compiled by the end of March and published in April; in September they are disseminated together with ANA<sup>13</sup>. The above timetable has been arranged to seek full consistency across the different statistical domains.

In standard conditions, in year t:

- in the first release (March 1<sup>st</sup> for ANA and April for ASA) if no significant adjustment to the year t-4 is deemed necessary- a final estimate is published for the year t-3, while a provisional estimate for the year t-2 and a first estimate for the year t-1 are compiled, both through a simplified approach based on quarterly estimates (QNA).
- in September data are revised for the year t-2, drawing upon the statistical and administrative sources that have become available; the year t-1 is again updated through a ONA/OSA-based simplified approach.

The September release for the year t-2 incorporates all the statistical sources that become available after February. In particular, by June a final version of the Statistical Business Register and of Structural Business Statistics for year t-2 are made available.

# 6. Some specific features of institutional sector accounts in Italy

Two specific features of institutional sector accounts in Italy are worth mentioning:

1. Separate accounts for Households as consumers and as producers.

In general, S.14 includes:

- a) Individuals or groups of individuals whose principal function is consumption and that produce goods and non-financial services for exclusively own final use;
- b) Private non profit non market units with no economic relevance, i.e. with no employees;
- c) Own account workers and sole proprietorships ("imprese individuali", "società semplici" and "società di fatto" with up to 5 employees;
- d) Financial auxiliaries with no employees.

Given the large number of very small productive units to be classified, according to their features, in the Households sector, separate accounts are compiled in Italy for HH as consumers, corresponding to point a) and b), and HH as producers, corresponding to point c) and d). This allows, among other things, to:

<sup>&</sup>lt;sup>11</sup> See: http://www.istat.it/it/files/2017/04/Conti-per-settore-istituzionale-2016.pdf?title=Conti+economici+per+settore+istituzionale+-+11%2Fapr%2F2017+-+Testo+integrale+e+nota+metodologica.pdf

See: http://www.istat.it/it/archivio/203741

A specific press release for ASA is scheduled every year in April (see <a href="http://www.istat.it/it/archivio/198858">http://www.istat.it/it/archivio/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/it/archivio/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/it/archivio/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/it/archive/198858</a> for the Italian publication and <a href="http://www.istat.it/en/archive/198860">http://www.istat.it/en/archive/198860</a> for the short version in English); it also includes a methodological note and a glossary. In September ANA and ASA are included in a same press release. The data are available in I.stat, the warehouse of statistics currently produced by the Italian National Institute of Statistics .

- highlight the contribution of very small enterprises to the generation of income;
- better analyse the role of General Government in the secondary distribution of income, and, more in general, the efficacy of the welfare policies;
- more closely define the saving ratio.

As to consumer HH (S.14C), the sector is indirectly defined by the activity attributed to it. In particular production consists of compensation of employees paid to domestics and porters; own account agricultural production, directly estimated; imputed rentals for own occupied dwellings; ordinary and extraordinary maintenance of owned dwellings made on one's own.

Producer HH are market oriented units, whose income derive essentially from production (mixed income), but they also receive property income and other transfers. On the other hand, consumer households receive compensation of employees, but also the part of mixed income that the entrepreneur decide to devote to final consumption of his family (defined under specific assumptions on the behaviour of the entrepreneurs), together with property income, all pensions and other transfer incomes.

While imputed rents are included in own account production of S.14C, actual rents are a market production included in the output of S.14P.

The two set of accounts are compiled and published at the national level both on an annual and quarterly basis.

# 2. The level of the profit share in Italy proves to be much higher than in the other countries.

In Italy the institutional sector S.11 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 has been considered consistent with the definition of a quasi-corporation. The sector also includes NPIs serving non-financial corporations (for instance, trade associations like "Confindustria" and "Confcommercio"), and market NPIs. Given such classification rules, a peculiar feature of Non-financial corporations sector is the presence of a number of self-employed persons, who typically consist of partners of the corporation/quasicorporation who contribute with their own work to the productive activity of the unit: as a consequence, the remuneration they receive cannot be interpreted as a "pure" property income, since it also includes the payment for the work supplied. The presence of self-employed persons is relevant also in corporations strictu sensu, in particular in the legal form of "Società a responsabilità limitata", which are to all intents and purposes incorporated units, but whose main partners usually do work on a full time basis in the enterprise. To cope with this peculiarity in the national version of annual sector accounts a supplementary item has been introduced in the Secondary distribution of income accounts, termed "Other distributed income of corporations", where the remuneration of self-employed in corporations is registered.

#### 7. Future plans

ASA have been aligned to ESA2010 in 2014, at the time of the benchmarking revision of national accounts.

A new « light » benchmark is planned in 2019 (reference year 2016), to introduce in NA any improvement that will become available in the sources and to incorporate the action points defined by Eurostat in the recent GNI verification round.

In particular, improvements are expected in the accounts of S.15, since a specific Survey has been run in 2017 for the reference year 2015.

Some improvements are expected in the representation of the activity of Multi National Enterprises (MNEs), to which much attention is currently given at the international level, mainly by Eurostat.

By September 2019 the scope of the data transmitted on a voluntary basis will be enlarged, to include:

- separate accounts for the following sub-sectors of S.12: Monetary financial institutions (S.12K), Other financial institutions (S.12P), Insurance corporations and pension funds (S.12Q);
- the detail of GFCF by type of asset for all resident sectors.

We are currently investigating the possibility to compile separate accounts for public and private corporations (S.11).

ANNEX A.1 - Correspondence between 98 industries and NACE Rev.2 codes

	NACE Rev.2	
A98	Code	Description
	Crop production and	related service activities
	01.1	Growing of non-perennial crops
1	01.2	Growing of perennial crops
	01.3	Plant propagation
	01.6	Support activities to agriculture and post-harvest crop activities
	Animal production, h	unting and related service activities
2	01.4	Animal production
<u> </u>	01.5	Mixed farming
	01.7	Hunting, trapping and related service activities
3	02	Forestry and logging
4	03	Fishing and aquaculture
5	05	Mining of coal and lignite
6	06	Extraction of crude petroleum and natural gas
7	07	Mining of metal ores
8	08	Other mining and quarrying
9	09	Mining support service activities
10	10	Manufacture of food products
11	11	Manufacture of beverages
12	12	Manufacture of tobacco products
13	13	Manufacture of textiles
14	14	Manufacture of wearing apparel
15	15	Manufacture of leather and related products
16	16	Manufacture of wood and of products of wood and cork, except furniture
17	17	Manufacture of paper and paper products
18	18	Printing and reproduction of recorded media
19	19	Manufacture of coke and refined petroleum products
20	20	Manufacture of chemicals and chemical products
21	21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
22	22	Manufacture of rubber and plastic products
23	23	Manufacture of other non-metallic mineral products
24	24	Manufacture of basic metals
25 26	25	Manufacture of fabricated metal products, except machinery and equipment
27	26 27	Manufacture of computer, electronic and optical products  Manufacture of electrical equipment
28	28	Manufacture of machinery and equipment n.e.c.
29	29	Manufacture of motor vehicles, trailers and semi-trailers
30	30	Manufacture of other transport equipment
31	31	Manufacture of furniture
32	32	Other manufacturing
33	33	Repair and installation of machinery and equipment
		l air conditioning supply
34	35.1	Electric power generation, transmission and distribution
	35.3	Steam and air conditioning supply
	Manufacture of gas	
35	35.2	Manufacture of gas
36	36	Water collection, treatment and supply
37	37	Sewerage
	<u> </u>	, –

	NACE Rev.2	
A98	Code	Description
		atment and disposal activities
38	38.1	Waste collection
	38.2	Waste treatment and disposal
	Materials recovery	
39		
	38.3	Materials recovery
40	39	Remediation activities and other waste management services
41	41	Construction of buildings
42	42	Civil engineering
43	43	Specialised construction activities
	Wholesale and retail	trade of motor vehicles and motorcycles
44	45.1	Sale of motor vehicles
77	45.3	Sale of motor vehicle parts and accessories
	45.4	Sale, maintenance and repair of motorcycles and related parts and accessories
45		pair of motor vehicles
73	45.2	Maintenance and repair of motor vehicles
46	Wholesale on a fee or	r contract basis
40	46.1	Wholesale on a fee or contract basis
	Wholesale	
	46.2	Wholesale of agricultural raw materials and live animals
	46.3	Wholesale of food, beverages and tobacco
47	46.4	Wholesale of household goods
4/	46.5	Wholesale of information and communication equipment
	46.6	Wholesale of other machinery, equipment and supplies
	46.7	Other specialised wholesale
	46,9	Non-specialised wholesale trade
48	47	Retail trade, except of motor vehicles and motorcycles
	Rail transport	
49	49.1	Passenger rail transport, interurban
	49.2	Freight rail transport
50	Other passenger land	l transport
30	49.3	Other passenger land transport
	Freight transport by	road and removal services and Transport via pipeline
51	49.4	Freight transport by road and removal services
	49.5	Transport via pipeline
52	50	Water transport
53	51	Air transport
54	52	Warehousing and support activities for transportation
55	53	Postal and courier activities
56	55	Accommodation
57	56	Food and beverage service activities
58	58	Publishing activities
59	59	Motion picture, video and television programme production, sound recording and music publishing activities
60	60	Programming and broadcasting activities
61	61	Telecommunications
62	62	Computer programming, consultancy and related activities
63	63	Information service activities
64	64	Financial service activities, except insurance and pension funding
65	65	Insurance, reinsurance and pension funding, except compulsory social security
66	66	Activities auxiliary to financial services and insurance activities
		1 J Ser 1100 and modified well filled

	NACE Rev.2	
A98	Code	Description
	Buying and selling of	own real estate and real estate activities on a fee or contract basis
67	68.1	Buying and selling of own real estate
	68.3	Real estate activities on a fee or contract basis
(0	Rental and operating	of own or leased real estate excluding imputed rents
68	68.20.0	Rental and operating of own or leased real estate excluding imputed rents
69	Imputed rents of own	er-occupied dwellings
09	68.20.1	Imputed rents of owner-occupied dwellings
70	69	Legal and accounting activities
71	70	Activities of head offices
72	71	Architectural and engineering activities
73	72	Scientific research and development
74	73	Advertising and market research
75	74	Other professional, scientific and technical activities
76	75	Veterinary activities
77	77	Rental and leasing activities
78	78	Employment activities
79	79	Travel agency, tour operator and other reservation service and related activities
80	80	Security and investigation activities
81	81	Services to buildings and landscape activities
82	82	Office administrative, office support and other business support activities
		e State and the economic and social policy of the community; Foreign affairs;
		; Compulsory social security activities
83	84.1	Administration of the State and the economic and social policy of the community
0.5	84.21	Foreign affairs
	84.25	Fire service activities
	84.3	Compulsory social security activities
84	<b>Defence activities</b>	
	84.22	Defence activities
	•	ctivities; Public order and safety activities
85	84.23	Justice and judicial activities
	84.24	Public order and safety activities
86	85	Education
87	86	Human health activities
88	87	Residential care activities
89	88	Social work activities without accommodation
90	90	Creative, arts and entertainment activities
91	91	Libraries, archives, museums and other cultural activities
92	92	Gambling and betting activities
93	93	Sports activities and amusement and recreation activities
94	94	Activities of membership organisations
95	95	Repair of computers and personal and household goods
96	96	Other personal service activities
97	97	Activities of households as employers of domestic personnel
98	00	Undifferentiated goods- and services-producing activities of private households
	98	for own use
	99	Activities of extraterritorial organisations and bodies

#### ANNEX A.2 - The estimate of value added generated by undeclared labour input

Estimates of employment are produced in the national accounts framework complying with definitions and coverage set by ESA 2010 and consistently with the concept of domestic employment.

Estimates are mainly obtained elaborating microdata of statistical and administrative sources. Microdata are integrated, validated and adjusted using statistical methodologies based on checks of consistency among information related to the same statistical unit (person or production unit) in the different sources available.

The methodology allows estimating all the measures of labour input (persons employed, jobs, hours worked, FTEUs) both for declared and for undeclared workers.

A synthetic description of the procedure is provided in Section D- EMP.

Undeclared labour input generates part of the non-observed value added in the economic system, that is classified in category N1.

As for <u>employees</u>, they are not registered by employers at the social security authorities and therefore their social security contributions are not paid; such a situation exists both in regular enterprises and in those that are completely undeclared. The <u>undeclared entrepreneurs</u> are those who avoid the obligations to register with the tax and social security authorities.

To measure non-observed value added generated through undeclared labour input (which falls under the category N1 "Producer fails to register in order to avoid tax and social security obligations"), a labour-based approach is adopted, grounded on the hours worked by undeclared workers. A complex model based on a wide information data base that matches Labour Force Survey and a number of administrative sources allows a detailed estimate of the number of hours worked by undeclared workers, both employees and self-employed.

In defining the new estimation procedure of non-observed value added, potential overlaps between the component generated by undeclared work and the component of revaluation of the declared entrepreneur's profit are in principle avoided. For this purpose, methods of quantification of the value added produced by the undeclared labour input have been designed according to the domain segmentation identified in the correction phases of the underreporting.

For minimum size units and for micro units (units with less than 10 employees in the industrial sector and less than 6 in services), value added generated by undeclared labour input is evaluated on the basis of its distribution to production factors. In this reference domain the average profit revalued by the correction process of under-reporting is attributed to the undeclared self-employed; as for undeclared employees, the average hourly wage paid to undeclared workers is applied to the relevant number of hours worked. To represent the gain deriving from the use of undeclared employees, the entrepreneur's operating surplus (declared or not) is increased by the difference, in the reference domain, between the average hourly wage of a declared employee and that of an undeclared one. Therefore, in the distribution of value added, once the declared and undeclared labour input is appropriately remunerated, the gross operating surplus comes to include also the component hidden through under-reporting plus a margin generated by using undeclared employees.

In small and medium enterprises with a more complex organization (units with 10 employees or more in industry and 6 or more in services), the evaluation of the value added generated by undeclared labour input closely follows the criteria applied for the correction of underreporting in registered units. The revaluation method of enterprises belonging to this domain is multiplicative, based on the identification, through the use of a profitability model, of an average value added per labour unit in each domain: this average value is applied to the undeclared labour input, employees and self-employed, in the same domain.

N1 also includes rents paid by undeclared entrepreneurs who evade any administrative, fiscal and social security obligations for the buildings where they exercise their productive activity,

fall under the category N1 of adjustments for exhaustiveness. In general, the output related to the lease of non-residential buildings is estimated as the sum of related costs declared by the registered production units: it is assumed, in fact, that for those who exercise declared productive activities, there is no advantage in concealing the rents paid, because they are deductible from the tax base. The opposite must be assumed in the case of entrepreneurs who exercise a totally undeclared production activity. The amount of rent paid by undeclared entrepreneurs was obtained by an indirect method (labour input method), applying to the undeclared self-employed the average value of the rent paid by "declared" entrepreneurs active in the same cluster (stratified according to economic activity and size class).

### **ANNEX A.3 - Under-reporting of value added (N6)**

On the occasion of the benchmark revision for the adoption of ESA2010, a new methodology was developed for adjusting value added for under-reporting (which is classified in category N6), defined as the deliberate concealment by companies of a portion of the income, through misstatements of turnover and/or costs to the statistical authorities (generally arising from similar behaviour towards the tax authorities).

The method used in the Italian National Accounts for the detection and correction of the under-reported value added before the benchmark revision considered an approach originally proposed by A. Franz in 1985<sup>14</sup>. The selection model of under-reporting units underlying the so-called 'Franz method' assumes that if the business income is less than the amount the entrepreneur could obtain by changing his/her own status from self-employed to subordinate employee, the unit must be considered under-reporting. The correction of the value added of the production unit brings the aggregate to a level (the so-called "shadow income") whereby the entrepreneur obtains by his/her company at least the same amount as an employee would obtain from a job.

The improvement and strengthening of data sources, census-oriented on small and medium enterprises, associated with progress in the use of administrative and tax data led to the development of a new methodology.

The new procedure for the correction of the under-reporting of value added in small and medium enterprises is divided into three phases<sup>15</sup>:

- 1) analysis of available information sources;
- 2) identification of the population of enterprises to be submitted to analysis of underreporting of business income and partition of the this population into sufficiently homogeneous groups from the point of view of economic and tax behaviour to which different correction methods are applied;
- 3) definition, for each group, of a method of identifying the under-reporting subjects and correction of the relative economic results.

In the following the main aspects of the estimation procedure are presented.

<sup>&</sup>lt;sup>14</sup> Basic Model for Estimates of the hidden economy in Austria on the basis of official statistics, Austrian Central Statistical Office, 1985.

<sup>&</sup>lt;sup>15</sup> To support the study and analysis for the revision of the estimation method of NOE, Istat set up a commission of experts to redefine the system of production of non-observed economy estimates, including chaired by Monducci R., with scholars and experts from the administrations and institutions having greater involvement (Tax Authority, INPS-National Institute of social insurance, the Ministry of Labour, INAIL-National Institute for Insurance against Accidents at Work, Customs Agency, Bank of Italy, Universities). The results of the studies are summarised in the internal report "Rapporto finale alla Commissione incaricata di ridefinire il sistema di produzione delle stime dell'economia non osservata" for the issues addressed and the operational solutions proposed and accepted by the Commission.

## Segmentation of the population

The overall population of interest (enterprises with up to 99 employees)<sup>16</sup> was broken down into five groups, one of which includes all units that are not deemed to be subjected to reevaluation of economic results, since they have particular conditions of intractability:

- Group 1: Minimum size units;
- Group 2: Micro units;
- Group 3: Organized units;
- Group 4: Units belonging to groups of domestic enterprises;
- Group 5: Untreatable units.

Group 1 of the minimum size units includes the so-called 'small entrepreneurs', defined as those units in which the entrepreneur's work is fully interchangeable with that of an employee, with specialization being equal. The enterprise actually coincides with its owner, and the equipment to pursue the activities is absent or minimal. In this sense, there are no specific obstacles for a change in the occupational status from self-employed to employee. More particularly, Group 1 contains all units which are not corporations, nor controlled by them, and only have working shareholders (i.e., who do work for the enterprise) and which also meet at least one of two conditions: (1) they adhere to the tax regime of minimum taxpayers; (2) they present a turnover of less than 30,000 euro; (3) they have only one self-employed worker, and no employees.

This group was further divided into three sub-groups, with features that make it possible to identify differentiated treatments.

Subgroup 1A includes the units presumably under conditions of 'economic marginality': entrepreneurs that are holders of other forms of earned income, such as pension income or employment at other companies, or aged over 70, for which the existence of retirement income is assumed. Subgroup 1B includes the units that, by their nature, have low capacity to produce income: units operating in economic activities that do not require highly specialized skills and training, do not employ external staff, whose owners are aged between 40 and 70 years; units whose owners have a age between 30 and 40 years regardless of the economic activity and the presence or absence of external staff. Subgroup 1C includes units that have a greater capacity to produce income: units operating in economic activities that require highly specialized skills and training, regardless of whether or not they employ external staff; units that operate in economic activities not requiring skills and highly specialized training but employ external personnel; in both cases, the owners are aged between 40 and 70 years.

Group 2 includes the so-called 'micro-enterprises', i.e. units that have a reduced business organization and production structure. These have been identified as units, not included in Group 1 and having less than 10 employees, if they operate in the industrial sectors, and less than 6 workers when operating in market services.

Group 3, the 'organized' units, including small and medium enterprises with a more complex organizational and production structure, defined as units with 10 or more employees, active in the industrial sectors, and 6 or more employees, active in the market services sectors.

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<sup>&</sup>lt;sup>16</sup> The exclusion of large companies (100 employees or more) is based on the following elements: (1) evidence of analysis of tax assessments indicates that generally the larger companies adopt complex strategies, that are not limited to the recording of items in the profit and loss account; (2) theoretical and empirical studies in the literature; (3) applying statistical models as those identified for smaller companies would lead to operational difficulties, mainly related to the very low number of observations (in particular by excluding companies belonging to groups - see next point). For these companies it is therefore necessary to design different approaches, but to do so requires tools, information and more time and resources.

Group 4 includes the units that are part of groups of companies resident in the national territory, with a staff of fewer than 100 workers, and that do not have links with foreign firms. For the identification of the units belonging to this segment, the Business Register of Enterprise Groups is used, which completes the Business register ASIA with information related to the control and connections between companies belonging to groups of enterprises. The different conditions of intractability and exclusion concern enterprise for which there is no definition for the phenomenon of *under-reporting* (enterprises controlled by institutional units that are part of the General Government, or operating in regulated markets), enterprises for which the availability of information sources is inadequate, enterprises where the new method is not applicable (due to specific events, business start-up, etc.), and enterprises associated with particular conditions (e.g. co-operative enterprises, or enterprises whose main business is the sale and purchase of own property, in which the treatment of properties as current assets distorts the definition of value added).

### Methods of selecting and correcting under-reporting

For each of the different groups of enterprises identified, specific methods were adopted for selecting the under-reporting enterprises and performing the correction of the value added.

### *Minimum size units (Group1)*

Enterprises of Group 1A are excluded a priori from the selection and correction process because under-reporting, although possible, cannot be detected by the method.

For units belonging to Group 1B under-reporting enterprises are identified by comparing the business income with the so-called 'shadow income' (defined as a normalized measure of labour costs), then re-evaluating the value added by an amount equal to the difference between the two quantities. The estimation of this 'shadow income' uses a very rich information basis on the compensation of employees (INPS-EMENS data<sup>17</sup>) and a statistical methodology to define an 'optimal' stratification for labour costs compared to the economic, territorial and size characteristics of the companies. The statistical tool used is the regression trees (CART Algorithm-Classification and Regression Trees), which makes it possible to stratify units into sub-sets that are homogeneous with respect to the value of the target variable (in this case, the labour cost) and differentiated as much as possible. 18 This procedure, applied on EMENS archive data, resulted in the identification of nodes corresponding to a set of companies in the EMENS archive with a specific combination of modes of the stratification variables. In particular, the 'shadow income' is calculated, for each node, by aggregating the data of these enterprises relative to the totals of labour costs (normalized<sup>19</sup> and not) and the employees distinguished by profession (managers and clerks, employees) with a full-time contract.

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<sup>&</sup>lt;sup>17</sup> The EMENS archive is a exhaustive set of data providing the monthly statements of companies with employees (about 1.6 million enterprises with employees) transmitted to social security institutions by computer (directly or through those in charge), with data on wages/salaries and information useful to the calculation of contributions to the management of individual insurance positions and the payment of benefits. For each enterprise, data is available on compensation and employees distinguished by individual qualification (managers, office workers and executives, low skill workers, apprentices) and by type of contract (full-time, part-time).

<sup>&</sup>lt;sup>18</sup> This algorithm generates a graphic representation in the shape of a tree in which, starting from the root node (the set which has not been divided, that is to say the whole population), branches out into a series of nodes and branches. The nodes that do not undergo further ramifications (splits) are called tree terminals. Each node represents a particular subset, characterized by a particular combination of modes of stratification variables (division of economic activity, the volume of business class, region and aggregate legal form).

<sup>&</sup>lt;sup>19</sup> The normalization of labour costs occurs through a coefficient – by qualification and branch of economic activity - based on Labour Force Survey data and calculated as the ratio between the average number of hours worked by entrepreneurs and the average number of hours worked by employees of each

For the units included in Group 1C an approach similar to the one presented for units of Group 1B is used. However, due to the nature of the companies considered here, at the border between this segment and that of the micro-enterprises (Group 2), the 'shadow income' is corrected on the basis of a profit function in which the following variables appear: the reference threshold of the strata, the value of intermediate consumption and some factors controlling for the economic context.

### Micro units (Group 2)

The approach to the under-reporting estimation of the micro units is based on the separation between the selection and correction procedures.

The selection of the under-reporting companies is conducted at micro level using a set of economic indicators that are summarized using a factor analysis (where the population stratification variables are both sectorial and territorial), then aggregated into a composite indicator. A logistic model and its ROC (Receiving operating characteristics) analysis make it possible to define a cut-off point that separates units into under-reporting and not.

The re-evaluation of the value added is based on an econometric estimation (at the micro level) of a profitability model, which considers the relationship between the production value, fixed costs and variable costs. The behavioural hypothesis is based on the assumption that the entrepreneur guarantees a margin on variable costs for him/herself (*mark-up* model). A theoretical profit is estimated on the non-underreporting units that is added to the labour cost and is compared with the income declared by the entrepreneur: the correction is equal to the difference between the two levels (observed and estimated). The possibility of working on a very detailed stratification allows a satisfactory matching between the models and the economic features while the use of profitability functions makes the estimation of the threshold (and therefore, the correction mechanism) sensitive to the economic situation.

### Organized units (Group 3)

For organized units, the selection procedure is similar to that defined for micro-enterprises but, the correction procedure uses the results and models developed in the selection phase. Based on the difference between the value obtained for the single unit and the threshold value of the composite indicator (which determines the inclusion in the under-reporters group), an extrapolation is made of the level of value added per employee that the unit should declare in order to attain the minimum value of the composite indicator, so that it can be considered not under-reporting. In this way, the correction of the unit value added will depend on two factors: the difference between the composite indicator value of the unit itself and the *cut-off* level; the relative importance (compared to the structure of indicators) of the value added per employee.

### *Units belonging to groups of national enterprises (Group 4)*

The companies belonging to the national groups are treated the same way as Group 3 of the organized units, taking the enterprise group as a whole as unit of analysis. In order to select the under-reporting groups, the items of the income statement and balance sheet needed for the calculation of the selection indicators and the calculation of the value added are consolidated at the group level and the possible correction of the group results is calculated. It is then redistributed between the enterprises in the group based on the weight of the turnover of each unit on the total.

# **SECTION B - Sector delineation**

# 1. List of the (sub)sectors

The table below shows the (sub)sectors, market with 'X', that are distinguished in the sector accounts compilation process.

Sector code	List of subsectors		Additional breakdowns / comments
S.11	Non-financial corporations	X	
S.11001	- Public non-financial corporations		
S.11002	- National private non- financial corporations		
S.11003	- Foreign controlled non- financial corporations		
S.12	Financial corporations	X	
S.121	- The central bank	X	
S.122	- Deposit-taking corporations except the central bank	X	The compilation procedures do not distinguish the two sub-sectors: we estimate the economic flows for
S.123	- Money market funds		S122+S123.
S.124	- Non-MMF investment funds	X	
S.125	- Other financial intermediaries, except insurance corporations and pension funds	X	
S.126	- Financial auxiliaries	X	
S.127	- Captive financial institutions and money lenders		
S.128	- Insurance corporations	X	
S.129	- Pension funds	X	
S.13	General government	X	
S.1311	- Central government	X	
S.1312	- State government	X	
S.1313	- Local government	X	
S.1314	- Social security funds	X	
S.14+S.15	Households and Non-profit institutions serving households		
S.14	Households	X	
S.141 + S.142	- Employers and own- account workers		

S.143 + S.144 + S.145	- Others than employers and own-account workers		
S.15	Non-profit institutions serving households	X	
S.2	Rest of the world	X	

# 2. Importance of institutional sectors in domestic economy

Reference year: 2015

Sector	Employment (full-time equivalence thousands of unit)	Share in total economy (%)
S11	11,214.7	47.8%
S12	467.5	2.0%
S13	3,335.6	14.2%
S14	8,338.2	35.6%
S15	93.6	0.4%

## 3. Sector allocation of institutional units

The table below shows the criteria used to allocate units to institutional sectors.

S11	Corporations	Limited Companies (join-stock company,limited-liability company, cooperative)
		Market non-profit institutions
	Quasi-corporations	Unlimited partnerships
		Sole proprietorships and simple partnerships with more than five persons
		employed, if active in sections other than K
		Branches and other notional resident units
	Corporations	Limited Companies (join-stock company,limited-liability company, cooperative)
		Market non-profit institutions
<b>S12</b>	Quasi-corporations	Unlimited partneriships
		Sole proprietorship and simple partnership with more than one person employed
		if active in sections K
		Branches and other notional resident units
<b>S13</b>		Public non-market producers
	Consumer Households	Own final use producers
	Producer Households	Sole proprietorships and simple partnerships with up to five persons employed, if active in sections other than K
<b>S14</b>		Sole proprietorships and simple partnerships with one person employed, if active in sections K
		Non-structured microenterprise that can be identified with the entrepreneur himself
		Outworkers
S15		Private non-market producers (non-market NPIs)

A specific feature of sector accounts that deserves attention is **the classification of institutional units as quasi corporations.** 

In Italy, the classification by institutional sector of unincorporated enterprises follows the following criteria:

- a) Partnerships, *branches* and other notional resident units, sole proprietorships and simple partnership with more than one person employed, if they are active in Section K of NACE Rev.2, or with more than 5 persons employed, if active in sections other than K, are classified in S.11 or S.12 <u>as quasi-corporations</u>, since they are deemed to have autonomy of decision in respect of their principal function;
- b) the remaining units are classified as Producer households (S.14P) in the Households sector: sole proprietorships and simple partnership with one person employed and active in Section K of NACE Rev.2, and with up to 5 persons employed in sections other than K; microenterprises with a non-formalized organizational structure; and outworkers.

The data sources available to identify unincorporated enterprises are:

- Statistical register of active enterprises (ASIA-Enterprises) for sole proprietorships, partnerships and branches in sections B-N and P-S of NACE Rev.2.
- ASIA LeU register for some non-structured microenterprises that may be identified with the entrepreneur himself.
- Archive of INPS separate management for outworkers not included in the Asia-enterprises register.
- 6th Census of Agriculture (reference year 2010) for unincorporated enterprises in the agricultural sector (Section A of NACE Rev.2).

A second issue that is worth addressing is **the coverage of S.15**. Non-profit institutions include social cooperatives (that by law cannot share profits with their partners), recognized and non-recognized associations, charities, committees, ecclesiastical institutions, and mutual-aid societies.

The CISINP supplies information on the organizational model and the composition of the revenues and expenses of the financial statements of NPIs in 2011; the detail of the entries for revenues and expenditures provided allows to apply the criteria defined by ESA 2010 to

identify their public or private nature, as well as whether they are producing for the market or not. Relying on the information available on the organizational model and the composition of the revenues and expenses of the financial statements of NPIs, the non-market units are identified and classified in the S.15 sector, while market NPIs are classified in the sectors of non-financial and financial corporations according to their economic activity.

The data sources available to define NPIs are:

- 2011 Census of non-profit institutions (CISINP)
- Statistical register of active enterprises (ASIA-Enterprises)
- Asia LeU register
- Administrative archives (Uniemens archive, Tax register).

The table below gives a sense of the distribution of NPISHs by economic function.

### Final consumption expenditure of NPISHs by function - Year 2011 (million EUR)

COPNI	Values
Health	373
Recreation and culture	2.209
Education	612
Social protection	867
Religion	1.624
Political parties, labour and professional organisation	1.128
Environmental protection	23
Services n.e.c.	1.982
Total	8.819

The final issue concerns the identification and classification of the **Special purpose entities** (**SPE**). These units are corporations that are part of groups and:

- are directly (first level of control) and totally (100%) foreign controlled;
- exercise no control over other legal units;
- are not included in ASIA-Enterprises register;
- have no employees, nor outworkers.

These entities with little or no physical presence are identified since 2011 through the integration of the statistical register on enterprise groups (ASIA-Groups), ASIA-LeU and the InfoCamere archive of financial statements

# 4. Matrix 'Industries – (sub)sectors'

Reference year: 2015

T. 1. 1. 1.00	Sectors (in GVA)					
Industries A98	Total	S11	S12	S13	S14	S15
01 Crop and animal production, hunting and related service activities	2.09%	0.31%	0.00%	0.00%	1.78%	0.00%
02 Forestry and logging	0.08%	0.02%	0.00%	0.04%	0.03%	0.00%
03 Fishing and aquaculture	0.07%	0.04%	0.00%	0.00%	0.03%	0.00%
05 Mining of coal and lignite	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
06 Extraction of crude petroleum and natural gas	0.20%	0.20%	0.00%	0.00%	0.00%	0.00%
07 Mining of metal ores	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
08 Other mining and quarrying	0.08%	0.07%	0.00%	0.00%	0.00%	0.00%
09 Mining support service activities	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%
10 Manufacture of food products	1.51%	1.41%	0.00%	0.00%	0.10%	0.00%
11 Manufacture of beverages	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%
12 Manufacture of tobacco products	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13 Manufacture of textiles	0.45%	0.42%	0.00%	0.00%	0.03%	0.00%
14 Manufacture of wearing apparel	0.60%	0.53%	0.00%	0.00%	0.07%	0.00%
15 Manufacture of leather and related products	0.53%	0.50%	0.00%	0.00%	0.03%	0.00%
16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.31%	0.25%	0.00%	0.00%	0.06%	0.00%
17 Manufacture of paper and paper products	0.34%	0.34%	0.00%	0.00%	0.00%	0.00%
18 Printing and reproduction of recorded media	0.28%	0.26%	0.00%	0.00%	0.02%	0.00%
19 Manufacture of coke and refined petroleum products	0.15%	0.15%	0.00%	0.00%	0.00%	0.00%
20 Manufacture of chemicals and chemical products	0.73%	0.73%	0.00%	0.00%	0.00%	0.00%
21 Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.58%	0.58%	0.00%	0.00%	0.00%	0.00%
22 Manufacture of rubber and plastic products	0.81%	0.79%	0.00%	0.00%	0.01%	0.00%
23 Manufacture of other non-metallic mineral products	0.63%	0.60%	0.00%	0.00%	0.03%	0.00%
24 Manufacture of basic metals	0.52%	0.51%	0.00%	0.00%	0.00%	0.00%
25 Manufacture of fabricated metal products, except machinery and equipment	1.91%	1.80%	0.00%	0.00%	0.12%	0.00%
26 Manufacture of computer, electronic and optical products	0.56%	0.55%	0.00%	0.00%	0.01%	0.00%
27 Manufacture of electrical equipment	0.73%	0.72%	0.00%	0.00%	0.01%	0.00%
28 Manufacture of machinery and equipment n.e.c.	2.36%	2.33%	0.00%	0.00%	0.03%	0.00%
29 Manufacture of motor vehicles, trailers and semi- trailers	0.82%	0.82%	0.00%	0.00%	0.00%	0.00%
30 Manufacture of other transport equipment	0.44%	0.44%	0.00%	0.00%	0.00%	0.00%
31 Manufacture of furniture	0.44%	0.41%	0.00%	0.00%	0.03%	0.00%
32 Other manufacturing	0.42%	0.35%	0.00%	0.00%	0.07%	0.00%

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33 Repair and installation of machinery and equipment	0.57%	0.48%	0.00%	0.00%	0.09%	0.00%
35 Electricity, gas, steam and air conditioning supply	1.59%	1.57%	0.00%	0.01%	0.01%	0.00%
36 Water collection, treatment and supply	0.28%	0.25%	0.00%	0.02%	0.00%	0.00%
37 Sewerage	0.07%	0.05%	0.00%	0.02%	0.00%	0.00%
38 Waste collection, treatment and disposal activities; materials recovery	0.56%	0.59%	0.00%	-0.04%	0.01%	0.00%
39 Remediation activities and other waste management services	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%
41 Construction of buildings	1.37%	0.98%	0.00%	0.04%	0.36%	0.00%
42 Civil engineering	0.50%	0.44%	0.00%	0.04%	0.02%	0.00%
43 Specialised construction activities	2.90%	1.78%	0.00%	0.00%	1.13%	0.00%
45 Wholesale and retail trade and repair of motor vehicles and motorcycles	1.07%	0.84%	0.00%	0.00%	0.23%	0.00%
46 Wholesale trade, except of motor vehicles and motorcycles	5.31%	3.78%	0.00%	0.00%	1.53%	0.00%
47 Retail trade, except of motor vehicles and motorcycles	5.10%	3.21%	0.00%	0.02%	1.87%	0.00%
49 Land transport and transport via pipelines	2.98%	2.01%	0.00%	0.02%	0.95%	0.00%
50 Water transport	0.24%	0.23%	0.00%	0.00%	0.00%	0.00%
51 Air transport	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%
52 Warehousing and support activities for transportation	1.87%	1.52%	0.00%	0.32%	0.03%	0.00%
53 Postal and courier activities	0.24%	0.23%	0.00%	0.00%	0.01%	0.00%
55 Accommodation	1.00%	0.87%	0.00%	0.02%	0.11%	0.00%
56 Food and beverage service activities	2.67%	2.01%	0.00%	0.01%	0.65%	0.00%
58 Publishing activities	0.20%	0.18%	0.00%	0.00%	0.01%	0.00%
59 Motion picture, video and television programme production, sound recording and music publishing activities	0.19%	0.17%	0.00%	0.00%	0.02%	0.00%
60 Programming and broadcasting activities	0.18%	0.18%	0.00%	0.00%	0.00%	0.00%
61 Telecommunications	1.19%	1.18%	0.00%	0.00%	0.02%	0.00%
62 Computer programming, consultancy and related activities	1.43%	1.27%	0.00%	0.03%	0.14%	0.00%
63 Information service activities	0.49%	0.44%	0.00%	0.00%	0.04%	0.00%
64 Financial service activities, except insurance and pension funding	3.86%	0.00%	3.86%	0.00%	0.00%	0.00%
65 Insurance, reinsurance and pension funding, except compulsory social security	0.67%	0.00%	0.67%	0.00%	0.00%	0.00%
66 Activities auxiliary to financial services and insurance activities	1.11%	0.25%	0.57%	0.00%	0.29%	0.00%
68 Real estate activities	4.72%	1.77%	0.00%	0.09%	2.86%	0.00%
69 Legal and accounting activities	9.33%	0.00%	0.00%	0.00%	9.33%	0.00%
70 Activities of head offices; management consultancy activities	2.19%	0.53%	0.00%	0.00%	1.66%	0.00%
71 Architectural and engineering activities; technical testing and analysis	1.11%	0.49%	0.00%	0.00%	0.61%	0.00%
72 Scientific research and development	1.31%	0.40%	0.00%	0.01%	0.90%	0.00%
73 Advertising and market research	0.58%	0.11%	0.00%	0.40%	0.06%	0.01%
74 Other professional, scientific and technical activities	0.29%	0.20%	0.00%	0.00%	0.09%	0.00%
75 Veterinary activities	0.86%	0.34%	0.00%	0.00%	0.51%	0.00%

77 Rental and leasing activities	0.07%	0.00%	0.00%	0.02%	0.05%	0.00%
78 Employment activities	0.46%	0.44%	0.00%	0.00%	0.02%	0.00%
79 Travel agency, tour operator reservation service and related activities	0.57%	0.57%	0.00%	0.00%	0.00%	0.00%
80 Security and investigation activities	0.12%	0.09%	0.00%	0.01%	0.03%	0.00%
81 Services to buildings and landscape activities	0.18%	0.17%	0.00%	0.00%	0.01%	0.00%
82 Office administrative, office support and other business support activities	0.83%	0.69%	0.00%	0.02%	0.13%	0.00%
84 Public administration and defence; compulsory social security	0.91%	0.64%	0.00%	0.08%	0.19%	0.00%
85 Education	6.65%	0.00%	0.00%	6.65%	0.00%	0.00%
86 Human health activities	4.16%	0.34%	0.00%	3.66%	0.16%	0.02%
87 Residential care activities	5.16%	0.98%	0.00%	2.65%	1.52%	0.01%
88 Social work activities without accommodation	0.44%	0.37%	0.00%	0.06%	0.01%	0.01%
90 Creative, arts and entertainment activities	0.44%	0.26%	0.00%	0.14%	0.03%	0.01%
91 Libraries, archives, museums and other cultural activities	0.29%	0.06%	0.00%	0.03%	0.18%	0.01%
92 Gambling and betting activities	0.20%	0.03%	0.00%	0.15%	0.00%	0.01%
93 Sports activities and amusement and recreation activities	0.20%	0.18%	0.00%	0.00%	0.02%	0.00%
94 Activities of membership organisations	0.41%	0.28%	0.00%	0.03%	0.08%	0.02%
95 Repair of computers and personal and household goods	0.33%	0.19%	0.00%	0.00%	0.00%	0.14%
96 Other personal service activities	0.11%	0.05%	0.00%	0.00%	0.06%	0.00%
97 Activities of households as employers of domestic personnel	1.14%	0.47%	0.00%	0.02%	0.65%	0.00%
98 Undifferentiated goods- and services-producing activities of private households for own use	1.27%	0.00%	0.00%	0.00%	1.27%	0.00%
99 Activities of extraterritorial organisations and bodies	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total (Share in %)	100.00%	49.68%	5.10%	14.54%	30.43%	0.25%

# **Section C. Data sources**

DS1	Balance of Payments
DS2	Financial Statements of Insurance Corporations
DS3	COVIP Annual Report
DS4	COVIP report for SBS
DS5	Household Expenditure Survey (from 2014)
DS6	Survey on the financial statements of large enterprises (SCI)
DS7	Survey on small and medium-sized enterprises and on the exercise of arts and professions
	(PMI)
DS8	Supervisory reporting by the FIs to the Bank of Italy
DS9	FISIM information system
DS10	Imported and exported FISIM
DS11	CDP Report
DS12	Integrated statistical system of administrative and survey data for SBS estimations (Frame
	SBS)
DS13	Financial Accounts
DS14	Bank of Italy report on mutual investment funds
DS15	General Government non-financial accounts
DS16	6th General Agricultural Census
DS17	Economic outcomes of agricultural holdings (RICA-REA)
DS18	CREA annual report
DS19	Farm Structure Survey (FSS)
DS20	Statistical register of active enterprises (ASIA-Enterprises)
DS21	Multipurpose survey on households time use
DS22	2011 Census of non-profit institutions (CISINP)
DS23	Tax register
DS24	InfoCamere archive of financial statements
DS25	Archive of INPS separate management
DS26	Statistical archive of Enterprise Groups (ASIA-Groups)
DS27	Household Budget Survey (until 2013)
DS28	Uniemens archive
DS29	Archive of domestic work relationships
DS30	Residential and non-residential real estate sales
DS31	UNRAE vehicle register
DS32	Annual financial statements of banks
DS33	Statistical survey on research and development
DS34	Land sales provided by the Tax and Revenue Agency
DS35	Archive of Earnings, Hours and Total Labor Cost (RACLI)
DS36	Archive of employees in agriculture
DS37	Labor Force Survey (LFS)
DS38	Financial statement of the Bank of Italy
DS39	ASIA LeU
DS40	Report on the financial statements of social security institutions (BICEP)
DS41	Eu Silc
DS42	Labor Cost and Structure of Earnings Survey - Labor Cost Survey Edition (RCL-LCS)
DS43	Information system on Employment (ASIA-Employment) – Linked Employer-Employees
	Database (LEED))
DS44	15th General Population and Housing Census

Nr.	Data source	Data source description	Used for
	name		sectors
DS1	Balance of Payments	Type of source Statistical	Main source for S.2
		Type of collection method  Census data for IMF and OFI; NA estimates for goods; sample surveys for tourism, international travel and merchandise transport; direct reporting system for non-financial and insurance corporations about their transactions with RoW; administrative data	Used as counterparts for S.11, S.12, S.14, S.15
		Population and reporting units All MFIs and OFIs supervised by the Bank of Italy; about 7,000 non-financial and insurance corporations selected on the basis of their size (value of total assets) and their volume business with RoW; general government; households and other units involved in transactions with non resident units	
		Contents The compilation of BoP complies with BPM6 standards. BoP provides all variables to compile RoW account broken down for the following counterpart sectors: central bank, MFIs, financial corporations other than MFIs, general government and other institutional units (non-financial corporations, households and NPISHs)	
		Valuation principle Accrual	
		Organisation collecting data Bank of Italy	
		Periodicity Monthly, quarterly	
		<b>Timeliness</b> M+50 days, Q+83 days	
DS2	Financial Statements of	Type of source Administrative data	Main source for S.128
	Insurance Corporations	Type of collection method Census data, IVASS collects information on insurance corporations that it supervises.	Used as counterparts for S.14
		Population and reporting units All domestic insurance corporations and branches of foreign non-EU insurance enterprises authorized in Italy	
		Contents Aggregate financial statement (BS; P&L annex to BS and P&L) and additional supervisory information	
		Valuation principle Accrual	
		Organisation collecting data Insurance Supervisory Authority (Istituto per la Vigilanza sulle Assicurazioni - IVASS)	
		Periodicity Annual	
		Timeliness t+11 months	
DS3	COVIP Annual	Type of source Administrative data	Main source for S.129
	Report	Type of collection method Census data, COVIP collects information on PFs that it supervises.	Used as counterparts
		Population and reporting units  Domestic PFs entered in the Register of Supplementary Pension Schemes held by COVIP.	for S.14
		Contents Aggregate financial statement and additional supervisory information	
		Valuation principle	

	T		
		Accrual  Organisation collecting data Supervisory Commission on Pension Funds (Commissione di vigilanza sui fondi pensione - COVIP)  Periodicity Annual	
		<b>Timeliness</b> t+7 months	
DS4	COVIP	Type of source	Main source
	1	Administrative data	for S.129
	SBS	Type of collection method Census data	Used as counterparts
		Population and reporting units  Domestic PFs entered in the Register of Supplementary Pension Schemes held by COVIP.	for S.14
		Contents Aggregate value of output, value added, intermediate consumptions, compensation of employees, actual social contributions, social benefits, current transfers, primary income.	
		Valuation principle Accrual	
		Organisation collecting data COVIP	
		Periodicity Annual	
		Timeliness t+10 months	
DS5	Household Expenditure Survey (from	Type of source Statistical Type of collection method	Main source for S.14
	2014)	Survey	
		<b>Population and reporting units</b> About 25,700,000 resident households	
		Annual theoretical sample of about 28,000 households, annual actual sample of about 17,000 households	
		Contents Socio-demographic characteristics of the household members, housing condition, household expenditures on goods and services for private use.	
		Valuation principle	
		Organisation collecting data  Istat	
		Periodicity Annual	
		Timeliness t+6 months	
DS6		Type of source Statistical	Main source for S.11,
	financial statements of large	Type of collection method Census survey	S.14, S.126
	enterprises (SCI)	Population and reporting units About 10,500 enterprises	
		Enterprise at least 100 employees and local KAU	
		<b>Contents</b> Turnover; production value; value added; wages and salaries; number of employees	
		Link to the questionnaire: http://siqual.istat.it/SIQual/visualizza.do?id=0062400	

		Valuation principle	
		Accrual	
		Organisation collecting data  Istat	
		Periodicity	
		Annual	
		Timeliness t+18 months	
DS7	Survey on	Type of source	Main source
	small and	Statistical	for S.11, S.14, S.126
	medium-sized enterprises and on the exercise of arts and professions	Type of collection method Survey	3.14, 3.120
		Population and reporting units 4.4 million enterprises	
		About 100,000 enterprise with less than 100 employees	
	(PMI)	Contents Turnover; production value; value added; wages and salaries; number of employees	
		Link to the questionnaire: <a href="http://siqual.istat.it/SIQual/visualizza.do?id=0012200">http://siqual.istat.it/SIQual/visualizza.do?id=0012200</a>	
		Valuation principle Accrual	
		Organisation collecting data  Istat	
		Periodicity Annual	
		Timeliness t+18 months	
DS8	Supervisory	Type of source	Main source
	reporting by the FIs to the	Administrative data <b>Type of collection method</b>	for S.12
	Bank of Italy	Census data	
		Population and reporting units Deposit-taking corporations: domestic banks (excluding CDP S.p.A.) entered in the Register of banks held by the Bank of Italy (legal basis, article 13 of the Consolidated Law on Banking (TUB), Legislative Decree No. 385/1993), and domestic branches of EU banks entered in the List of bank branches held by the Bank of Italy (legal basis, Banking supervisory instruction); Securities investment firms (SIM): SIM entered in a register held by Consob	
		(legal basis, article 20 of the Consolidated Law on Finance (TUF), Legislative Decree No. 58/1998); SIM groups entered in a register held by the Bank of Italy (article 11 of the TUF);	
		Other financial intermediaries: financial intermediaries entered in the Special register of financial companies held by the Bank of Italy (legal basis, article 107 of the TUB, Legislative Decree No. 385/1993, before the adoption of Legislative Decree 141/2010); payments intermediaries and Electronic money institutions (EMIs) entered in the Register of EMIs held by the Bank of Italy (legal basis, article 144-quater of the TUB, Legislative Decree No. 385/1993)	
		Contents Aggregate financial statements (BS; P&L annex to BS and P&L) and additional supervisory information. The Bank of Italy collects information on banks and other financial intermediaries, through regular and structured prudential and statistical-accounting reporting. References: Bank of Italy, "Vigilanza bancaria e finanziaria – Matrice dei conti", Circolare n. 272, dated 30th July 2008 and following amendments; Bank of Italy, "Manuale delle segnalazioni statistiche e di vigilanza per gli intermediari del mercato mobiliare", Circolare n. 148, dated 2nd July 1991 and following amendments; Bank of Italy, "Manuale per la compilazione delle segnalazioni di vigilanza per gli intermediari finanziari, per gli istituti di pagamento e per gli IMEL", Circolare n. 215, dated 5th August 1996 and subsequent amendments]	
		Valuation principle	

		Accrual	
		Organisation collecting data Bank of Italy	
		Periodicity	
		Annual, quarterly	
		Timeliness	
		t+7 months, q+55 days	
DS9	FISIM information	Type of source Administrative data	Main source for S.11,
	system	Type of collection method Census data	S.12, S.13, S.14, S.15
		Population and reporting units Deposit-taking corporations: domestic banks (excluding CDP S.p.A.) entered in the Register of banks held by the Bank of Italy (legal basis, article 13 of the Consolidated Law on Banking (TUB), Legislative Decree No. 385/1993), and domestic branches of EU banks entered in the List of bank branches held by the Bank of Italy (legal basis, Banking supervisory instruction)	
		Contents Quarterly stocks and related interest rates of resident bank's loans by counterpart institutional sector	
		Quarterly stocks and related interest rates of resident bank's deposits by counterpart institutional sector	
		Valuation principle Accrual	
		Organisation collecting data Bank of Italy	
		Periodicity Quarterly	
		<b>Timeliness</b> q+38 days	
DS10	Imported and exported	Type of source Administrative data	Main source for S.12, S.2
	FISIM	Type of collection method Census data	Used as counterparts
		Population and reporting units Deposit-taking corporations (S.122), Money market funds (sub-sector S.123) and a macro sector that gathers together the institutional sectors different from S.122 and S.123	for S.11, S.12, S.13, S.14, S.15
		Contents Imported and exported FISIM, the stocks of loans/deposits and the interest flows accrued on cross-border operations	
		Valuation principle Accrual	
		Organisation collecting data Bank of Italy	
		Periodicity Quarterly	
		<b>Timeliness</b> q+55 days	
DS11	CDP Report	Type of source Administrative data	Main source for S.12
		Type of collection method Census data	
		Population and reporting units CDP S.p.A	
		Contents Stock of loans and deposits of the CDP	
	Ĩ	Valuation principle	1

		I	I
		Accrual	
		Organisation collecting data Cassa Depositi e Prestiti S.p.A.	
		Periodicity	
		Quarterly	
		Timeliness	
		q+55 days	
DS12	Integrated statistical	Type of source Statistical	Main source for S.11,
	system of administrativ	Type of collection method Census data	S.14, S.126
	e and survey data for SBS	Population and reporting units Enterprises included in the Business Register (ASIA-Enterprises)	
	estimations (Frame-SBS)	Contents SBS variables and the details of revenue and costs	
		Eurostat Regulation No. 58/97 and SBS Regulation No. 295/2008	
		The SBS Frame derives the economic information for each unit with less than 100 employees from a large set of sources. Information are drawn from:	
		- Business accounts: BS and P&L of corporate enterprises;	
		- Business Sector Studies - Studi di settore (SDS)	
		- Tax returns: Ordinary income tax return (UNI), Regional Tax on Productive Activities (IRAP).	
		The choice of the source follows a hierarchical criterion: first of all, the information derived from Business accounts (for medium enterprises) and SDS (for small enterprises) are considered; when these sources are not available, IRAP or UNI source are considered.	
		Details of revenue or costs not directly available from administrative data are estimated by the "projection estimator" using survey data from the "Survey on small and medium-sized enterprises" (SME, Italian acronym PMI), including professional and artistic activities.	
		For units with 100 employees or more, SBS aggregates are derived from the "Survey on the financial statements of large enterprises" (SCI).	
		Valuation principle Accrual	
		Organisation collecting data  Istat	
		Periodicity Annual	
		Timeliness	
		t+18 months	
DS13	Financial Accounts	Type of source Statistical	Main source for S.11,
		Type of collection method	S.12, S.13, S.14, S.12,
		Census data for MFIs, insurance corporations, general government, administrative information for other units	S.2
		Population and reporting units Institutional units	
		Contents	
		Stocks and flows of Italy's financial assets and liabilities classified by institutional sector (S.11, S.12, S1.13, S.14, S.15, S.2) and by financial instrument	
		Valuation principle accrual	
		Organisation collecting data	
		Bank of Italy	
		Periodicity	
		quarterly	
		Timeliness	

		q+95 days	
DS14	Bank of Italy report on mutual investment funds	Type of source Administrative data Type of collection method Census data, Bank of Italy collects information on Non-MMF investment funds that it supervises Population and reporting units Non-MMF investment funds Contents Aggregate property income Valuation principle Accrual	Main source for S.12 Used as counterparts for S.11, S.12, S.14
		Organisation collecting data Bank of Italy Periodicity Annual Timeliness t+3 months	
DS15	General Government non-financial accounts	Type of source Statistical  Type of collection method Census data  Population and reporting units All public non-market units included in S.13  Contents All variables of non-financial accounts of S.13 and its sub-sectors (S.1311, S.1312, S.1313, S.1314)  Valuation principle accrual  Organisation collecting data Istat  Periodicity Annual, quarterly  Timeliness t+3/9 months, q+83 days	Main source for S.13 Used as counterparts for S.11, S.12, S.14, S15, S.2
DS16	6th General Agricultural Census	Type of collection method  Census survey  Population and Reporting units  Populations: pre-census list consisted of 2,047,948 units to which 89,082 new farms were added. The survey estimated the presence of 1,620,884 active farms in Italy, defined by the thresholds set.  Reporting units: "livestock and agricultural holdings" or "holdings": single technical-economic unit under a single management which performs - as a primary or secondary activity - agricultural activities listed in Annex I to the Regulation within the European Union's economic territory  Contents  geo-location of the holding; legal status; management system; land units; holding activity state; landscape features;; arable crops land; permanent crops; permanent grassland pastures and meadows; utilized agricultural area; lands for wood production; woods; unused agricultural area; greenhouses; energy crops; specific information on vineyards; irrigated and irrigable areas; methods of irrigation; organic farming and PDO and PGI quality production; livestock stock; biological agriculture and PDO and PGI quality livestock production; animal grazing; type of animal housing; storage method by type of animal manure; manure application; location of the holding land and livestock; holder family and relatives; non-family labour regularly employed; other labour	Main source for S.11, S.14 Used as counterpar ts for S.11, S.14, S.13, S15

		employed on a non-regular basis; labour not directly employed by the holding; equipment used for renewable energy production; accounting; revenues; self-consumption; holding products marketing.	
		Link to the questionnaire:	
		http://www3.istat.it/censimenti/agricoltura2010/questionario.pdf	
		Valuation principle	
		Organisation collecting data  Istat	
		Periodicity Ten-yearly	
		Timeliness	
		t+7 months	
DS17	Economic outcomes of	Type of source Statistical	Main source for S.11, S.14
	agricultural	Type of collection method	Used as
	holdings (RICA-REA)	survey	counterparts for S.11,
	(RICA-REA)	Population and reporting units Population: 1,620,884 holdings	S.14, S15,
		Simple size: about 19,000 holdings	S.13
		Reporting units: Agricultural holding", technical-economic unit, consisting of land, even in non-contiguous plots, and possibly plants and various equipment,	
		where agricultural and livestock activities take place as main or secondary activity at the hands of a conductor - natural person, corporation, entity - who	
		bears the risk, either alone, as a tenant farmer or conductor with employees and /	
		or co-participants, or in associated form	
		Contents Geo-location of the holding; legal status; management system; land units;	
		holding activity state; landscape features;; arable crops land; permanent crops;	
		permanent grassland pastures and meadows; utilized agricultural area; lands for wood production; woods; unused agricultural area; greenhouses; energy crops;	
		specific information on vineyards; irrigated and irrigable areas; methods of	
		irrigation; organic farming and PDO and PGI quality production; livestock stock; biological agriculture and PDO and PGI quality livestock production;	
		animal grazing; type of animal housing; storage method by type of animal	
		manure; manure application; location of the holding land and livestock; holder family and relatives; non-family labour regularly employed; other labour	
		employed on a non-regular basis; labour not directly employed by the holding;	
		equipment used for renewable energy production; accounting; revenues; self- consumption; holding products marketing.	
		Link to the questionnaire:	
		http://www3.istat.it/censimenti/agricoltura2010/questionario.pdf	
		Valuation principle	
		Organisation collecting data Istat	
		Periodicity	
		annual	
		Timeliness t+20 months	
DC10	CDE A amount 1		Main source
DS18	report	Type of source Statistical	for S.11, S.14
		Type of collection method Administrative data	Used as counterparts
		Population and reporting units Agricultural holding	for S.11, S.14, S15
		Contents Data on agriculture sector	

		Valuation principle	
		Organisation collecting data Council for Agricultural Research and Economics (CREA) Periodicity annual Timeliness t+20 months	
DS19	Farm Structure Survey (FSS)	Type of source Statistical  Type of collection method Survey  Population and reporting units Population: 1,620,884 active farms in Italy simple size: 44,200 units  Reporting units: "Agricultural holding" or "holding": single technical-economic unit under a single management which undertakes agricultural activities  Contents  Areas cultivated with different crops, livestock dimensions, organizational forms, relationships of agricultural holdings with the market Valuation principle  Valuation principle  Organisation collecting data Istat  Periodicity three-year	Main source for S.11, S.14 Used as counterparts for S.11, S.14, S15
		<b>Timeliness</b> t+13 months	
DS20	Statistical register of active enterprises (ASIA- Enterprises)	Type of source Statistical  Type of collection method census data  Population and reporting units population: 4.4 million enterprises, 4.8 million local units (in 2011) simple size: universe reporting units: enterprise, local unit  Contents	Main source for S.11, S.14 Used as counterpar ts for S.11, S.14, S15
		identifying information (name and address) and structural information (economic activity, employment and self-employment, legal form, start and end date of operation, turnover)  Valuation principle  Organisation collecting data Istat  Periodicity annual  Timeliness t+15 months	

		Contents	
		Main activity, contemporary activity, place or means of transport, people present <b>Valuation principle</b>	
		-	
		Organisation collecting data Istat	
		Periodicity	
		five-yearly Timeliness	
		t+24 months	
DS22	2011 Census of non-profit	Type of source Statistical	Main source for S.11, S.15
	institutions	Type of collection method Census survey	
		Population and reporting units population: 474,765 non-profit institutions	
		sample size: universe	
		reporting units: institution/ local KAU	
		Contents  NPIs general data, legal status, activity status, human resources (paid and unpaid), financial resources (amount and structures of revenues and expenditures), sector of activity and services supplied, communication and fundraising, local units	
		Valuation principle	
		Organisation collecting data Istat	
		Periodicity Ten-yearly	
		Timeliness t+24 months	
DS23	Tax register	Type of source Administrative data	Main source for S.11, S.14
		Type of collection method Census survey	
		Population and reporting units Population: all natural persons, companies and entities to which the Revenue Agency has attributed an identification code (tax code, VAT number) Sample size: universe	
		Reporting units: taxpayers (individuals / companies / entities)	
		Contents fiscal code, demographic characteristics of natural person (date and country of birth, sex), business name and economic activity of legal person, VAT number	
		Valuation principle	
		Organisation collecting data Ministry of Economy and Finance – Revenue Agency	
		Periodicity annual	
		Timeliness T+18 months	
DS24	InfoCamere archive of	Type of source Administrative data	Main source for S.11, S.14
	financial statements	Type of collection method Census survey	
		Population and reporting units population: all corporations	
	l	17 7 *	L

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sample size: universe	
reporting units: single enterprise	
Contents statutes, profit and loss accounts and the related additional note, balance she and legal documentation Valuation principle	eets
Valuation principle Accrual	
Organisation collecting data InfoCamere, the Association of the Italian Chambers of Commerce Periodic	city
Periodicity Annual	
Timeliness T+18 months	
DS25 Archive of INPS Type of source Administrative data	Main source for
separate management Type of collection method Census survey	S.11, S.14
Population and reporting units Population: self-employed	
Sample size: universe	
Reporting units: self-employed/work relationship "outworker-employer"	
Contents  Workers' personal data, employers' personal data, length and type of employment, kind of activity, contribution base, contribution rate	
Valuation principle	
Organisation collecting data National Social Security Institute (INPS)	
Periodicity annual	
Timeliness T+15 months	
DS26 Statistical Type of source Statistical	Main source for S.11, S.12
Enterprise Groups Type of collection method Census survey	
(ASIA- Groups) Population and reporting units Population: ASIA business register of enterprise groups	
Sample size: about 200,000 enterprises, 90,000 groups	
Reporting units: enterprise group, enterprise	
Contents  Legal Entity Identifier (LEID) number and identifying variables (name, add of subsidiary, parent, Global Group Head and Global Decision Center (GD shares, control levels, nationality of Group, NACE, turnover, employment. provides classification of Holding Companies, Head Offices and Special Purpose Entities (HC-HO-SPE)	C),
Valuation principle	
Organisation collecting data  Istat	
Periodicity	
annual	
Timeliness	
T+15 months	
DS27 Household Type of source	Main source
DOB     LIVESCHOIG   Lypt of Stuffe	Main Source
Budget Statistical	for S.14

	2012)	Survey	
	2013)	Population and reporting units	
		population: about 25,700,000 households residing in Italy	
		sample size: about 28,000 households residing in Italy	
		reporting units: household	
		Contents Sociodemographic characteristics of household members, housing condition, household expenditures on goods and services for private consumption	
		Valuation principle	
		Organisation collecting data Istat	
		Periodicity Monthly/yearly	
		<b>Timeliness</b> t+60 days (quarterly estimates)	
		t+7 months (yearly estimates)	
DS28	Uniemens archive	Type of source Administrative data	Main source for S.11,S.12,
	archive	Type of collection method Census data	S.14, S.15
		Population and reporting units Reporting units: work relationship "employee-employer"	
		Contents employees' personal data, enterprise identification data, days worked, pay, contributions paid	
		Valuation principle	
		Organisation collecting data National Social Security Institute (INPS)	
		Periodicity monthly	
		Timeliness T+18 months	
<b>DS29</b>	Archive of domestic	Type of source Administrative data	Main source for S.14
	work relationships	Type of collection method Census data	
		Population and reporting units Reporting units: work relationship "employee-employer"	
		Contents Employees' personal data, employers' personal data, work period, type of work relationship, number of hours worked, hourly pay, social contribution paid	
		Valuation principle	
		Organisation collecting data National Social Security Institute (INPS)	
		Periodicity Annual	
		Timeliness T+18 months	
DS30	Residential and non-	Type of source Administrative data	Main source for S.11, S.14
	residential real estate	Type of collection method Census data	
	sales	Population and reporting units Reporting units: building properties purchased and sold according to their	

		destination of use (residential and related outbuildings, industrial, offices and commercial) and their cadastral category as indicated for each building in the transcription and recording document compiled by notaries  Contents  Surface, price, date, type of building (cadastral category), tax paid, fiscal code (for not private person), sex and age for private persons  Valuation principle  Accrual  Organisation collecting data  Ministry of Economy and Finance – Revenue Agency  Periodicity	
DS31	UNRAE vehicle register	Type of source Administrative data  Type of collection method Census data  Population and reporting units Reporting units: first registrations and changes of ownership of second hand vehicles  Contents  Vehicle Identification Number (VIN), brand, model, type of supply, engine displacement, Gross Vehicle Mass (GVM), vehicle length, type of sale (acquisitions of new vehicles, exchanges of second hand vehicles through a dealer/retailer - so called "minivoltura" - or without any dealer/retailer - so called "ordinary sales"), list price, price paid, fiscal code of buyers and sellers  Valuation principle	Main source for S.11, S.14
		Accrual  Organisation collecting data National Association of foreign car makers operating in Italy (Unione Nazionale Rappresentanti Autoveicoli Esteri – UNRAE)  Periodicity annual  Timeliness t+10 months (at t+3 months a provisional version is available)	
DS32	Annual financial statements of banks	Type of source Administrative data  Type of collection method Census data, ABI (Italian Banking Association) collects information on banks associated.  Population and reporting units All banks associated to ABI (Italian Banking Association)  Contents Aggregate financial statement (BS; P&L annex to BS and P&L)  Valuation principle Accrual  Organisation collecting data ABI (Italian Banking Association)  Periodicity Annual  Timeliness t+10 months	Main source for S.12
DS33	Statistical survey on research and development	Type of source Statistical  Type of collection method Census survey: the survey covers enterprises and private institutions with high probability to carry out R&D. Computer-assisted web interviewing (CAWI) is used for the survey  Population and reporting units	Main source for S.11, S.14, S.15

		D 14' 1 1 10 000 '4	1
		Population size: about 18,000 units	
		reporting units: enterprise, institutions	
		Contents internal personnel engaged in R&D	
		expenses incurred by the corporation for R&D activity	
		Valuation principle Accrual	
		Organisation collecting data  Istat	
		Periodicity Annual	
		Timeliness T+18 months	
DS34	Land under cultivation	Type of source Administrative data	Main source for S.11, S,14
	sales	Type of collection method Census data	
		Population and reporting units Reporting units: land under cultivation purchased and sold	
		Contents Surface, price, date of the transaction, type of land, tax paid, legal form for not	
		private person, sex and age for private persons  Valuation principle  Accrual	
		Organisation collecting data Ministry of Economy and Finance – Revenue Agency	
		Periodicity Annual	
		Timeliness T+12	
DS35	Archive of Earnings,	Type of source Administrative data	Main source for
	Hours and Total Labour	Type of collection method Census data	S.11, S.14
	(RACLI)	Population and reporting units Reporting units: job (and the related enterprises)	
		Contents identification number of employee, identification number of employer,	
		characteristics of job (length of contract, type of contract, contractual work time), earnings, paid days, other labour costs	
		Valuation principle -	
		Organisation collecting data National Social Security Institute (INPS)	
		Periodicity Monthly	
		Timeliness	
DS36	Archive of	Type of source Administrative data	Main source for S.11, S.14
	employees in agriculture	Type of collection method Census data	101 5.11, 5.11
		Population and reporting units Reporting units: work relationship "employee-employer" in agriculture	
		Contents Employees' personal data, holding identification data, work period, days worked, contribution base	

		Valuation principle	
		Organisation collecting data National Social Security Institute (INPS) Periodicity Quarterly Timeliness	
DGGE	T 1 T	m	M :
DS37	Survey (LFS)	Type of source Statistical data	Main source for S.11, S.14
		Type of collection method Survey	
		Population and reporting units Population: about 25,700,000 resident households, distributed into about 8,000 municipalities	
		Sample size: about 71,000 households per quarter, distributed into about 1,260 municipalities	
		Reporting units: resident households	
		Contents Employees' personal data, holding identification data, work period, days worked, contribution base	
		Valuation principle	
		Organisation collecting data  Istat	
		Periodicity Quarterly and monthly	
		Timeliness t+18	
DS38	Financial statement of	Type of source Administrative data	Main source for S.12
	the Bank of Italy	Type of collection method Census data	
	,	Population and reporting units Bank of Italy	
		Contents Financial statements of the Bank of Italy	
		Valuation principle Accrual	
		Organisation collecting data Bank of Italy	
		Periodicity Annual	
		Timeliness t+5 months	
DS39	ASIA-LeU	Type of source Statistical, administrative data	Main source for S.11,
		Type of collection method census data	S.14, S.12, S.15
		Population and reporting units Population: all active enterprises (ASIA-Enterprises), non-active and ceased legal units (ceased within the last three years), active enterprises in section A of NACE Rev.2, legal units classified in the List of General Government entities (S.13 list) and non-profit institutions	
		simple size: universe	
		reporting units: enterprise, local unit  Contents	
		Identifying information (name and address) and structural information	

		(economic activity, employment and self-employment, legal form, start and end date of operation, turnover)  Valuation principle -	
		Organisation collecting data Istat Periodicity annual	
		<b>Timeliness</b> t+15 months	
DS40	financial statements of	Type of source Statistical, administrative data Type of collection method	Main source for S.11, S.14
	social security institutions (BICEP)	Population and reporting units Population: 48 entities	
		Reporting units: social security institutions  Contents  Assessments, commitments, cash revenues and payments, employment data  Valuation principle	
		- Organisation collecting data Istat	
		Periodicity Annual Timeliness t+8 months	
DS41	Eu Silc	Type of source Statistical Type of collection method	Main source for S.14
		Survey  Population and reporting units population: about 25,700,000 households residing in Italy sample size: about 29,000 households reporting units: household  Contents Socio-demographic characteristics of household members, housing condition, household income components  Valuation principle  Organisation collecting data  Istat	
		Periodicity two-yearly Timeliness t+18 months	
DS42	Labor Cost and Structure		Main source for S.11, S.12, S.14
	of Earnings Survey - Labor Cost	Type of collection method Survey  Population and reporting units	5.12, 5.17
	Survey Edition (RCL-LCS)	Population and reporting units Population: about 180,000 enterprises and 18,525 public institutions Sample size: about 20,200 units Reporting units: enterprises and public institutions (with at least 10 employees)	
		Contents number of employees by type (full-time, part time and apprentices), total hours actually worked, total hours paid, compensation of employees, social security	

		contributions, other components of labor cost		
		Valuation principle		
		-		
		Organisation collecting data  Istat		
		Periodicity		
		Four-yearly		
		Timeliness t+18 months		
DS43	Information system on Employment (ASIA- Employment – linked Employer- Employees Database (LEED))	Type of source Statistical, administrative data	Main source for S.11,	
		Type of collection method Census data	S.12, S.14	
		Population and reporting units		
		Population: about 4.4 million enterprises and 17 million workers (in 2011) reporting unit: enterprise, individuals		
		Contents		
		Individual (worker) demographic characteristics (sex, age place of birth, residence); enterprise characteristics (industry sector NACE 4 digits, size in terms of number of employees and turnover, geographical location (local unit)); jobs characteristics by type of worker (job qualification, contractual working time (part time/full time); type of contract (temporary or fixed time/permanent); maternity leave, illness; type of worker (employees, self-employed/contributing family workers, outworkers-external component, temporary workers-external component).	;	
		Employment is expressed in annual average and measured in terms of jobs		
		Valuation principle		
		Organisation collecting data Istat		
		Periodicity Annual		
		Timeliness t+15 months		
DS44	15th General Population and Housing Census	Type of source Statistical	Main source for S.11,	
		Type of collection method Census	S.12, S.14	
		Population and reporting units Population: about 25.950.000 persons were eligible for the sample		
		sample size: about 9.400.000 persons		
		Contents  Demographic variables (sex, age, marital status, etc.), and socio-economic variables (educational attainment, current activity status, work, commuting, disability); type of living quarters and housing characteristics		
		Valuation principle		
		Organisation collecting data Istat		
		Periodicity Ten-yearly		
		<b>Timeliness</b> t+15/t+27 months		

# **SECTION D. Description by transaction**

## 1. P1 - Output

Table D.1 - Output - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses	
S.1	Total economy	3,129,282	0	
S.11	Non-financial corporations	2,107,366	0	
S.12	Financial corporations	129,668	0	
S.13	General government	306,140	0	
S.14	Households	574,747	0	
	S.14/C Consumer Households	169,660	0	
	S.14/P Producer Households	405,087	0	
S.15	NPISH	11,360	0	
S.2	Rest of the world	0	0	

Output is estimated by institutional sector and industry. Institutional units are classified, according to their economic activity, in 98 industries which derive from the aggregation of NACE Rev.2 groups (see Annex A.1). Furthermore, institutional units are distinguished and classified into institutional sectors according to the type of activity they perform:

Producers of market goods and services

- Financial and non-financial corporations, including non-profit institutions serving (financial and non-financial) corporations, and other market NPIs (S.11, S.12)
- Producer households (S.14P)

Private producers of goods and services for own final use

- Consumer households (S.14C)

Producers of non-market goods and services

- General Government (S.13)
- Non-profit institutions serving households (NPISHs) (S.15)

The criteria used to allocate units to institutional sectors are described in Section B, paragraph 3

The table D.2 shows the output by institutional sectors and divisions Nace Rev.2 in the year 2015.

Table D.2 - Output by institutional sectors and divisions Nace Rev.2 – Year 2015

Divisions	S.11	S.12	S.13	S.14/P	S.14/C	S.14	S.15	Total
		0	2	43,990	2,331	46,321	0	55,020
2		0	702 0	430 645	0 0	430 645	0	1,489 1,784
4		0	0	043	0	043	0	1,704
5	5,298	0	0	0	0	0	0	5,298
6		0	0	0	0	0	0	2
7 8		0	0 0	58 0	0 0	58 0	0	2,948 1,060
9		0	8	3,452	0	3,452	0	113,244
10	19,226	0	0	128	0	128	0	19,354
11		0	0	0	0	0	0	119
12 13		0	0	798 2,126	0 0	798 2,126	0	21,859 30,037
14	28,567	0	0	1,099	0	1,099	0	29,666
15		0	0	1,542	0	1,542	20	13,771
16		0	0	165	0	165	0	22,506
17 18		0	0	674 5	0 0	674 5	0	10,756 42,600
19	50,342	0	Ö	98	o	98	0	50,440
20		0	0	0	0	0	0	24,818
21		0	0	465	0	465	0	41,642
22 23	28,546 52,050	0	0 0	827 118	0 0	827 118	0	29,373 52,169
24	76,562	0	1	3,442	o	3,442	0	80,004
25	21,124	0	0	153	0	153	0	21,277
26	38,636	0	0	343	0	343	0	38,979
27 28		0	0	727 57	0 0	727 57	0	114,113 59,261
29	25,401	0	0	81	o	81	0	25,482
30	20,932	0	0	784	0	784	0	2 1,716
31		0	0	1,685	0	1,685	0	18,531
32 33		0	0 302	2,353 344	0 0	2,353 344	0	19,010 88,606
34	7,859	0	801	9	o	9	27	8,696
35	1,802	0	495	57	0	57	0	2,354
36 37		0	8,528 27	237 19	0 0	237 19	0	32,332 1,432
38	53,874	0	677	10,545	0	10,545	0	65,097
39	29,167	0	857	585	0	585	0	30,609
40	69,253	0	0	30,227	1,084	31,311	0	100,563
41 42		0	0	6,215 29,479	0 0	6,215 29,479	0	37,359 166,240
43		0	350	29,479 36,110	0	36,110	0	124,934
44		0	556	18,2 18	0	18,218	0	90,643
45		0	3	94	0	94	0	12 ,10 2
46 47		0	0 5,278	0 898	0 0	0 898	0 4	11,602 65,574
48		0	0,278	265	0	265	0	6,760
49	25,641	0	334	2,538	0	2,538	8	28,521
50	57,138	0	1,352	18,520	0	18,520	6	77,015
51 52	9,056 5,576	0	0	2 <i>74</i> 336	0 0	274 336	3	9,333 5,916
53		0	4	17	o	17	0	9,221
54	38,717	0	0	544	0	544	0	39,262
55		0	795	2,423	0	2,423	0	41,938
56 57	11,809 0	0 88,206	26 0	837 0	0 0	837 0	0	12,672 88,206
58	0	23,902	0	0	0	0	0	23,902
59	6,332	17,352	0	5,720	0	5,720	0	29,404
60		0	1,505	45,137	0	45,137	0	87,972
61 62		0	0 0	0 31,140	147,388 0	147,388 31,140	0 14	147,388 44,353
63		208	36	9,744	o	9,744	1	32,087
64	17,205	0	234	16,318	0	16,318	1	33,758
65		0	8,386	1,080	0	1,080	367	13,389
66 67		0 0	0	1,921 9,297	0 0	1,921 9,297	0 2	16,608 21,430
68		0	473	1,000	o	1,000	0	1,584
69	13,058	0	0	629	0	629	0	13,687
70 71		0	69 279	63 854	0	63 954	0	9,785
71 72		0	278 0	854 241	0 0	854 241	0	11,854 4,173
73		0	641	2,529	o	2,529	1	20,350
74		0	2,567	3,861	0	3,861	0	38,364
75 76		0 0	127,545 59,209	0 2,650	0 0	0 2,650	0 429	127,545 72,190
76 77		0	69,436	2,650 27,489	0	2,650	429 571	127,365
78		0	1,468	249	o	249	234	11,865
79	6,373	0	4,799	556	0	556	719	12,447
80		0	774	3,174	0	3,174	744	7,433
81 82		0 0	3,314 2,472	68 534	0 0	68 534	541 0	4,869 14,879
83		0	1,287	1,840	o	1,840	2,165	16,014
84	5,936	0	50	1	0	1	5,366	11,354
85		0	0	1,312	0	1,312	0	3,009
86 87		0	501 0	12,646 0	0 18,858	12,646 18,858	133 0	25,928 18,858
88		0	0	ő	0	0	ő	0,000
Total	2,107,366	129,668	306,140	405,087	169,660	574,747	11,360	3,129,282

### 2. P.11 – Market output

Table D.3 - Market output - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses	
S.1	Total economy	2,628,313	0	
S.11	Non-financial corporations	2,081,869	0	
S.12	Financial corporations	128,553	0	
S.13	General government	14,905	0	
S.14	Households	402,985	0	
	S.14/C Consumer Households	0	0	
	S.14/P Producer Households	402,985	0	
S.15	NPISH	0	0	
S.2	Rest of the world	0	0	

Market output is the result of the economic activity carried out by units that belong to the institutional sectors S.11, S.12 (Financial and Non-financial corporations), S.14 (Households) and S.13 (General Government).

As regard to sector S.14, when compiling sector accounts, Producer households (S.14P) are treated separately from Consumer households (S.14C). The estimation procedure of the latter will be described in the relevant paragraph.

The estimation procedure of market output by institutional sector and industry (98 industries according to NACE Rev.2) follows the one used within the framework of annual accounts.

Production of institutional units derives from observed and non-observed activities. Observed activities are directly measured in the basic data from which the national accounts are compiled while non-observed activities are either illegal or deliberately concealed by enterprises to tax authorities in order to avoid tax and social security obligations and are therefore measured with indirect methods.

Output is obtained by an additive procedure and consistency by industry is obtained separately for each component that sums up to total output. The latter is estimated at a microlevel with direct or indirect methods; when the information is not available at such a level of detail, the components are subdivided over sectors with the use of indicators such as labour input or output obtained at previous stages of the estimation process.

For some economic activities, output is directly attributed to an institutional sector as for Financial and insurance activities (NACE Rev.2, Section K) and Public administration and defence; compulsory social security (NACE Rev.2, Section O).

Table D.4 shows the share of each component of output referred to private market producers within each institutional sector.

Table D.4 - Share on total output of each component of market output by private institutional sector – Year 2015 (share in %)

	Non-financial corporations	Finanacial Corporations	Producer Households	Market producers
SBS	92.9	12.4	39.5	80.8
Other sources (agriculture, dwelling				
services, financial services)	0.5	51.2	17.0	5.5
Registered legal persons not included in				
SBS	0.2	0.0	0.0	0.1
Registered entrepreneur not included in				
the statistical registers	0.0	0.0	10.0	1.5
Outworkers	0.0	0.0	2.7	0.4
Adjustment for net taxes	0.4	0.0	1.8	0.6
NPI	1.2	0.2	0.0	0.9
FISIM	0.0	34.5	0.0	1.7
Other exhaustiveness adjustments	1.0	0.8	0.5	0.9
Total observed output	96.1	99.1	71.4	92.5
Mis-reporting	3.8	0.9	24.2	6.8
Illegal	0.1	0.0	4.4	0.7
Total non-observed output	3.9	0.9	28.6	7.5

### 2.1. Description of compilation procedures

### **USES**

Not applicable

### **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sectors S.11, S.14P

### A. Sources

Survey on the financial statements of large enterprises (SCI) (DS6)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Survey on Economic outcomes of agricultural holdings (RICA-REA) (DS17)

6th General Census of Agriculture in 2010 (DS16)

Farm Structure Survey (FSS) (DS19)

Statistical register of active enterprises (ASIA-Enterprises) (DS20)

Archive of INPS separate management (DS25)

Tax register – revenue agency (DS23)

Census of non-profit institutions (CISINP) (DS22)

## B. Methods

The estimation procedure of market output is the same for sectors S.11 and S.14P.

The main source used to estimate market output of sectors S.11 and S.14P is the Frame-SBS register. The Frame-SBS component accounts for approximately 81% of total market output (87% of total observed market output) as from Table D.4.

The Frame-SBS register is a statistical register on financial statements of enterprises based on administrative and fiscal data and on survey data. It is partitioned into:

- Frame-SME, for enterprises with 0 to 99 persons employed
- Frame-SCI, for enterprises with 100 or more persons employed

Frame-SBS register includes all units of Asia-enterprises register with the exclusion of units of divisions 65 (insurance corporations and pension funds), 64 (banks, other financial intermediaries and holding corporations) and 66 (financial auxiliaries) with more than 99 persons employed.

Business accounts data provides, for each enterprise, detailed information on revenues and costs items that allow a correct transition from business accounting to national accounts and therefore enables to calculate output (at factor costs). To comply with ESA2010 definition some conceptual adjustments are carried out, in particular:

- exclusion of holding gains/losses from changes in inventories;
- inclusion of the valuation of additions to work in progress;
- exclusion of insurance claims;
- exclusion of capital gains from revenues.

Therefore for units included in the scope of SBS regulation, output is calculated at a micro-level for each institutional unit. As a consequence output by institutional sector and by industry is directly measured from micro-data: information on the unit's economic activity, size class of employment and legal status allows to allocate each enterprise to an institutional sector (S.11, S.14P) according to the criteria previously described in Section B, paragraph 3.

For units out of scope of observation of Frame-SBS, that is units that perform their economic activity in Section A (Agriculture) or in Section L (Real estate activity), and for market non-profit institutions, estimates are obtained with the use of different data sources and methodologies.

For institutional units operating in agriculture (section A of NACE Rev.2), out of scope of SBS regulation, a quantity per price approach is adopted to estimate goods and services produced. This methodology guarantees exhaustiveness of output estimates.

According to this method the quantity of each product (about 170) is multiplied by its average annual price per unit. Quantities and prices are provided by specific Istat surveys. The average prices, at producer prices, are then appropriately adjusted to obtain basic prices. The main sources are:

- Survey on Economic outcomes of agricultural holdings (RICA-REA)
- 6th General Census of Agriculture in 2010 (benchmark year)
- Farm Structure Survey (FSS) (infra-censual years)

For this section, output by industry is disaggregated by institutional sector (sectors S.11, S.14P) by means of an indirect methodology. The indicator used is based on the section's labour input by industry.

For units of section L (Real estate activities), the outcomes of Frame-SBS are integrated with the amount of actual rentals collected by natural persons and declared to tax authorities (Tax and Revenue Agency), that are considered production of Producer households and assigned entirely to sector S.14P.

Output of market NPIs, identified according to the criteria described in paragraph 3 of section B2 are estimated for the benchmark year 2011 with the accounting information available from the Census of Non-profit Institutions and are extrapolated to the following years with appropriate indicators based on Frame-SBS and on employment data.

Social cooperatives are already included in Asia-enterprises and economic data are available in the Frame-SBS system.

Output of market NPIs are assigned to Non-financial corporations (sector S.11) except for Bank Foundations that are classified in the Financial sector (S.12).

Since output is evaluated at factor costs, transition to basic prices is carried out (the estimation of other taxes and other subsidies on production will be described in the relevant paragraphs).

Other adjustments are carried out in order to obtain exhaustive estimates. These components may be referred either to observed or non-observed economy and are included in the *Exhaustiveness* categories N1-N7 of the Process Table.

The exhaustiveness components referred to observed activities are:

1. Non-structured micro-enterprises, that can be identified with the entrepreneur himself (category N5 of the Process Table - *Registered entrepreneur is not included in statistics*), included in the ASIA-LeU register but not in ASIA-Enterprises, are identified by micro-linkage between the Labour force survey and administrative registers.

For these units, the Labour force survey provides information on the hours worked. Output is estimated, for each economic activity, by applying to the total amount of hours worked the hourly value added as detected from Frame-SME for very small enterprises.

These operators are assimilated to Producer households and their output is assigned to sector S.14P.

- 2. Para-subordinate workers (category N5 of the Process Table Registered entrepreneur is not included in statistics) that are not included in ASIA-Enterprises are identified in the "Archive of National social security Agency separate management". This data source provides information on their remuneration, that corresponds to their output.
  - This component is allocated to the Producer households sector (S.14P).
- 3. Producers included in ASIA-Enterprises but outside SBS scope of observation (category N4 of the Process Table *Registered legal person is not included in statistics*), that is producers active for less than six months in the year: output is estimated by domain (economic activity, size class and institutional sector) through an indirect method, based on economic information from administrative data and labour input.
  - Output is disaggregated by sector with the use of output by industry obtained at previous stages (sectors S.11, S.14P).
- 4. Special Purpose Entities (SPE) (category N4 of the Process Table *Registered legal person is not included in statistics*). They are not included in ASIA-Enterprises. Their production is estimated on the basis of the financial statements data derived from the InfoCamere archive. For those enterprises with no revenues from sales (about 88% of the identified units) the production at basic prices has been approximated by the sum of production costs. No compensation of employees exists and taxes on production and consumption of fixed capital prove to be negligible; therefore output is the sum of costs for purchase of raw materials and services and for leases and rentals.

Output related to these units is allocated to sectors S.11 and S.12.

Output is then adjusted to include the following non-observed components:

- 1. Income deliberately concealed by enterprises to tax authorities, either by overstating costs or understating revenues. The availability of a micro-founded database such as Frame-SBS enabled to set up a stratification scheme, economic/organizational criteria, which allowed the definition of different estimation models for each cluster. The estimation procedure separates the phase concerning the identification of the under-reporting enterprises from that of the correction of value added (category N6 according to the Process Table - Mis-reporting by the producer). Therefore for this component an indirect estimation procedure was set up at a microlevel; units are allocated to institutional sectors according to their economic activity, size class and legal status according to criteria described in paragraph 3 of section B.
- 2. Output generated through the undeclared labour input (employees and self-employed) (category N1 of the Process Table *Producer should have registered*). As a general rule, the average value of output per working hour, re-evaluated to include the underreporting of output, is applied to the number of hours worked by unregistered workers at a level of institutional sector, economic activity (98 industries: an aggregation of NACE Rev.2 groups) and size class (6 classes:1-5, 6-9, 10-19, 20-99, 100-249, 250 and more)
- 3. Rents paid by undeclared entrepreneurs, that is, who evade any administrative, fiscal and social security obligation (category N1 of the Process Table *Producer should have registered*). The estimate is obtained by comparing information from the supply side (Frame-SBS and Tax and Revenue Agency) with information from the demand side (dwelling stratification method for residential rentals and information on expenses for non residential rentals from Frame-SBS). This component is assigned to the Producer households sector (S.14P).
- 4. Output deriving from illegal activities as drug trafficking, prostitution, smuggling (category N2 according to the Process Table *Illegal producer that fails to register*). The estimate of output is based on methodological approaches agreed at the European level, which are based mainly on demand indicators. Output mainly affects to the Producer households sector (S.14P).

### Sector S.12

### A. Sources

Financial Statements of Insurance Corporations (DS2)

COVIP Annual Report (DS3)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Statistical register of active enterprises (ASIA-Enterprises) (DS20)

InfoCamere archive of financial statements (DS24)

Financial statement of the Bank of Italy (DS38)

### B. Methods

Market output of sector S.12 is estimated separately for the following sub-sectors:

- Central Bank (sector S.121)
- Other monetary financial institutions (MFI) (sectors S.122 and S.123)
- Holding companies (sector S.127)
- Other financial intermediaries, excluding insurance companies and pension funds (OFI) (sector S.125)

- Insurance corporations (sector S.128)
- Pension funds (sector S.129)
- Financial auxiliaries (sector S.126)

Output of the central bank (sector S.121) is defined as the sum of its costs, i.e. intermediate consumption, compensation of employees, other taxes on production and consumption of fixed capital. No FISIM are calculated for central banking authorities. The information source is the financial statement of the Bank of Italy published in the Annual report five months after the end of reference year.

Intermediate consumption includes commission expenses, administrative expenses, expenditure for other personnel (administrators, statutory auditors) and the costs for banknotes production services. Other taxes on production are IRAP (the Italian regional tax on productive activity) and municipal taxes on real estate (ICI until 2011, and IMU from 2012). Since a separate estimate of the capital stock of the Central Bank is not available, consumption of fixed capital cannot be calculated via PIM; hence, Central Bank consumption of fixed capital is approximated with the figures registered in the financial statement.

The revenues of the Central Bank for services provided for direct payment are:

- Rents of buildings;
- Commissions, including: charges payable by participants in TARGET2; charges for the management of securities used as collateral for monetary policy operations; fees on financial services on behalf of General Government fees for substitute protest declarations; fees for Correspondent Central Banking Model services; fees for the retail clearing system services; fees for the use of Central credit register (Centrale dei Rischi) information;
- The fees for studies and projects include the reimbursements of the Eurosystem NCBs in connection with the development of platforms, applications and IT infrastructures by the Bank of Italy in collaboration with other central bank. Providers.

The non-directly allocated part of the output of the Bank of Italy is registered as an intermediate cost of MFIs and OFIs (sub-sectors S.122 and S.125); a counterpart transfer from the central bank to MFIs and OFIs is introduced in the secondary distribution of income account. The final uses of directly allocated output are identified with regard to the user (General Government, households, enterprises, non-resident units).

Output of MFIs and OFIs is made up of explicit charges for financial services provided for direct payments (Non-FISIM output) and FISIM. The FISIM estimation methods are detailed in the relevant paragraph.

The estimate of the non-FISIM output of MFIs is compiled using financial statement data gathered by the Bank of Italy. The source covers the domestic banks, excluding Cassa Depositi e Prestiti (CDP), and the branches of EU banks in Italy included in the List required by Art. 13 of the "Testo Unico delle leggi in materia bancaria e creditizia (TUB)" (Legislative Decree n. 385/93).

The supervisory reporting schemes require the MFIs to separate the Profit and loss data concerning the activity carried out on the national territory from the ones concerning activities carried out abroad through a stable organization. Such detailed information allows to include in the estimates of output and value added the activity of domestic branches of foreign banks, and to exclude the activity of foreign branches of Italian banks. This ensures that only the operations carried out by MFIs in the national territory contribute to the gross domestic product.

Table D.5 shows the procedure for calculating output of financial services provided for direct payment (Non-FISIM output).

Table D.5 - MFI: Output of financial services provided for direct payment (Non-FISIM output)

#### Non-FISIM output (=)

- (+) Commission earned
- on guaranteed loans;
- on credit derivatives;
- on management, intermediation and consultancy services;
- on sales of products/services of third parties;
- on cashing and payment services;
- on securitization transactions services;
- on factoring services;
- on management/operation of multilateral trade/trading system activities;
- on current accounts management activities;
- on other services;

#### (+)Other net receipts from services:

- Rents from real estate
- Receipts from IT services supplied
- Recoveries for compensations of employees on temporary transfer, on deposits and current accounts, ...

The other financial intermediaries excluding insurance corporations and pension funds (OFIs, sector S.125) include:

- the securities investment firms (SIM);
- the financial intermediaries listed in the Special register of financial companies held by the Bank of Italy as per Art. 107 of the Legislative Decree 385 /93, the payment institutions and the electronic money institutions (EMIs). These operators mainly perform the following activities: financial leasing, consumer credit granting, factoring, merchant banking, securities services.

Output of OFIs is estimated from supervisory data provided by the Bank of Italy. OFIs are subject to supervision by the Bank of Italy, for the reduction of risk exposure and asset and liability stability, and by Consob for transparency and correctness, as established in the "Testo unico delle disposizioni in materia di intermediazione finanziaria (Legislative Decree n.58/98)". As for MFIs, the reporting schemes allow to measure the activities carried out by the resident OFIs in domestic territory, as to properly reflect the economic flows which contribute to the gross domestic product.

Table D.6 and Table D.7 show the calculation of Non-FISIM output for SIMs and OFIs, respectively.

Table D.6 - SIM: Output of financial services provided for direct payment (Non-FISIM output)

#### NON-FISIM output (=)

- (+) Commission earned:
- on financial instruments trading
- on investment activity;
- on consultancy and wealth management
- on order collection
- on door-to-door of financial products
- on management/operation of multilateral trade/trading system
- on other services.

#### (+) Other receipts

The supervisory reporting schemes require the SIMs to split the item 50 of the P&L account into commissions, which refer only to the revenue from securities intermediary services, and other receipts.

Table D.7 - Non-FISIM Output of financial intermediaries listed in the special register ex Art.107

#### NON-FISIM Output (=)

- (+) Commission earned:
- on factoring
- on servicing
- on cashing and payment services
- on financial leasing
- due to other funding
- on consumer credit services
- on credit card issuing and operations
- on consultancy services
- on the activity of intermediaries in transferable securities and trustees firms
- on guaranteed loans
- on other services
- (+) Other net receipts from services:

Insurance output is measured indirectly since insurance corporations do not charge explicit commissions to the insured parties. The output is calculated as the sum of actual premiums earned and implicit premium supplements (i.e.- the income from the investments of technical reserves) net of claims due, and the changes in technical provisions.

The estimates of output of life and non-life insurance are based on a proper reclassification of the financial statements of insurance corporations gathered by IVASS for supervisory purposes. IVASS collects very detailed information (BS, P&L account and its annexes) that cover all insurance corporations authorized to run their insurance and reinsurance activity in Italy. The calculation of output of insurance is reported in Table D.8.

The estimate of the insurance service is consistent with the ESA 2010 criteria and with the guidelines of GNP Committee Task Force on Insurance Measurement. In particular, the estimation methods comply with the most relevant recommendations:

- to exclude realised and unrealised holding gains from insurance output, i.e. supplementary premiums and change in life insurances reserves;
- to exclude income generated by investment of companies own funds from supplementary premiums, on the basis of the ratio: (own funds) /(own funds + technical reserves);
- to exclude claims settlements costs from the calculations of claims due to policy holders.

Table D.8 - Output and intermediate consumption of direct insurance

Life insurance	Non-Life insurance
Output at basic prices =	Output at basic prices =
+Actual premiums accruing =	+Actual premiums accruing =
+Premiums written during the period	+Premiums written during the period
- Change in the reserve for unearned premiums	- Change in the reserve for unearned premiums
+Balance of other technical items	+Balance of other technical items
+Supplementary premiums =	Supplementary premiums =
+Interest received - Interest paid	+Interest received – Interest paid
+Dividends received	+Dividends received
+Real-estate operating surplus	+Real-estate operating surplus
- Income from insurer own funds	- Income from insurer own funds
	+Balance between income and charges related to investment for policy holders
	who bear the investment risk
- Adjusted claims due =	- Benefits due =
+Claims paid during the period	+Claims paid during the period
+Change in reserve for claims outstanding	+Change in reserve for claims outstanding
- Changes in technical reserves =	- Changes in technical reserves =
+Changes in equalisation reserve	+Changes in life insurance reserve
+Changes in other technical reserves	+Changes in other technical reserves
- Balance of holding gains and losses realised and unrealised	- Balance of holding gains and losses realised and unrealised
- Balance of portfolio account	- Balance of portfolio account
ntermediate Consumption =	Intermediate Consumption =
+Operating costs net of personnel costs	+Operating costs net of personnel costs
+Claims settlements costs	+Claims settlements costs
+Investment management fees	+Investment management fees
+Reinsured services	+Reinsured services

As to <u>holding gains and losses</u>, they are only present in those insurance policies whose benefits are linked to investment funds or market indexes (linked policies). For such insurance contracts, both the assets in which premiums paid by policy holders are invested and the provisions are valued in the profit and loss account at fair value; they thus implicitly contain changes in financial assets due to financial markets trends. To deduct realised gains (losses) on investment and unrealised capital gains (losses) relating to investment of linked policies, the annexes to the profit and loss account provided by IVASS are used: they provide quite a granular information and, in particular, figures on "profit/losses on the realisation on investments" and "unrealised capital gains/losses on unit-linked policies", that have been subtracted from supplementary premiums. Only the "balance between income and charges relating to investment for policy holders who bear the investment risk" is to be considered a component of supplementary premiums, since it does not contain capital gains or losses.

The valuation at market prices of the provisions of linked policies implies that also the change of provisions implicitly includes capital gains and losses. Therefore the change in provisions has been adjusted by the balance of realised and unrealised holding gains and losses: if the balance is positive (indicating capital gains), it is deducted from change of reserves, if it is negative (indicating capital losses), it is added to change of provisions.

<u>Income earned on own funds</u> is excluded from supplementary premiums according to the task force recommendations, separately for life and non-life insurance.

<u>Claim settlement costs</u> were excluded from the calculation of claims to be paid to policy holders and classified as intermediate consumptions of insurance corporations.

The non-life insurance - adjusted claims are derived ex-post as actual claims incurred plus the changes in equalisation provisions.

No claims arising from catastrophic losses have been defined: at the moment there is no specific evidence of insurance companies covering the risks of national disasters in Italy.

Although there has been an increase in the supply of this kind of service in the last few years, according to the information available this was not associated with an increase in the demand by the economic operators. The demand for such an insurance service mainly comes from enterprises, since the existing legislation does not provide for the obligatory subscription of such insurance policies by households.

Reinsurance services are defined as the transfer of part of the risks taken from insurance companies to other specialized insurance or reinsurance companies. ESA 2010 introduced a gross recording of the flows between direct insurers and reinsurers. The production of reinsurance companies has been estimated with reference to the indirect portfolio of authorized insurance enterprises, according to the calculation scheme of nonlife insurance. As a matter of fact, in Italy there are no longer specialized enterprises that supply either life or non-life reinsurance services. The methodology, defined in a working group with experts of the National Association of Insurance Companies (ANIA), uses all the available information and implicitly considers all the elements included in the evaluation of the reinsurance service.

Pension funds in Italy have been regulated by Legislative Decree n. 124 of 21th April 1993, which defines the modalities and requirements to set up pension funds. They are supervised by COVIP (the Italian Supervisory Commission on pension funds), that, in turn, reports to the Ministry of Labor and Social Policies.

Pension funds may be classified in the following categories:

- Contractual (*negoziali* in Italian) pension funds (CPF) represent the technical form chosen by the legislator to set up collective complementary social security in Italy; they are the main category introduced by Legislative Decree 124/1993. They are set up on the basis of collective agreements (for employees), or agreements between workers (for self-employed or professional workers), and are possible exclusively for a category of workers under contract or to which the profession of promoters refer (article 3 of Legislative Decree 124/1993). CPF are legally independent from their promoters (article 4 Legislative Decree 124/1993) and have their own statuary bodies to ensure the performance of fund activity and the pursuing of its aims. The fund rules are provided for in a statute and regulation defined by COVIP. The activity of a pension fund must be authorized by COVIP;
- Open (*aperti* in Italian) pension funds (OPF) are established by Article 9 of Legislative Decree 124/1993, and they may be approached by any possible beneficiary, without any constraint due to contract or professional framework. They are directly set up by the same economic subjects that the law entitled to operate pension funds (asset management companies (SGR) and insurance corporations), and are directly proposed to potential beneficiaries by these subjects. The features of the open fund are set up in a regulation drafted according to the scheme established by COVIP. This type of fund is regulated by the rule on "sollecitazione del pubblico risparmio".
- Pre-existing Funds (*preesistenti* in Italian) (PPF): all the various types of social security existing before the Legislative Decree 124/1993 entered into force could be included into the new regulation framework on complementary social securities, with a defined number of exceptions. PPF could therefore keep operating without requiring any specific authorization but merely informing COVIP.

Output of the pension funds is measured as sum their costs.

Output of holding corporations included in ASIA-Enterprises is estimated through information from the InfoCamere archive. A cost-based approach is followed for units without revenues from the sale of goods and services.

Output of financial auxiliaries (S.126) is calculated on the basis of Frame-SBS for SMEs, following the procedures described for sector S.11 and S.14P. For large enterprises, information on the economic aggregates has been taken from any available administrative source (mainly from the InfoCamere archive).

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

Not applicable.

# 2.2. Balancing adjustments across all sectors

The effect due to balancing of supply and use tables within the National Accounts framework is treated as a separate component that must be added to total output. The subdivision over institutional sectors follows an indirect procedure based on output by industry and sector estimated at previous stages. General government and NPISH are not affected by balancing adjustments.

# 3. P.12 – Output for own final use

Table D.9 - Output for own final use - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	207,606	0
S.11	Non-financial corporations	25,497	0
S.12	Financial corporations	1,115	0
S.13	General government	9,084	0
S.14	Households	171,762	0
	S.14/C Consumer Households	169,660	0
	S.14/P Producer Households	2,102	0
S.15	NPISH	148	0
S.2	Rest of the world	0	0

# 3.1. Description of compilation procedures

#### **USES**

Not applicable

#### **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of private market producers (S.11, S.12, S.14P), consumer households (S.14C), NPISHs (S.15) and GG (S.13)

## A. Sources

Survey on the financial statements of large enterprises (SCI) (DS6)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Survey on Economic outcomes of agricultural holdings (RICA-REA) (DS17)

6th General Census of Agriculture in 2010 (DS16)

Farm Structure Survey (FSS) (DS19)

Statistical register of active enterprises (ASIA-Enterprises) (DS20)

Statistical survey on research and development (DS33)

# B. Methods

The estimation procedure used for P.12 for S.11, S12 and S.14P is the same.

Output for own final use is included in the *Exhaustiveness* category N7 of the Process Table, and it refers to:

- Integration of output of food and beverage service activities (division 56) in order to consider meals and drinks provided free of charge to employees (compensations in kind); the average cost per meal is applied to the number of employees
- Tips that the employees receive from customers in some economic activities (hotels and restaurants, taxis operation and removal services; section H and I).
- Production of Research and Development, software and original works of art and literature made by private producers on own account.
- Major maintenance performed by the companies on their own buildings

These components are assigned to Financial and non-financial corporations and Producer households (S.11, S.12, S.14P) according to the distribution by institutional sector of the relevant labour input by industry.

Sectors S.14C

## A. Sources

Household Expenditure Survey (from 2014) (DS5)

Household Budget Survey (until 2013) (DS27)

Survey on Economic outcomes of agricultural holdings (RICA-REA) (DS17)

6th General Census of Agriculture in 2010 (DS16)

Farm Structure Survey (FSS) (DS19)

Multipurpose survey on households time use (DS21)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Archive of domestic work relationships (DS29)

Uniemens archive (DS28)

General Census of Population and Housing (DS44).

#### B. Methods

Private producers of goods and services for own final use are Households (S.14C) in their function as consumers. Their production includes:

a) Production of services of owner-occupied dwellings (imputed rents). In compliance with the Commission Regulation (EC) No. 1722/2005 of 20 October 2005, the estimate of imputed rentals is carried out using a stratification method based on the

stock of owner-occupied dwellings, that are stratified on the basis of different features of dwellings in order to differentiate the average rents used to give a rental value to the dwellings.

An essential element of the stratification method is the information on the stock of dwellings provided for the benchmark year by the 2011 General Census of Population and Housing.

The average rent used in the calculation of output of imputed dwelling services is the same used for the assessment of actual dwelling services output, therefore it excludes charge for insurance, heating, water, electricity, etc. Information on average actual rentals per stratum are obtained from the Household budget survey: respondents to the survey are asked to indicate the monthly rent paid for their main residence net of all other expenses (managing fees, charges for water, heating, electricity etc.). Variables needed to stratify the housing stock are defined on the basis of detailed information collected by the survey and taking into account the sample robustness. Different rent categories are also identified, distinguishing in particular between social housing rents and market rents. A part of the housing stock is represented by government agencies dwellings built to facilitate specific population groups. These rentals, even if economically significant, are lower than market prices and therefore to estimate imputed rentals only the private market rentals are considered. To ensure the consistency of time series and to correct outliers, HBS data on rent are treated with moving averages before they are used for estimates.

- b) Production of agricultural products for own final use. The value of this component is deducted from the total output of the farm sector (Sect. A NACE Rev.2), which is exhaustive by construction, as it is estimated through a quantity per price procedure.
- c) Construction activities of households for own final use: production by households for own gross fixed capital formation, includes dwellings built or enlarged by the households themselves, and own-account construction, including communal construction undertaken by groups of household (ESA 2010, §3.22). Since this is not market-oriented production, in compiling national accounts this activity is assessed with an indirect estimation procedure based on the use of indirect indicators on the hours worked as recorded in the Use of Time survey, as well as of direct information on some aggregates of the output of small enterprises (1–5 persons employed) operating in the sector, provided by Frame-SBS.
- d) Production of services by paid domestic staff: the value of domestic services obtained by employing paid staff by households is valued by the compensation of employees paid, both declared and undeclared. The estimate is therefore based on the components of compensation of employees: wages in cash and in kind and, where present, social contributions (actual and imputed).

The main sources used for own-account production of services generated by employing paid domestic staff by Households as Consumers (S.14C) are:

- National Social Security Institute (INPS) Archive of domestic work relationships: it includes all the information that employers of domestic staff have to provide when compiling the form for the payment of social contributions. In particular, for each domestic employee, the number of hours worked, hourly pay and paid social contribution are available.
- INPS-Uniemens archive: it provides comparable information on doormen, as to the number of hours worked, wages and paid social contribution.

The estimation method is described in Italy EDP Inventory (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

Sector S.15

## A. Sources

Statistical survey on research and development (DS33)

# B. Methods

Survey on research and development activities provides information to estimate R&D for market and non-market non-profit institutions. The survey is conducted using the methods suggested by the OECD Manual on the statistical measurement of R&D activities (Frascati Manual).

Sector S.2

Not applicable.

# 4. P.13 – Non-market output

Table D.10 - Non-market output - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	293,330	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	282,118	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	11,212	0
S.2	Rest of the world	0	0

## 4.1. Description of compilation procedures

### **USES**

Not applicable

## **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sectors S.11, S.12, S.14

Not applicable

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.15

#### A. Sources

2011 Census of non-profit institutions (CISINP) (DS22)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Uniemens archive (DS28)

#### B. Methods

Output of non-market NPIs is calculated as the sum of the production costs incurred: compensation of employees, intermediate consumption, consumption of fixed capital, other taxes on production (D29) net of subsidies on production (D39).

For the benchmark year 2011, the estimates of intermediate consumption and compensation of employees were mainly based on census information and administrative data.

For units not covered by CISNP and for which administrative data are not available, a labour-based model is applied: the average hourly values of each aggregate, calculated by industry and by enterprise's size class for NPISHs surveyed by CISINP are grossed up to cover also non-surveyed institutions.

In 2011, 86% of NPISHs output has been estimated using census data; 3.4% using administrative sources and 10.5% via extrapolation models.

Data for the years following 2011 are extrapolated through a labour-based method. The components of output are estimated as follows:

- average wages and salaries are updated by means of Social Security Institute data (Uniemens archive) and grossed up through labour input;
- the same contribution rate (employers' social contributions to wages) of enterprises in the same domains is applied;
- average values per hour worked of intermediate consumption are calculated for the year t-1, by industry;
- they are updated through the ratio Intermediate consumption/compensation of employees calculated for market NPIs in the same domains.

Sector S.2

Not applicable.

## 5. P.119 – Financial intermediation services indirectly measured, FISIM

Table D.11 - FISIM by institutional sectors - Year 2015 (million EUR)

						S14			INTERMEDIATE	FINAL	
	S11	S126	S128	S13	S.1	4/C	S.14/P	S15	CONSUMPTION	CONSUMPTION	EXPORT
	(a)	(b)	(c)	(d)	C (e)	DW (f)	(g)	(h)	(i) = (a+b+c+d+f+g+h)	(e)	LAFORT
FISIM on loans	20,115	1,036	44	3,014	6,404	5,825	4,538	284	34,856	6,404	
FISIM on deposits	996	910	104	-141	827	0	146	84	2,099	827	
Domestic production of FISIM	21,111	1,946	148	2,873	7,231	5,825	4,684	368	36,955	7,231	
Imported FISIM	859	0	44	348	-32	0	0	0	1,251	-32	
Total resources	21,970	1,946	192	3,221	7,199	5,825	4,684	368	38,206	7,199	
Exported FISIM											531

## 5.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sector S.11

## A. Sources

The intermediate consumption of FISIM is calculated on the basis of information on stocks of deposits and loans of S.11 and on the relevant market interest rates applied by MFIs on deposits and loans of S.11. The data used are collected from the intermediaries included in the subsectors S122 and S125 and published by the Bank of Italy in the publications of the series "Statistics of the Bank of Italy" (DS9, DS13).

### B. Methods

*Domestic FISIM*: the intermediate consumption of FISIM on deposits of S.11 is calculated by applying to the quarterly average stocks of deposits collected by MFIs (S.122) from S.11 units, the spread between the internal reference rate (see below) and the average market interest rate applied by MFIs on deposits.

The intermediate consumption of FISIM on loans of S.11 is calculated by applying to the quarterly average stocks of loans granted by intermediaries included in S.122 and S.125 to units included in S.11, the spread between the average market interest rate applied by MFIs on loans and the internal reference rate.

The applied market interest rates and the corresponding stocks by maturity are available for loans granted to sector S.11. For this sector the average market interest rate is calculated as the average of the interest rates by maturity weighted on the underlying stocks

The stock of loans is considered net of securitized loans.

Imports of FISIM: please refer to par. 5.2 below.

#### Sector S.12

Intermediate consumption of FISIM is only calculated for FIs other than MFIs and OFIs, namely financial auxiliaries(S.126), insurance corporations(S.128), pensions funds(S.129) and holding corporations(S.127).

*Domestic FISIM*: the intermediate consumption of FISIM on deposits of FIs is calculated by applying to the quarterly average stocks of deposits collected by MFIs(S.122) from these units, the spread between the internal reference rate (see below) and the average market interest rate applied by MFIs on deposits.

The intermediate consumptions of FISIM on loans of FIs is calculated by applying to the quarterly average stocks of loans granted by intermediaries included in S.122 and S.125 to FIs indicated above, the spread between the average market interest rate applied by MFIs on loans and the internal reference rate.

The stock of loans is considered net of securitized loans.

*Imports of FISIM*: please refer to par. 5.2 below

Sector S.13

### A. Sources

The intermediate consumption of FISIM is calculated on the basis of information on stocks of deposits and loans of S.13 and on the relevant market interest rates applied by MFIs on deposits and loans of S.13. The data used are collected from the intermediaries included in the subsectors S122 and S125 (DS9, DS11, DS13).

#### B. Methods

*Domestic FISIM*: the intermediate consumption of FISIM on deposits of S.13 is calculated by applying to the quarterly average stocks of deposits collected by MFIs (S.122) from S.13 units, the spread between the internal reference rate (see below) and the average market interest rate applied by MFIs on deposits.

The intermediate consumption of FISIM on loans are calculated by applying to the quarterly average stocks of loans granted by intermediaries included in the S.122 and S125 subsectors to units included in S.13 sector, the spread between the average market interest rate applied by MFIs on loans and the internal reference rate.

The stock of loans is considered net of securitized loans.

Imports of FISIM: please refer to par. 5.2 below

Sector S.14

#### A. Sources

The intermediate and final consumption of FISIM are calculated on the basis of information on stocks of deposits and loans of S.14 and on the relevant market interest rates applied by MFIs on deposits and loans of S.14. The data used are collected from the intermediaries included in the subsectors S.122 and S.125 and published by the Bank of Italy in the publications of the series "Statistics of the Bank of Italy" (DS9, DS13).

#### B. Methods

Domestic FISIM: the intermediate and final consumptions of FISIM on deposits are calculated by applying to the quarterly average stocks of deposits collected by MFIs (S.122) from producer and consumer households, the spread between the internal reference rate (see below) and the average market interest rate applied by MFIs on deposits.

The average market interest rate is obtained as the average of the rates by maturity (with a maturity of less than 2 years) weighted by the underlying stock.

An ad hoc estimate is made for the sub-sectors of households as producers (S.14P) and as consumers (S.14C), for which separate stocks are published by the Bank of Italy.

Intermediate consumptions and final consumptions of FISIM on loans are calculated by applying to the average stocks (average of the quarters) of loans granted to consumer and producer households by intermediaries included in the S.122 and S.125 sub-sectors, the spread between the average market interest rate applied by MFIs on loans and the internal reference rate.

An ad hoc estimate is made for mortgages contracted by households for the purchase of dwellings and is totally allocated to Intermediate consumption, both whether the mortgage is got by S.14C or S.14P.

The relative average market interest rates are obtained as the average of the weighted rate-based interest rates for the underlying stock.

The stock of loans is considered net of securitized loans.

Imports of FISIM: please refer to par. 5.2 below

Sector S.15

#### A. Sources

The intermediate consumption of FISIM is calculated on the basis of information on stocks of deposits and loans to S.15. The data used are collected from the intermediaries included in the subsectors S.122 and S.125 and published by the Bank of Italy in the publications of the series "Statistics of the Bank of Italy" (DS9, DS13).

### B. Methods

The intermediate consumption of FISIM on deposits of S.15 is calculated by applying to the quarterly average of stocks of deposits collected by MFIs from S.15 units, the differential between the internal reference rate (see below) and the average market interest rate applied from MFIs on deposits.

The intermediate consumption of FISIM on loans is calculated by applying to the average stocks (average of the quarters) of loans granted by intermediaries included in the S.122 and S.125 subsectors to units included in S.15 sector, the spread between the average market interest rate applied by MFIs on loans and the internal reference rate.

No interest rate data exist for deposits and loans of S.15 from 2004 to 2017: hence the interest rates available for 2004 have been updated by applying the trend of the interest rates applied by S.122 to S.14. From 2018 on, the Bank of Italy will provide a specific interest rate for loans of S.15.

The stock of loans is considered net of securitized loans.

Sector S.2

See paragraph 16 of Section D.

#### **RESOURCES**

Sector S.1

Data for S.1 corresponds to resources of S.12.

Sector S.11

Not applicable

## A. Sources

The output of FISIM is calculated on the basis of information on stocks of deposits and loans and on the market interest rates applied by banks on deposits and loans. The data used are collected from the intermediaries included in the subsectors S122 and S125 and published by the Bank of Italy in the publications of the series "Statistics of the Bank of Italy" (DS9, DS11, DS13).

#### B. Methods

Output of FISIM is calculated through a bottom-up methodology. The production is the sum of the FISIM on deposits of financial intermediaries of sub-sector S.122 and the FISIM on loans granted by intermediaries included in sectors S.122 and S.125 "consumed" by each institutional sector different from S.121, S.122 and S.125.

DOMESTIC OUTPUT OF FISIM =  $\sum_{i}$  FISIM ON DEPOSITS<sub>i</sub> +  $\sum_{i}$  FISIM ON LOANS<sub>i</sub>

Where *i* represents a generic institutional sector different from FISIM producers.

Sector S.13, S.14, S.15 Not applicable

Sector S.2

See paragraph 19 of section D.

# 5.2. Allocation of imported FISIM by institutional sector

FISIM imported by each institutional sector, excluding the resident producer sectors, are calculated as the sum of FISIM imported on loans and FISIM imported on deposits. FISIM imported on loans and deposits of each resident institutional sector are estimated through a top-down approach: the total value of imported FISIM on loans and deposits estimated by the Bank of Italy (DS10) is allocated to user institutional sectors according to the underlying stocks (DS13), in order to properly allocate imported FISIM between final and intermediate consumption.

## 5.3. Additional details: internal and external reference rates

To calculate FISIM produced and consumed internally an internal reference rate is used. The *internal reference rate* is calculated as the ratio of the interest receivable on loans within and between subsectors S.122 and S.125 to the stock of loans within and between subsectors S.122 and S.125. The calculation does not include some operators of the subsector S.125, such as Confidi, consumer credit operators and credit card providers. The data on such categories of operators are not included because their implicit interest rate is particularly unstable, and their inclusion in the internal reference rate calculation would have negative repercussions on the total estimate, and would cause an increase in the volatility of the results. The data not included in the calculation represent a small amount of the loans between intermediaries in the sectors S.122 and S.125.

The information used to calculate the internal reference rate is the supervisory reports carried out by monetary financial institutions and other financial intermediaries authorized by the Bank of Italy (DS8).

The calculation of the imported and exported FISIM requires the use of an *external* reference rate. The external reference rate is calculated as the ratio between interest accrued on loans and deposits and the stock of loans and deposits between resident financial intermediaries (S.122 and S.125) and non-resident financial intermediaries (S.122 and S.125).

## 6. P.2 – Intermediate Consumption

Table D.12 - Intermediate Consumption - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	0	1,644,030
S.11	Non-financial corporations	0	1,369,866
S.12	Financial corporations	0	53,986
S.13	General government	0	89,940
S.14	Households	0	122,471
	S.14/C Consumer Households	0	<i>9,584</i>
	S.14/P Producer Households	0	112,887
S.15	NPISH	0	7,768
S.2	Rest of the world	0	0

Intermediate consumption by institutional sectors is estimated by industry (see Table D.14). In general, the data sources and the methodological scheme used to estimate P.2 are similar to the ones used for P.1.

## 6.1. Description of compilation procedures

## **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sectors S.11 and S.14P

## A. Sources

Survey on the financial statements of large enterprises (SCI) (DS6)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Survey on Economic outcomes of agricultural holdings (RICA-REA) (DS17)

6th General Census of Agriculture in 2010 (DS16)

Farm Structure Survey (FSS) (DS19)

Statistical register of active enterprises (ASIA-Enterprises) (DS20)

2011 Census of non-profit institutions (CISINP) (DS22)

### B. Methods

The estimation procedure of intermediate consumption is the same for sectors S.11 and S.14P.

The main source used to estimate intermediate consumption of S.11 and S.14P is the Frame-SBS register. The Frame-SBS component accounts for approximately 91% of total intermediate consumption (Table D.13).

In order to comply with ESA2010 definitions, the following conceptual adjustments are carried out on basic data:

- exclusion of holding gains/losses from changes in inventories;
- exclusion of rents of lands from intermediate consumption;
- adjustment of non-life insurance premiums in order to include in intermediate consumption the insurance service only;
- exclusion of capital losses from expenditures.

Table D.13 - Share on total intermediate consumption of each component of intermediate consumption for market producers (share in %)

	Non-financial corporations	Finanacial Corporations	Producer Households	Market producers
SBS	96.7	14.3	60.9	91.1
Other sources (agriculture, dwelling				
services, financial services)	0.3	82.6	17.8	4.5
Registered legal persons not included in				
SBS	0.2	0.0	0.0	0.1
Registered entrepreneur not included in				
the statistical registers	0.0	0.0	16.3	1.2
Other conceptual adjustments	0.0	0.0	0.0	0.0
NPI	1.0	0.3	0.0	0.9
FISIM	1.7	2.6	3.1	1.8
Other exhaustiveness adjustments	0.2	0.3	0.2	0.2
Total observed output	100.0	100.0	98.3	99.9
Mis-reporting	0.0	0.0	0.0	0.0
Illegal	0.0	0.0	1.7	0.1
Total non-observed output	0.0	0.0	1.7	0.1

Therefore for units included in the scope of SBS regulation, intermediate consumption is calculated at a micro-level for each institutional unit. As a consequence output by institutional sector and by industry is directly measured from micro-data: information on the unit's economic activity, size class of employment and legal status allows to allocate each enterprise to an institutional sector (S.11, S.14P) according to the criteria previously described in paragraph 3 of Section B.

For units out of scope of observation of Frame-SBS, that is units that perform their economic activity in Section A (Agriculture) or in Section L (Real estate activity), and for market non-profit institutions, estimates are obtained with the use of different data sources and methodologies.

Table D.14 - Intermediate consumption by sectors and divisions Nace Rev.2 – Year 2015

Divisions	S.11	S.12	S.13	S.14/P	S.14/C	S.14	S.15	Total
1	4,053 48	0	1 159	10,852 53	0	19,8 62 53	0	23,917
2 3	517	0	0	236	0	236	0	753
4	0	0	0	0	0	0	0	0
5 6	2,314	0	0	0	0	0	0	2,314
7	1,797	0	0	34	ő	34	0	1,831
8	795	0	0	0	0	0	0	795
9	88,837 15,344	0	3	1,947 100	0	1,947	0	90,786 15,444
11	66	ő	0	0	ő	0	ő	66
12	14,827	0	0	393	0	393	0	15,220
13 14	20,079 21,133	0	0	1,030 578	0	1,030 578	0	21,109
15	8,478	ō	0	675	ō	675	20	9,173
16	17,263	0	0	100	0	109	0	17,372
17 18	6,281 40,165	0	0	317 3	0	317 3	0	6,599 40,168
19	39,451	ő	0	53	ő	53	ő	39,504
20	16,034	0	0	0	0	0	0	16,034
21 22	29,338 19,600	0	0	280 401	0	280 401	0	29,618
23	44,407	0	0	55	ő	55	0	44,463
24	49,764	0	1	1,730	0	1,730	0	51,496
25 26	12,907 27,939	0	0	58 151	0	68 161	0	12,976 28,100
27	78,657	0	0	349	0	349	0	79,006
28	46,961	0	0	20	0	20	0	46,982
29	18,856	0	0	35 378	0	36	0	18,892
30 31	14 ,867 11,651	0	0	378 589	0	378 689	0	15,2 4 6 12,3 4 0
32	9,569	0	0	974	ō	974	0	10,543
33	64,602	0	16.8	183	0	183	0	64,953
34 35	4,159 1,048	0	493 256	3 29	0	3 29	16 0	4,671 1,332
36	15,000	0	9,187	13.4	ō	134	ō	24,320
37	1,112	0	9	10	0	10	0	1,131
38 39	39,440 22,689	0	146 246	5,268 324	0	5,268 324	0	44,854 23,258
40	42,895	0	0	13,857	594	14,551	ō	57,446
41	18,831	0	0	2,751	0	2,751	0	21,581
42 43	80,357 40,718	0	0 47	6,622 8,325	0	6,622 8,325	0	86,979 49,088
44	41,872	ő	2 57	4,053	ō	4,0 53	ō	46,182
45	8,602	0	1	21	0	21	0	8,624
46 47	10,933 37,233	0	0 494	0 397	0	0 397	0 2	10,933 38,126
48	3,087	ō	0	112	ō	112	ō	3,199
49	12,591	0	53	889	0	889	5	13,539
50 51	27,882 6,359	0	1,261	9,056 74	0	9,056 74	3 2	38,202 6,435
52	3,028	ő	0	92	ō	92	1	3,121
53	6,498	0	2	2	0	2	0	6,502
54 55	21,272 19,847	0	0 403	269 397	0	269 397	0	21,541
56	5,259	0	15	171	o	171	ō	5,445
57	0	30,949	0	0	0	0	0	30,949
58 59	0 2.777	13,949 8,932	0	0 1347	0	0 1,347	0	13,949
60	15,066	0	121	2,431	ō	2,431	0	17,618
61	0	0	0	. 0	8,890	8,890	0	8,890
62 63	5,320 14,574	0 156	0 19	6,550 635	0	6,550 635	8	11, 8 78 15, 3 8 5
64	11,114	0	81	2,767	0	2,767	0	13,962
65	1,998	0	2,374	133	0	133	254	4,759
66 67	11,706 7,112	0	0	548 1,589	0	648 1,689	0 2	12,354 8,802
68	79	0	170	280	0	280	0	529
69	6,579	0	0	293	0	293	0	6,872
70 71	1,277 9.361	0	29 183	6 482	0	6 482	0	1,313 10,026
72	1,405	0	0	108	ō	108	0	1, 513
73	7,039	0	386	542	0	642	0	8,068
74 75	22,121 0	0	1,391 28,609	1,054	0	1,0 54	0	24,566
76	4,943	0	4,909	339	0	339	202	10,394
77	15,379	0	30,199	4,937	0	4,937	366	50,778
78 79	4,474 2,556	0	593 2,738	67 52	0	67 52	14 9 576	5,283 5,922
80	1,790	0	3 17	521	o	521	528	3,156
81	461	0	1,008	3	0	3	367	1,839
82 83	9,173 6,588	0	2,472 846	248 593	0	248 593	0 1,859	11,892 9,885
84	3,096	0	21	0	0	993	3,328	6,444
85	942	0	0	455	0	4 55	0	1,397
86 87	5,624 0	0	274 0	3,036	0	3,036	79 0	9,013
88	0	0	0	ō	ō	0	0	0
Total	1,369,866	53,986	89,940	112,887	9,584	12 2 , 4 7 1	7,768	1,644,030

For institutional units operating in agriculture (section A of NACE Rev.2), out of scope of SBS regulation, a quantity per price approach is adopted to estimate intermediate consumption.

The quantities are taken from statistical surveys that collect detailed data for each item. The prices used are those collected through the survey on prices of products purchased by farmers. The other expenses, such as agricultural services and other goods and services, are estimated through specific elaborations on RICA REA survey data.

For this section, intermediate consumption by industry is disaggregated by institutional sector (sectors S.11, S.14P) by means of an indirect methodology. The indicator used is based on the section's labour input by industry.

For units of section L (Real estate activities), intermediate consumption of Frame-SBS is integrated with expenses for maintenance carried out by natural persons for non-residential buildings they own and rent out, which are measured using the costs/output ratio of dwellings. This amount is entirely allocated to the sector of Producer Households (S.14P).

Intermediate consumptions of market NPIs are estimated for the benchmark year 2011 with the accounting information available from the Census of Non-profit Institutions and are extrapolated to the following years with appropriate indicators based on Frame-SBS and on employment data.

Social cooperatives are already included in Asia-enterprises and economic data are available in the Frame-SBS system.

Intermediate consumptions of market NPIs are assigned to Non-financial corporations (sector S.11) except for Bank Foundations that are classified in the Financial sector (S.12).

Other conceptual adjustments are necessary to account for:

- 1. inclusion of FISIM. FISIM are calculated separately for each institutional sector. This component of intermediate consumption is indirectly subdivided for each sectors across industry on the basis of the structure of output.
- 2. exclusion from the intermediate consumption of expenses relating to research and development purchases, as well as those incurred for mineral exploration. The first component is allocated by sector with an indicator based on intermediate consumption obtained at previous stages of the estimation procedure; as for mineral exploration the component is attributed to Non-financial corporations (sector S.11).

For the exhaustiveness adjustments that refer to the activities listed below, the sources used, the estimation method and the allocation to institutional sectors is as for P.1:

- 1. Non-structured micro-enterprises, that can be identified with the entrepreneur himself (category N5 of the Process Table *Registered entrepreneur is not included in statistics*)
- 2. Producers included in ASIA-Enterprises but outside SBS scope of observation (category N4 of the Process Table Registered legal person is not included in statistics)
- 3. Special Purpose Entities (SPE) (category N4 of the Process Table *Registered legal person is not included in statistics*)

- 4. Rents paid by undeclared entrepreneurs, that is those evade any administrative, fiscal and social security obligation (category N1 of the Process Table *Producer should have registered*)
- 5. Income deriving from illegal activities

#### A. Sources

Financial Statements of Insurance Corporations (DS2)

COVIP Annual Report (DS3)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Statistical register of active enterprises (ASIA-Enterprises) (DS20)

InfoCamere archive of financial statements (DS24)

Financial statement of the Bank of Italy (DS38)

#### B. Methods

The intermediate consumption of the financial corporations is estimated separately by sub-sectors as for output.

The approach used for the Central Bank is treated when describing P.11 (paragraph 2, sector S.12).

The estimates of the intermediate consumption of MFIs is compiled using financial statement data gathered by the Bank of Italy. Table D.15 shows the procedure for calculating intermediate consumption of MFIs.

### Table D.15 - MFI: Intermediate consumption

# Intermediate consumption (=)

- (+) Commission paid:
  - on guaranteed loans;
  - on credit derivatives;
  - on management and intermediation services;
  - on cashing and payment services
  - other services
- (+) Other operating costs
  - IT expenses;
  - Paid rents;
  - expenses on goods and services;
  - non-life insurance service charges;
  - advertising expenses:
  - expenses for other personnel, administrators, statutory auditors

"Commission paid" are defined by the item 50 of the P&L account; the "Other operating costs" are defined by the item 150 sub b) of the P&L account. Intermediate consumption is adjusted to include the expenses for administrators, statutory auditors and other personnel which are registered in compensation of employees in the financial statement (item 150 sub a) of the P&L account.

Intermediate consumption of OFIs is estimated from supervisory data provided by the Bank of Italy. Table D.16 and Table D.17 show the calculation of intermediate consumption for SIMs and OFIs, respectively.

Table D.16 - SIM: Intermediate consumption

#### Intermediate consumption (=)

- (+) Commission paid:
- on financial instrument trading
- placement
- on wealth management
- on order collection
- on consultancy
- on products and services
- on other services
- (+) Other operating costs
- IT expenses
- Paid rents:
- expenses for other personnel, administrators, statutory auditors
- other expenses

Table D.17 - Intermediate consumption of financial intermediaries listed in the special register ex Art.107

#### Intermediate consumption (=)

- (+) Commission paid:
- on bank current accounts
- on other financial services
- on core business
- on guaranteed loans
- on third parties intermediation
- on other commissions
- (+) Operating costs net of personnel cost
- administrative expenses not including income from paid employees:
- expenses for other staff, administrators, auditors;
- other operating costs
- (+) Other charges

The estimate of intermediate consumption for insurance corporations is based on a proper reclassification of the financial statements of insurance corporations gathered by IVASS for supervisory purposes. The calculation of intermediate consumption is reported in Table D.9 of paragraph 2.

The intermediate costs of reinsurance companies have been estimated with reference to the indirect portfolio of authorized insurance enterprises, according to the calculation scheme of non-life insurance. The reinsurance service associated with the transfer and retrocession of premiums has been included in the estimate of the intermediate consumption of non-life and life insurance companies.

Intermediate consumption of holding corporations included in ASIA-Enterprises is estimated through information from the InfoCamere archive.

Intermediate consumption of financial auxiliaries (S.126) is calculated on the basis of Frame-SBS for SMEs, following the procedures described for sector S.11 and S.14P. For large enterprises, information on the economic aggregates has been taken from any available administrative source (mainly from the InfoCamere archive).

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14C

#### A. Sources

Household Expenditure Survey (from 2014) (DS5) Household Budget Survey (until 2013) (DS27) General Census of Population and Housing (DS44).

#### B. Methods

This transaction for consumer households (S.14C) includes:

- a) intermediate consumption related to services of owner-occupied dwellings (imputed rents) includes FISIM and the ordinary maintenance not typically carried out by tenants. Expenditure for decoration, maintenance and repair of dwellings not typically carried out by tenants has been estimated using two main sources of information: the Household budget survey (HBS) and the Housing Census. In the benchmark year, data on the stock of dwellings are provided at a high level of detail by the Housing Census (HC) available every ten years. The HBS is a sample survey that provides data on actual rents and includes a specific section on minor maintenance of dwellings. The same general approach is used to estimate the output and the intermediate consumption of maintenance and repairs needed to keep the dwellings in good working order. The method adopted is based on the 'actual average expenditure' per square meter (for tenants and owners) and it has been calculated with the aim to standardize expenditures with respect to surface of dwellings. In order to obtain the total value of intermediate consumption, the average expenditure has been grossed up to the whole stock of dwellings measured by the HC, detailed for typologies of dwellings and expressed in terms of square meters. Costs for insurance, heating, water, electricity etc., are excluded from the calculation of output, and as a consequence they are excluded from intermediate consumption.
- b) Intermediate consumption related to construction activities of households for own final use; costs related to production by households for own gross fixed capital formation. It includes dwellings built or enlarged by the households themselves, and own-account construction, including communal construction undertaken by groups of household (ESA 2010, §3.22). Since this is not market-oriented production, in compiling national accounts this activity is assessed with an indirect estimation procedure.

Sector S.15

#### A. Sources

2011 Census of non-profit institutions (CISINP) (DS22)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

### B. Methods

Intermediate consumption of non-market NPIs is mainly based on census information and administrative data. For units not covered by CISNP and for which administrative data are not available, a labour-based model is applied.

Sector S.2

Not applicable.

#### RESOURCES

Not applicable

## 6.2. Balancing adjustments across all sectors

The effect due to balancing of supply and use tables within the National Accounts framework is treated as a separate component that must be added to total intermediate consumption. The subdivision over institutional sectors follows an indirect procedure based on intermediate consumption by industry and sector estimated at previous stages. General government and NPISHs are not affected by balancing adjustments.

# 7. P31 - Individual final consumption expenditure

Table D.18 - Individual final consumption expenditure - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses	
S.1	Total economy	0	1,190,543	
S.11	Non-financial corporations	0	0	
S.12	Financial corporations	0	0	
S.13	General government	0	183,994	
S.14	Households	0	997,438	
	S.14/C Consumer Households	0	997, <i>4</i> 38	
	S.14/P Producer Households	0	0	
S.15	NPISH	0	9,110	
S.2	Rest of the world	0	0	

## 7.1. Description of compilation procedures

Individual consumption includes:

- household final consumption expenditure;
- final consumption expenditure of NPISHs;
- individual consumption of General Government, including social transfers in kind.

#### **USES**

Sector S.1

Individual final consumption expenditure payable for total economy (S.1) are obtained as sum of uses of resident sectors.

Sectors S.11, S12
Not applicable

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

#### Sector S.14

Household final consumption expenditure (HFCE) is estimated according to the functional classifications (COICOP), that groups expenditure on goods and services in homogenous categories according to the purpose. To include HFCE the SUT system, it must be classified by product, according to CPA: hence, a bridge table is applied to switch from a functional classification to a product classification. The bridge table is a rectangular matrix of 256 groups of products and 62 functions.

The main sources used for estimating HFCE are:

- Household Expenditure Survey (HBS)
- Census of Population and Housing
- Survey on aspects of daily life
- Other Istat surveys
- Commodity-flow method
- Stratification of the housing stock (to estimate expenditure on actual and imputed rents)
- Administrative and other sources.

The use of surveys on the demand side and their integration with other sources of information ensures a good coverage, since no source, by itself, is appropriate for estimating the overall consumption by COICOP item. To give an example, the reliability of HBS data is high for non-durable goods (e.g. food) and much lower for semi-durable and durable goods, whereas the reliability of the commodity flow method is high for durable and semi-durable goods, and low for non-durable goods. The comparison of independent sources allows to capture a part of non-observed economy and to integrate phenomena that can hardly be measured on the basis of information collected from households.

HFCE is adjusted to include FISIM.

Consumption of goods and services stemming from illegal activities (drugs, smuggled tobacco and prostitution) are also added, while some goods purchased and used in the production process by illegal operators are reclassified into intermediate consumption.

A demand side approach is applied for the trafficking of illicit drugs, based on a quantity per price model: the consumption expenditure is equal to the number of users (consumers) multiplied by the average consumed quantity and by street prices. A supply side approach is adopted to estimate prostitution services, that takes into account the number of different types of prostitution (i.e., street, apartment, night club) and the relevant variables (average costs, daily average performances per year, intermediate consumption). Smuggling of cigarettes is estimated through a supply-side approach, too, based on information on the amount of goods seized, on import and retail prices of goods

smuggled as well as on some assumptions (specifically, on the seizure rate<sup>20</sup> and on the share of illicit import of cigarettes that will be used in the domestic market).

#### Sector S.15

Final consumption expenditure of NPISHs is all individual. The estimate is derived from output calculation. Referring to non-market production units, output is evaluated as the sum of costs incurred for its implementation (intermediate consumption, compensation of employees, depreciation and other production taxes, net of subsidies for production). Final consumption expenditure is obtained from output subtracting expenses incurred in the production of goods used as investments for own use (own-account production of software and research and development) and as payments for sales of goods and services to households (payments for non-market output). For the benchmark year 2011, Non-Profit Institutions (NPIs) expenditure estimation was based on information provided by the 2011 Non-profit Institutions Census (CISINP). This source allowed a direct estimation method of the economic flows for the detected non-market NPIs (NPISHs); then an extrapolation model was applied for active NPISHs not covered by the census. The availability of census data made it possible to prepare a generalized estimation approach for the different categories of non-profit institutions, with the only exception of operators exclusively dedicated to the activity of religious organizations in worship practice, which are not covered by the census. In the years different from the benchmark year, extrapolation methods are used to compile the flows of NPIs, both market and nonmarket (NPISHs), excluding Social cooperatives, that are included in the scope of Frame-SBS. As a matter of fact, not any annual survey exists for these units and an indirect approach is performed, through a labour-input based model.

Every year labor input in terms of jobs and hours worked is estimated for NPI, separately for market and non-market units.

As for NPISHs the components of output, it is compensation of employees and intermediate consumption, are updated as follows:

- average wages and salaries are updated by means of Social Security Institute data (Uniemens archive) and grossed up through labour input;
- the same contribution rate (employers' social contributions to wages) of enterprises in the same domains is applied.

Sector S.2
Not applicable

#### RESOURCES

Not applicable

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<sup>&</sup>lt;sup>20</sup> It represents a measure of quality and quantity actions against the phenomenon by police forces.

## 8. P.32 - Collective consumption expenditure

Table D.19 - Collective consumption expenditure - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	0	127,802
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	127,802
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	0

# 8.1. Description of compilation procedures

Final consumption expenditure (P.3) by government includes two categories of expenditures:

- (a) the value of the goods and services produced by general government itself (P.1) other than own-account capital formation (corresponding to P.12), market output (P.11) and payments for non-market output (P.131);
- (b) purchases by general government of goods and services produced by market producers that are supplied to households, without any transformation, as social transfers in kind (D.632). General government pays for these goods and services that the sellers provide to households.

While (b) are classified as individual consumption expenditure (P.31), services in (a) can be both individual (for example, education and health services directly provided by S.13), and collective (defence, public order and safety).

The proper evaluation of final consumption expenditure for General Government and its subsectors, is achieved through the following steps:

- the analysis of produced and consumed good and services (output);
- the distinction between market and non-market services;
- the analysis of revenues from sale of output and, of expenditure for social services in kind.

The correct allocation of individual and collective services is obtained through the functional classification *COFOG* 

#### **USES**

Sector S.1

In

Individual final consumption expenditure payable for total economy (S.1) are obtained as sum of uses of resident sectors.

Sectors S.11, S.12, S.14, S.15

Not applicable

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2
Not applicable

#### RESOURCES

Not applicable

# 9. P.51G – Gross fixed capital formation

Table D.20 - Gross fixed capital formation - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses	
S.1	Total economy	0	279.677	
S.11	Non-financial corporations	0	148.526	
S.12	Financial corporations	0	4.648	
S.13	General government	0	36.643	
S.14	Households	0	89.302	
	S.14/C Consumer Households	0	62.682	
	S.14/P Producer Households	0	26.620	
S.15	NPISH	0	558	
S.2	Rest of the world	0	0	

## 9.1. Description of compilation procedures

## **USES**

Sector S.1

A number of different methods are used to compile gross fixed capital formation (GFCF), namely:

- commodity-flow approach;
- expenditure approach;
- quantity per price approach;
- other indirect approaches.

Through the *commodity-flow approach*, the value of goods intended for capital formation is calculated by subtracting from the total amount of resources of capital goods the amount intended for other uses. The estimate is made at 6 digits of the CPA classification detail. It is used to calculate most part of capital formation in machinery and equipment, in intellectual property products (purchased software and artistic originals), in agricultural assets (livestock) and in dwellings (services of purchases and sales of residential and non-residential real estate on own assets);

Another method widely used in estimating gross fixed capital formation is the *expenditure approach*, using the accounting documentation that reports the expense incurred by enterprises for the purchase of capital goods.

The *quantity per price approach* is mainly used in the estimate of the new private non-residential and residential buildings, of legal expenses.

Finally, for certain types of capital formation, calculation methods are used that cannot be directly ascribed to the three approaches described above, and that do not have common characteristics. *Indirect approaches* contribute significantly to the estimation of artistic originals, software produced for own final use, research and development.

Some adjustments for exhaustiveness are made, in particular an estimate of unauthorized buildings is included.

In 2015 capital formation in construction represents 48% of total gross fixed capital formation (GFCF) (26% of which AN.111 residential buildings and 22% AN.112 other structures and AN.113 land improvements), capital formation in AN.113 machinery and equipment 35%, capital formation in AN.115 cultivated biological resources 0.2% and capital formation in AN.117 intellectual property products 17% (of which AN.1171 research and Development 8%).

#### Sector S.11

#### A. Sources

Survey on financial statements of large enterprises (SCI) (DS6)

Survey on small and medium-sized enterprises and on the exercise of arts and professions (PMI) (DS7)

Economic outcomes of agricultural holdings (RICA-REA) (DS17)

Residential and non-residential real estate sales (DS30)

UNRAE vehicle register (DS31)

#### B. Methods

P.51G by institutional sector is estimated at a high level of detail, by industry (98) and with the following asset breakdown:

- dwellings (part of AN.111),
- costs of ownership transfer for residential buildings (part of AN.111),
- buildings other than dwellings (AN.1121),
- costs of ownership transfer for other buildings (part of AN.1121),
- other structures (AN.1122),
- land improvements (AN.1123),
- road transport equipment (new one) (part of AN.1131),
- road transport equipment (second hands one) (part of AN.1131),
- repair of motor vehicles (part of AN.1131),
- aircraft and satellites (part of AN.1131),
- locomotives and railway rolling stock (part of AN.1131),
- ships (part of AN.113) (part of AN.1131),
- hardware (part of AN.1132),
- communication equipment (part of AN.1132),
- other machinery and equipment (part of AN.1139),
- furniture (part of AN.1139),
- weapon systems (AN.114),
- cultivated biological resources tree, crop and plant resources yielding repeat products (part of AN.115),

- cultivated biological resources animal resources yielding repeat products (part of AN.115),
- research and development (AN.1171),
- mineral exploration (AN.1172),
- software and databases (AN.11731+AN.11732),
- entertainment, literary or artistic originals (AN.1174).

The estimates of GFCF by institutional sector are obtained applying a top-down approach: in every industry, the value of GFCF by asset calculated for S1 is appropriately distributed to all sectors engaged in that activity, given some constraints for GFCF of S.13, S.12 and S.15, as described below.

Therefore, by construction GFCF by institutional sector (reported in table 8. Non-financial accounts by sector, ESA 2010 TP) is totally consistent with:

- the value of GFCF calculated for Total economy (S.1), recorded in the supply and use table and included in the GDP value);
- the value of GFCF by industry and by asset (table 22. Cross-classification of gross fixed capital formation by industry and by asset, ESA 2010 TP);
- the value of GFCF for General government within the consolidated annual account of General government.

The methodology is carried out in three phases:

- an independent estimation of GFCF value is calculated for the following sectors: Financial corporations (see below, Sector S.12), General government (see below, Sector S.13) and Non-profit institutions serving households (see below, Sector S.15), by industry and by asset; estimates for these sectors, in fact, rely on specific sources and methods;
- from the total value of GFCF of S.1, by industry and by asset, the values calculated in the first step are subtracted;
- finally, the remaining part of GFCF is assigned to Non-financial corporations and Households, by industry and by asset on the basis of relevant shares (partition coefficients). The procedure to derive these shares differs by type of asset, according to the data sources.

GFCF in <u>dwellings</u> (net of S.12, S.13 and S.15) is divided using information derived from residential and non-residential real estate sales (DS30). For every transaction the following information is available:

- date,
- type of building,
- size,
- price,
- any tax paid on the transactions,
- nature of the seller/purchaser: individuals (i.e. private persons, PP) or others (NPP)
- if the seller is other than a private person (NPP), also the fiscal code is indicated.

Dwellings owned by PP are totally assigned to Households. Information on taxes paid for every transaction allows to get more detailed estimates, in particular the distinction between:

- dwellings purchased by households for own-occupancy as residence home (for which particular tax relieves exist), assigned to consumer households, S.14C;
- households' dwellings purchased for investment purposes and rented, assigned to producer households S.14C.

As to NPP, in order to assign the acquisition/disposal to the relevant buyer/seller institutional sector, information provided by DS30 is matched with statistical registers (ASIA Enterprises-DS20, S.13 list and other registers) by fiscal code. On the basis of the information provided by such sources (size class/legal form/activity of the unit), it is possible to identify the institutional sector of each unit, according to the Italian criteria used in National Accounts for defining institutional sectors.

For <u>other types of asset</u> (hardware; furniture; machinery and equipment; non-residential buildings; land improvements; tree, crop and plant resources yielding repeat products; animal resources yielding repeat products; software and databases):

- in industries where S.11 or S.14P represent more than 95% (in terms of hours worked), GFCF by asset is divided between the two sectors using the weight of each sector (% in terms of hours worked);
- in all the other industries, GFCF by asset is assigned to S.11 and S.14 on the basis of information derived from structural business statistics (SBS): Survey on financial statements of large enterprises (SCI) (DS6), Survey on small and medium-sized enterprises and on the exercise of arts and professions (PMI) (DS7), Economic outcomes of agricultural holdings (RICA-REA) (DS17). They represent the main sources used to calculate P.51G by industry, too.

From SBS, the values  $a_{kji}$  are obtained, where:

a = acquisitions of asset j, in industry i, for units with size class + legal form k i (1, ..., 98) = industry

j(1,..., 8) = asset (hardware; furniture; machinery and equipment; non-residential buildings; land improvements; tree, crop and plant resources yielding repeat products; animal resources yielding repeat products; software and databases).

k (1,2) where k = 1 identifies enterprises with size class 1-5 people employed and legal form sole proprietorships and simple partnerships;

k = 2 identifies enterprises with size class 6+ people employed.

According to the Italian criteria used to define S.11 and S.14P (see paragraph 3 of section B),

- a<sub>1ji</sub> is a first raw estimate of GFCF calculated for Producer households in asset j in industry i;
- a<sub>2ji</sub> is a first raw estimate of GFCF calculated for Non-financial corporations in asset j in industry i.

Then the weight of each sector is calculated:

$$w_{sij} = \frac{\mathbf{a}_{kij}}{\mathbf{a}_{.ij}}$$

where

$$s = sector (S.11 \text{ or } S.14)$$
  
 $a_{.ij} = a_{1ij} + a_{2ij}$ 

This weight  $w_{sij}$  represents the *partition coefficient* used to divide the amount of GFCF by industry, **net** of General government, Financial corporations and Non-profit institutions serving households:

$$GFCF_{S:ij} = [GFCF_{S:12ij} - (GFCF_{S:12ij} + GFCF_{S:13ij} + GFCF_{S:15ij})] \times w_{sij}$$

where

 $GFCF_{sij} = GFCF$  of sector s (Non-financial corporations or Households) in industry i and asset j  $GFCF_{S.12ij} = GFCF$  of S.1 in industry i and asset j  $GFCF_{S.12ij} = GFCF$  of S.12 in industry i and asset j  $GFCF_{S.13ij} = GFCF$  of S.13 in industry i and asset j  $GFCF_{S.15ij} = GFCF$  of S.15 in industry i and asset j

As to <u>non-residential buildings</u>, a share of the total is assigned to Households as producers, S.14C, that represents the investment by natural persons (not covered by SBS as they are not enterprises) who acquire non-residential buildings in order to rent them: in this case a market output of households is identified (NACE Div. Real estate activities 68, Renting and operating of own or leased real estate, 68.2).

Such a share of the total GFCF in non-residential buildings has been calculated as the percentage of non-residential buildings rented by natural persons: this information is provided by the Revenue Agency, that makes available the distribution of the stock of non-residential buildings by type of owner (individuals/enterprises) and by type of use (instrumental buildings/buildings acquired for investment purpose): in average around 14% of the total non-residential buildings are rented by the owners who are individuals and are then assigned to Producer Households.

The remaining share of GFCF in non-residential buildings is assigned to all the other sectors (S.11, S.12, S.13, S.15) and to the small enterprises included in S.14P. The same procedure described above for the other assets (using SBS information on acquisitions) is used:

$$GFCF_{sij} = [GFCF_{S.1ij} - (GFCF_{S.14I} + GFCF_{S.12ij} + GFCF_{S.13ij} + GFCF_{S.15ij})] \times w_{sij}$$

where

s = sector (S.11 or S.14-enterprises) j = non-residential buildings i = industryGFCF<sub>S.14I</sub>= GFCF in non-residential buildings of S.14-individuals =14% GFCF in non-residential buildings calculated S.1.

For GFCF in <u>road transport equipment</u>, the same procedure is used but *partitional coefficients* are calculated from an administrative data source, the public motor vehicle register (DS31), provided to Istat by UNRAE (Unione Nazionale Rappresentanti Autoveicoli Esteri, Association of foreign car makers), at micro level.

The register includes the following information:

- brand, model, type of supply, engine displacement and other technical variables for

the vehicle:

- fiscal code of both, the buyer and the seller;
- value of the invoice.

Two types of registration are recorded:

- First registrations (records used to estimate GFCF in new motor vehicles)
- Changes of ownership (records used to estimate GFCF in second-hand vehicles).

By matching information provided by the public motor vehicle register and all the available statistical registers, by fiscal code, it is possible to identify the nature of the ownership (individuals, enterprises). According to the type of ownership, cars and caravan are allocated to GFCF if the owners are:

- enterprises,
- individuals recorded in the business registers and carrying out one of the following activities: taxi and car and driver hire, driving schools, trade intermediaries, insurance agents, car rental, and financial promoters (NACE, classes 46.11-46.19, 49.32, 66.19, 66.22, 77.1).

All the other cars and caravan whose owner is an individuals are considered as Household consumption.

Other types of motor-vehicles (trucks and bus) are allocated entirely to GFCF.

On the basis of information provided by statistical registers (size/legal form/activity of the unit), it is possible:

- 1. to identify the sector of each unit, according to the Italian criteria used in National Accounts for defining Non-financial corporations and Households;
- 2. then, to calculate the weight of each of these two institutional sectors on their sum, by industry;
- 3. to apply these partition coefficients to the total value of GFCF in road transport equipment net of S.12, S.13 and S.15, by industry.

As to those assets for which no information is available from business statistics and administrative sources, the estimation of P51G is based on specific hypothesis:

- GFCF (net of S.12, S.13 and S.15) in repair of motor vehicles are proportionally distributed to S.11 and S.14 using the shares of GFCF in road transport equipment calculated for these sectors,
- GFCF (net of S.12, S.13 and S.15) in costs of ownership transfer are proportionally distributed to S.11 and S.14 using the shares of GFCF in dwellings and other buildings and structures calculated for these sectors;
- GFCF (net of S.12, S.13 and S.15) in rail transport equipment, other structures and research and development are totally assigned to S.11;
- GFCF (net of S.12, S.13 and S.15) in other assets (aircraft, ships, entertainment, literary or artistic originals) in each industry are assigned on the bases of the weight of each sector in that industry, expressed in terms of worked hours;
- weapon systems is zero by definition for S.11 and S.14.

#### Sector S.12

## A. Sources

Annual financial statements of insurance corporations (DS2),

Survey on financial statements of large enterprises (SCI) (DS6),

Survey on small and medium-sized enterprises and on the exercise of arts and professions (PMI) (DS7)

Supervisory reporting by the FIs to the Bank of Italy (DS8),

Annual financial statements of banks (DS32),

Statistical survey on research and development in business enterprises (DS33).

### B. Methods

P.51G is calculated for Bank of Italy and banks on the basis of information available in the their annual financial statements. Data for banks are provided by the Italian Banking Association (ABI), at micro level.

Values of GFCF are estimated from the detailed information reported in the "Notes to financial statements" on annual acquisitions, major improvements and disposals, by type of asset: instrumental land, instrumental buildings, land acquired for investment purpose, buildings acquired for investment purpose, furniture, machinery, other instrumental assets.

The information from financial statements of banks is integrated with other sources; in particular, for estimating software and hardware, information reported in the supervisory data base collected by the Bank of Italy (DS8) is used.

No aggregated and detailed information is available for the other financial intermediaries classified in S.123. As a consequence, to estimate the P.51G of this sub-sector, an indirect method is applied, assuming that they have a production system quite similar to the one of banks (capital and labor resources structure): per capita values of gross fixed capital formation (*GFCF/jobs*), by asset, calculated for banks are applied to jobs calculated in Nation Accounts for the other financial intermediaries.

An exception is the estimate of P.51G of Non-Money Market Funds: the supervisory data base collected by the Bank of Italy (DS8) for these units provides very detailed information on the acquisitions, major improvements and disposals of buildings, by type. The estimate of P.51G for Insurance corporations derives from the aggregated annual financial statements items (DS2) provided by the Supervisory Authority on Insurance Companies (IVASS).

The estimate of P.51G for financial auxiliaries derives from the value of P.51G calculated for the NACE Rev. 2 section 66 "Activities auxiliary to financial services and insurance activities", using information provided by business surveys (DS6 and DS7).

GFCF in R&D and in software for own final use, not covered by the mentioned sources, equal the values calculated for NACE 64, NACE 65 and NACE 66. Information from the Istat survey on research and development in business enterprises (DS33), based on the Frascati Manual, is used.

Sector S.13

The estimation method is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14

Data sources and estimation methods for S.14 are described above (see Sector S.11).

Sector S.15

No information is available from statistical and administrative sources.

Therefore, the value of P.51G for this sector is obtained indirectly, assigning to S.15 a share of gross fixed capital formation, by industry and by asset, that equals the weight of this sector in that industry in terms of worked hours.

An exception is the value of GFCF in Research and Development. Information from the Istat survey on research and development in business enterprises (DS33), based on the Frascati Manual, is used.

Sector S.2
Not applicable

#### RESOURCES

Not applicable

## 10. P.52 – Changes in inventories

Table D.21 - Changes in inventories - Year 2015 (million EUR)

Institut	Institutional sectors Resources			
S.1	Total economy	0	4.018	
S.11	Non-financial corporations	0	4.494	
S.12	Financial corporations	0	5	
S.13	General government	0	272	
S.14	Households	0	-754	
	S.14/C Consumer Households	0	0	
	S.14/P Producer Households	0	-754	
S.15	NPISH	0	0	
S.2	Rest of the world	0	0	

# 10.1. Description of compilation procedures

#### **USES**

Sector S.1

The initial estimate of changes in inventories by industry is obtained using as a principal source Frame-SBS data. The estimates are carried out at the level of 98 industries, by type of inventories and by product (256).

The data available refer to changes in inventories (flow variables); definitions and valuation criteria are in line with the principles of business accounting. Transition to the national accounts definitions is obtained by excluding the holding gains/losses component and adding an increase for the net operating surplus in the evaluation of inventories of work in progress.

After this step, independent estimates for agriculture and the General Government sector are included, since they refer to industries/institutional sectors out of the scope of observation of Frame-SBS. Changes in inventories of agricultural products are estimated using data derived from the survey "Estimate of areas and outputs of farm cultivations". Changes in inventories for S.13 are reported in General Government non-financial accounts (DS15) are used for estimating P.52.

# A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

#### B. Methods

P.52 by institutional sector is estimated by industry (98) and by type of inventories:

- materials and supplies;
- work-in-progress;
- finished goods;
- goods for resale

The estimates of P.52 by institutional sector are obtained applying a top-down approach: in every industry, the value of changes in inventories by type calculated for S.1 is distributed to all sectors engaged in that activity.

Since estimates for S.1 are already adjusted in order to be compliant with ESA2010 definitions and exhaustiveness, also the derived values for S.11 are compliant and exhaustive.

Given the estimation method, by construction P.52 by institutional sector is totally consistent with:

- the value of P.52 calculated for Total economy (S.1), recorded in the supply and use table and included in the GDP value);
- the value of P.52 by industry and by type;
- the value of P.52 for General government within the consolidated annual account of General government.

From the total value of P.52 available for S.1, by industry and by type, the value for S.13 is subtracted; then, the remaining part is assigned to Non-financial corporations, Financial corporations and Households, by industry and by type of inventories on the basis of relevant shares (*partition coefficients*).

In NACE Section A(agriculture), P.52 is divided between S.11 and S.14 according to the weight of each sector (in terms of worked hours).

In all the other industries, changes in inventories by type is assigned to S.11 and S.14 on the basis of information derived from Frame-SBS (DS12), that is the same source used to calculate P.52 by industry, too (see section Sector S.1). Frame-SBS (DS12) provides data on change of inventories for materials and supplies; work-in-progress; finished goods; goods for resale. Information is on the annual flows and not on the end-of-year stocks. Furthermore, when the value of P.52 is calculated for Total economy (S.1), micro data included in Frame-SBS (DS12) are treated in order to be compliant with ESA2010 definitions (see section Sector S.1); therefore, no other adjustment is required for the derived values of S.11.

From Frame-SBS, the values of changes in inventories  $a_{kii}$  are obtained, where:

```
a = changes in inventories j, in industry i, for units with size class + legal form k. j(1,..., 4) = finished goods, work-in-progress, materials and supplies, goods for resale. i(1,..., 98) = industry
```

k (1,2) = size class + legal form; where k = 1 identifies enterprises with size class 1-5 people employed and legal form sole proprietorships and simple partnerships; k = 2 identifies enterprises with size class 6+ people employed)

According to the Italian criteria used to define S.11 and S.14,

- $a_{1ji}$  is a first raw estimate of P.52 calculated for Households in type j in industry i;
- $a_{2ji}$  is a first raw estimate of P.52 calculated for Non-financial corporations in type j in industry i.

Then the weight of each sector in terms of P.52 are calculated:

$$w_{sij} = \frac{\mathbf{a}_{kij}}{\mathbf{a}_{sij}}$$

where

$$s = sector (S.11 \text{ or } S.14)$$
  
 $a_{.ij} = a_{1ij} + a_{2ij}$ 

This weight  $w_{sij}$  represents the *partition coefficient* used to divide the amount of P.52 by industry net of General government:

$$P52_{sij} = (P52_{S1ij} - P52_{S13ij}) x w_{sij}$$

P52 = changes in inventories s = sector (S.11 or S.14) j = type of inventories i = industry

Sector S.12

P.52 for S.12 only concern NACE Division 66 (Frame-SBS data). For other units, no information is available but it can be assumed that the amount of changes in inventories for them is negligible: units included in those activities are not expected to have changes in inventories in finished goods, goods for resale and work in progress but just P.52 in materials and supplies, if only inventories of office supplies.

Sector S.13

The estimation method is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14

Data sources and estimation methods for S.14 are described above (see Sector S.11). Changes in inventories only refer to S.14C.

Sector S.15

The value of P.52 for S.15 is assumed to be immaterial and is set equal to zero.

Sector S.2

Not applicable

### **RESOURCES**

Not applicable

# 11. P.53 – Acquisitions less disposals of valuables

Table D.22 - Acquisitions less disposals of valuables - Year 2015 (million EUR)

Institut	tional sectors	Resources	Uses	
S.1	Total economy	0	2.160	
S.11	Non-financial corporations	0	158	
S.12	Financial corporations	0	78	
S.13	General government	0	0	
S.14	Households	0	1.924	
	S.14/C Consumer Households	0	1.875	
	S.14/P Producer Households	0	49	
S.15	NPISH	0	0	
S.2	Rest of the world	0	0	

### 11.1. Description of compilation procedures

#### **USES**

#### Sector S.1

The estimate of the capital formation in valuables is obtained through the commodity-flow approach. The commodity-flow approach guarantees that the estimate includes all the acquisitions of new goods of domestic output and all the acquisitions and transfers (of both new and of existing goods) carried out with non-residents. In particular, the estimate includes the acquisitions of jewellers, art dealers, households, corporations that do not perform trading activity of this type of product, and museums. In turn, the available data sources do not allow the estimation of transactions on existing goods between residents.

In the Italian product classification (256), valuables refer to capital formation in product 86 ("Basic precious metals and other non-ferrous metals"), product 134 ("Jewels and articles of goldsmithery and dress jewellery"), product 243 ("Creative, artistic, and entertainment services") and product 244 ("Services of libraries, archives, museums, and other cultural services").

### Sector S.11

### B. Methods

Since there is no statistical or administrative information on P.53 by institutional sectors, the estimates are obtained with a "top-down" approach that relies on specific assumptions on the allocation of the different types of valuables., In particular the attribution to S.11, S12 and S.14 is determined through fixed ratios, considering the type of asset. The annual amount of P.53 in the asset "AN. 131 Precious metals and stones" is mainly assigned to S.12 (non-monetary gold, silver, etc. acquired/sold by banks and other financial intermediaries), S.14 (acquisitions/disposals by households) and, residually, to S.11; around 50% of the total value of P.53 in the asset "AN. 132 Antiques and other art objects" is assigned to S.11 (mainly museums and art dealers), while the residual amount is distributed almost equally between S.12 and S.14; around 95% of the total amount of P.53 in the asset "AN. 133 Other valuables" (mainly jewellery; it represents 90% of the total value of P.53) is assigned to households (S.14).

To date no P.53 is estimated for S.13 and S15.

Sector S.12

See S11above

Sector S.13

See S11above

Sector S.14

See S11above

Sector S.15

See S11above

Sectors S.2

Not applicable

## **RESOURCES**

Not applicable

# 12. P.51C – Consumption of fixed capital

Table D.23 - Consumption of fixed capital - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	0	298.236
S.11	Non-financial corporations	0	164.202
S.12	Financial corporations	0	3.599
S.13	General government	0	44.594
S.14	Households	0	85.330
	S.14/C Consumer Households	0	52.120
	S.14/P Producer Households	0	33.210
S.15	NPISH	0	512
S.2	Rest of the world	0	0

# 12.1. Description of compilation procedures

# **USES**

Sector S.1

Consumption of fixed capital (CFC) is estimated through the Perpetual Inventory Method (PIM) by industry and by asset, excluding animals (accordingly with ESA 2010 par. 3.140).

For all assets, except R&D and weapons systems, the straight line model of depreciation is adopted, by which the market value of an asset is assumed to decline by the same amount each period. This amount is equal to 1/T of the initial value of the asset, where T is the service life for that particular asset. The retirements are distributed around the

average service life (constant over time) according to a truncated normal distribution (with truncation limits set at  $\pm$ 40% of average service life and the variance set so that 90% of retirements occur between  $\pm$ 25% of the average service life).

The geometric depreciation function with a constant annual depreciation rate is used for weapons systems and research and development. According to the geometric model, net capital stock and consumption of fixed capital are obtained in accordance with the formula:

$$K_t = K_{t-1} (1 - delta) + I_t$$

where  $K_t$  and  $K_{t-11}$  I are, respectively, the net stock at the end of period t and t-1,  $I_t$  is gross fixed capital formation (at chain-linked values) of year t and *delta* represents the depreciation rate (assumed constant over time). For R&D, the depreciation rate is obtained as 2/N, where N is the service life (double-declining balance rate). For weapons systems the depreciation rate is obtained as 1.65/N. Consumption of fixed capital in period t is simply obtained multiplying the depreciation rate for the capital stock at the end of period t-1.

The main sources for fixing service lives are the following:

- for machinery and equipment, computer hardware, communication equipment and furniture, they are derived from the results of the survey on service lives of machinery and equipment in Italy that was run in 2011 by the Bank of Italy in collaboration with Istat:
- for road works and other civil engineering works, they have been set according to the recommendations from the GNP Committee on the Consumption of Fixed Capital on Roads, Bridges etc. (GNIC 011, 2003);
- for research and development, the service life has been set according to the recommendations from the second Task Force on the capitalisation of R&D in National Accounts (see Manual on measuring Research and Development on ESA 2010, Eurostat, 2014).
- for the remaining assets, service lives have been set relying on expert advice and other countries' estimates.

## Sector S.11

The value of CFC is estimated by applying two different estimation methods, according to the type of assets.

- The PIM method is used for the following assets: Computer hardware, Communication equipment, Furniture, Other machinery and equipment, Road transport equipment, Other transport equipment, Computer Software and databases, Entertainment, literary or artistic originals, Research and Development, Cultivated biological resources, Mineral explorations, Other structures.
  - The functions and the underlying hypothesis described above for Sector S.1 are adopted. Service lives are, in general, the same as for Total economy; for some assets, though, service lives differ according to the owner industry (Communication equipment, Furniture, Other machinery and equipment). In this case the relevant service life for each sector is a weighted average of service lives by asset and industry: the weight is represented by GFCF of the sector in that asset and that industry, year 2011.
- As for CFC for Dwellings and Non-residential buildings, since the time series of GFCF by institutional sector currently available are too short to apply the PIM,

another approach is used. The value of CFC for Dwellings and Non-residential buildings (including costs of ownership transfer) is estimated as a share of the CFC of the total economy (net of S.13), by type of buildings. This share is calculated as the weight of dwellings and of non-residential buildings (stock of fixed assets, as reported in the Balance Sheets by institutional sector, table 26 ESA 2010TP) of the sector on the value of dwellings and of non-residential buildings for Total economy (net of S.13).

#### Sector S.12

The estimation method for S.12 is the same described above, in Section Sector S.11.

## Sector S.13

The estimation method is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

#### Sector S.14

Estimation method for S.14 is the same described above, in Section Sector S.11.

#### Sector S.15

The estimation method for NPSHIs is the same described above, in Section Sector S.11.

Sectors S.2

Not applicable

### **RESOURCES**

Not applicable

## 13. NP – Acquisitions less disposals of non-produced assets

Table D.24 - Acquisitions less disposals of non-produced assets - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	0	1.184
S.11	Non-financial corporations	0	1.623
S.12	Financial corporations	0	21
S.13	General government	0	450
S.14	Households	0	-910
	S.14/C Consumer Households	0	<i>-4</i> 25
	S.14/P Producer Households	0	-485
S.15	NPISH	0	0
S.2	Rest of the world	0	-1.184

# 13.1. Description of compilation procedures

## **USES**

#### Sector S.1

The value of NP for Total economy equals the value - with opposite sign - calculated for S.2 in the Balance of Payments (DS1) data: they are acquisitions less disposals of non-produced assets exchanged with the Rest of the world, in particular contracts, licenses, permits. Transactions among resident sectors sum to zero, except for the relevant costs of ownership transfer, that are GFCF by ESA definitions.

## Sector S.11

### A. Sources

Balance of Payments (DS1),

Land sales (DS34).

## B. Methods

By construction the value of NP by institutional sector is totally consistent with NP calculated for Total Economy and with the value estimated for S.13 (they are constrains for the estimates of the other sectors).

NP calculated for Non-financial corporations includes all acquisition less disposals of non-produced assets (contracts, licenses, permits) exchanged with the Rest of the world (this amount equals the value of NP calculated for S.2, with opposite sign).

NP for S.11 also includes transactions of contracts, leases and licences with S13, that, to date, is assumed to take place only with non-financial corporations, since no further information is available.

Finally the value of exchanges of agricultural land among all sectors is estimated.

The value of acquisitions and disposals of land under cultivation is derived using data on land sales provided by the Tax and Revenue Agency (administrative data).

The database reports the following information:

- date of the transaction,
- size of traded land,
- price paid on the transaction,
- any tax paid on the transaction,
- nature of the seller/purchaser (individual-private person, PP, or others, NPP),
- if the seller is other than a private person (NPP), also the legal form is indicated.

On the basis of information provided (mainly, nature of the seller/purchaser and legal form), it is possible to identify the sector for each part included in the transaction. To date, no estimate exists for land underlying buildings.

Sector S.12

Only exchanges of agricultural land is estimated for S.12 (see Sector S.11).

Sector S.13

The estimation method is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14

Only exchanges of agricultural land is estimated for S.14 (see Sector S.11).

Sector S.15

The value of NP for S.15 is set equal to zero (not relevant value).

Sectors S.2

A. Sources

Balance of Payments (DS1)

B. Methods

BoP data provides information on NP.

## **RESOURCES**

Not applicable

## 14. P.61 – Exports of goods

Table D.25 - Exports of goods - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	405,981

# 14.1. Description of compilation procedures

#### **USES**

Sectors S.1

Not applicable

Sector S.2

## A. Sources

Balance of payments (DS1)

## B. Methods

Export and import of goods are compiled by the Bank of Italy in the framework of the Balance of Payments, relying on data on foreign trade statistics compiled by Istat in compliance with EU regulations<sup>21</sup>. Intrastat forms, including both statistical and fiscal information, are the base to measure trade with EU member states. As for extra-EU countries, the survey relies on the administrative information of S.A.D. (Single Administrative Document). Data for both sources are collected and provided to Istat by the Customs and Monopoly Agency.

According to ESA2010 and BPM6 two adjustments are needed to foreign trade:

- for goods entering a country to be transformed without changing economic ownership (processing), only the processing service is recorded, while the value of goods entering and subsequently leaving the country is excluded;
- goods purchased abroad and sold in another country without crossing the national border (merchanting), are recorded as net exports of goods and not as exports of services.

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 $<sup>^{21}</sup>$  Commission Regulation n.1982/2004 of 18/11/2004 and amendments (Intrastat), Commission Regulation N.113/2010 of 9/2/2010 and amendments (Extrastat).

Istat is responsible for the measurement of processing services, while the estimate of merchanting is carried out by the Bank of Italy.

Istat also carries out the estimates of imports and exports resulting from illegal activities (imports and exports of narcotics and imports of smuggled cigarettes), that have to be included both in NA and in BoP.

Imports of goods are valued at both CIF and FOB. In particular, statistics on foreign trade provide data on CIF valuation and the transition to FOB assessment is ensured by an adjustment for the total of imports. The adjustment items are provided directly by the Bank of Italy. Exports of goods are valued FOB, as provided by the statistics on foreign trade.

### **RESOURCES**

Not applicable

## 15. P.62 – Exports of services

Table D.26 - Exports of services - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	88,239

Description of compilation procedures

#### **USES**

Sectors S.1

Not applicable

Sector S.2

### A. Sources

Balance of payments (DS1)

### B. Methods

Export and Import of services are compiled by the Bank of Italy in the framework of the Balance of Payments. The main sources are: sample surveys on tourism and transport, the sample survey on non-financial transactions of non-financial corporations and insurance corporations (direct reporting) for service data other than transport and tourism, the

account matrix data, data on transactions made by the Bank of Italy on its own behalf and on behalf of Public Administrations, information on foreign transactions made by resident households yearly provided by Tax and Revenue Agency (*Agenzia delle Entrate*) – the so-called "fiscal monitoring" – and Istat estimate of processing services.

#### RESOURCES

Not applicable

# 16. P.62F – Exports of FISIM

Table D.27 - Exports of FISIM - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	531

## 16.1. Description of compilation procedures

#### **USES**

Sectors S.1

Not applicable

Sector S.2

## A. Sources

Balance of payments (DS1)

### B. Methods

Export of FISIM is calculated By the Bank of Italy in the framework of the compilation of BoP, and is provided to Istat. It corresponds to the sum of FISIM on loans granted by resident operators in S.122 and S.125 to non-resident operators, and of FISIM on deposits of non-resident operators in resident financial intermediaries (S.122). In NA export of FISIM among resident/non-resident financial intermediaries, that is included in BoP, is deducted from the calculation, in compliance with ESA 2010.

For the compilation of financial intermediation service charges indirectly measured (FISIM) two sources are used: the stock of loans and deposit of resident Financial Intermediaries towards non-resident sectors and the related interests; the stock of loans and deposits of resident sectors in the non-resident financial sector and the related interests. The FISIM calculation model is perfectly integrated with the model of income

from other investments, which uses information from the accounts matrix for flows and stocks of financial intermediaries and from direct reporting for the stocks in other sectors. The interest rate used is the interbank interest rate, calculated as the ratio of the interests on loans and deposits and the amount of loans and deposits (between resident and non-resident financial intermediaries). The calculation of FISIM is made taking into account the reference rates of the euro and the US dollar, that are the prevailing currencies of stocks.

#### RESOURCES

Not applicable

### 16.2. Additional details

The calculation of imported and exported FISIM requires the use of an external reference rate. The external reference rate is calculated as the ratio between interest accrued on loans and deposits and the stock of loans and deposits between resident banks (S.122) and non- resident financial intermediaries (S.122 and S.125). Resident intermediaries belonging to the S.125 sector are not included, since at the moment no data are available on interest accrued on the operations with non-resident financial intermediaries. The collection of such data by the Bank of Italy started in 2014, so their integration in the calculation is likely to happen in the next few years. Please note that data currently used for the calculation of the external reference rate, based on the available stocks, represent 90% of the operations between resident and non-resident intermediaries.

# 17. P.71 – Imports of goods

Table D.28 - Imports of goods - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	354,876	0

## 17.1. Description of compilation procedures

## **USES**

Not applicable

# **RESOURCES**

Sectors S.1

Not applicable

Sector S.2

A. Sources

Balance of payments (DS1)

B. Methods

Please refer to paragraph 14

# 18. P.72 – Imports of services

Table D.29 - Imports of services - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	91,458	0

# 18.1. Description of compilation procedures

# **USES**

Not applicable

# **RESOURCES**

Sectors S.1

Not applicable

Sector S.2

A. Sources

Balance of payments (DS1)

B. Methods

Please refer to paragraph 15

## 19. P.72F – Imports of FISIM

Table D.30 - Imports of FISIM - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	0	0
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	1,219	0

# 19.1. Description of compilation procedures

#### **USES**

Not applicable

### RESOURCES

Sectors S.1

Not applicable

Sector S.2

# A. Sources

Balance of payments (SD1)

### B. Methods

FISIM imported by each institutional sector, excluding the producer sectors, is calculated as the sum of FISIM imported on loans and FISIM imported on deposits. FISIM imported on loans and deposits of each resident institutional sector are estimated through a top-down approach: the total value of imported FISIM on loans and deposits estimated by the Bank of Italy is allocated to user institutional sectors according to the underlying stocks, in order to properly allocate imported FISIM between final and intermediate consumption.

The BoP provides P.72F flows. To ensure consistency of the BoP data with ESA 2010 definitions, data are adjusted to net FISIM imported by domestic FISIM producing units (Interbank FISIM). Data required to make this adjustment are provided by BoP.

## **20.** D.1 – Compensations of employees

Table D.31 - Compensations of employees - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	656,865	652,581
S.11	Non-financial corporations	0	410,958
S.12	Financial corporations	0	32,387
S.13	General government	0	162,074
S.14	Households	656,865	44,182
	S.14/C Consumer Households	656,865	18,859
	S.14/P Producer Households	0	25,323
S.15	NPISH	0	2,980
S.2	Rest of the world	2,131	6,415

The estimate of compensation of employees is carried out by industry and by institutional sector, separately for each individual component (wages and salaries, and social contributions, actual and imputed). The estimation procedure differs by type of producer (enterprises, non-profit institutions, market and non-market, and General Government) and, for market enterprises, according to the economic sector. Estimates of the declared component are carried out at the micro level (for each employer): this makes it possible to simultaneously obtain the estimates by industry and by institutional sector.

About 99% of the estimate of the paid compensation of employees is based on sources that directly provide the value of the variable of interest. The percentage rises to 100% for Financial Corporations and General Government. For Non-financial corporations only 1% of the basic value of the compensation of employees is estimated by indirect methods. This refers to:

- D.1 paid by the units classified in the sector S.11 that operate in section A of the NACE Rev.2 (agriculture, forestry and fishing).
- D.1 paid by market NPIs classified in sector S.11, for which no suitable information is available.

The use of indirect methods rises to about 10% of the basic estimate in the case of Households. This share refers to:

- D.1 paid by units classified in sector S.14 (Producer Households) operating in section A of NACE Rev.2.
- the estimate of actual contributions (social contributions and annual provisions to the severance fund) of condominium concierges.
- the annual provisions to the severance fund of paid domestic staff (section T of NACE Rev.2)

For NPISHs, the use of indirect methods accounts for 5% of the basic estimates: this is the case of the units for which no suitable information exists and for which the compensation of employees are estimated by applying average hourly values obtained from the Census data to the hours worked by employees.

## 21. D.11 – Wages and salaries

Table D.32 - Wages and salaries - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	481,737	477,637
S.11	Non-financial corporations	0	301,471
S.12	Financial corporations	0	22,997
S.13	General government	0	112,823
S.14	Households	481,737	38,140
	S.14/C Consumer Households	<i>4</i> 81,737	17,416
	S.14/P Producer Households	0	20,72 <b>4</b>
S.15	NPISH	0	2,206
S.2	Rest of the world	1,309	5,409

# 21.1. Description of compilation procedures

## **USES**

### S.1

Data S.1 are obtained as sum of all relevant resident sectors.

## Sectors S.11, S.14PA. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Archive of Earnings, Hours and Total Labor cost (RACLI register) (DS35)

Archive of employees in agriculture (DS36)

Survey on the structure of wages and salaries and labour costs (DS42)

Labour Force Survey (LFS) (DS37)

Uniemens archive (DS28)

## B. Methods

The estimation procedure of wages and salaries is the same for sectors S.11 and S.14P. In general, as for estimates of output, there are separate procedures for the declared and undeclared component of labour input.

The main source used to estimate wages and salaries of regular employees is the Frame-SBS register which, for each enterprise, provides the following detail of labour costs: wages, social contributions, provisions to the severance fund and other staff costs.

The item "Other staff costs" (once components relating to external workers are subtracted from the cost of labour and added to intermediate costs) contains elements that belong to labour costs but may have a different nature: wages and salaries in cash, wages and salaries in kind or imputed contributions. The preliminary results of the Survey of the structure of wages and salaries and labour costs (referring to year 2012) made it possible to break down this item into the three components listed above, using a stratification based on the weight of the item "other costs" on wages and salaries and on the size class of enterprises. The Survey on the Structure of wages and salaries and labour costs (for the year 2012) measures the components of labour costs per enterprise/institution (with more

than 10 employees) with a very high level of detail for wages and social contributions. Such source provides detailed information on the components of labour costs, particularly for compensation in kind and imputed contributions.

The following adjustments have been performed on basic data:

- 1. A further correction to Frame-SCI data concerns enterprises who did not respond to the survey and whose financial statement data is unavailable. For these enterprises the Archive of Earnings, Hours and Total Labour Cost, RACLI archive, is an alternative source. For all enterprises not included in Frame-SBS, an integration for missing data has been introduced. Employers are obliged to pay contributions to social security funds for each employee: RACLI contains estimates derived from the integrated data of the social security archives of labour costs by enterprise for the production units included in the ASIA-enterprises scope of observation.
- 2. In analogy to the methodology adopted for the compilation of Frame-SBS for enterprises with less than 100 persons employed, an analysis was performed and corrections were made, if necessary, on the values of the labour cost items of Frame-SCI, for offsetting effects due to the presence of external staff costs (temporary contracts and quasi-subordinates).

For units out of scope of observation of Frame-SBS, that is units that perform their economic activity in Section A (Agriculture) and for market non-profit institutions, estimates are obtained with the use of different data sources and methodologies.

Administrative and statistical sources are used in the National Accounts department to build an integrated database for all units operating in section A that includes information on employers, employees and labour costs. For missing values, integration is carried out at a level of 3-digit NACE Rev.2 and NUTS 2.

Market NPIs are treated together with NPISHs (sector S.15) therefore the estimation procedure of the different components of compensation of employees is described in the relevant paragraph.

Other adjustments are carried out in order to obtain exhaustive estimates. These components may be referred either to observed or non-observed economy and are included in the *Exhaustiveness* categories N1-N7 of the Process Table. The exhaustiveness components are:

- Estimate of compensation for employees of enterprises outside the scope of observation of Frame-SBS. Wages and salaries are estimated using administrative data, mainly Uniemens archive.
- Estimate of the component of wages and salaries in kind not included in the income value measured by the sources used (column N7 in the PT). These are the meals eaten by the staff of the NACE Rev.2 section I at the work place and tips that employees receive from their clients in some activities (hotels and restaurants, hairdressers, taxis, condominium concierges).
- Wages and salaries referred to undeclared employees are estimated by means of an indirect procedure: the average hourly salaries paid to undeclared workers are applied to the undeclared hours worked. The average hourly wage of undeclared positions is estimated by means of a wage differential between declared and undeclared workers, calculated starting from information from the Labour force survey, which is applied to the average hourly wage of declared jobs (by industry and size class). The Labour Force survey is used to estimate a differential of wage between declared and undeclared employees in the institutional sectors in which they are present. As a general rule, the average value of wage and salaries per working hour is applied to

the number of hours worked by unregistered employees at a level of institutional sector, economic activity (98 industries: an aggregation of NACE Rev.2 groups) and size class (6 classes:1-5, 6-9, 10-19, 20-99, 100-249, 250 and more).

#### Sector S.12

#### A. Sources

Financial statement of the Bank of Italy (DS38)

Supervisory reports to the Bank of Italy (DS8)

Financial statements of insurance corporations (DS2)

COVIP annual report (DS3)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

InfoCamere archive of financial statements (DS24)

### B. Methods

Data sources (DS8 and D38) provide all details necessary to estimate the components of compensation of employees as indicated in ESA 2010 (wages and salaries, actual contributions and imputed contributions) for the Central Bank, banks and other financial intermediaries supervised by the Bank of Italy.

As for the Insurance Corporations, the estimate of compensation of employees is based on supervisory information collected by the IVASS (Institute for the Supervision of Insurance), that provides separate data for wages and salaries, social contributions and provisions for severance pay and similar.

As for pension funds the COVIP annual report gives information on compensation of employees.

Compensation of employees of financial auxiliaries is calculated on the basis of Frame-SBS for SMEs, and follows the procedures described for sectors S.11 and S.14P. For large enterprises, information on the economic aggregates has been taken from any available administrative source (mainly from the InfoCamere archive).

#### Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

### Sector S.14C

# A. Sources

Archive of domestic work relationships (DS29) Uniemens Archive (DS28)

### B. Methods

Data source (DS29) provides information on hours worked, hourly contributions and compensation paid by Households for domestic staff, adjusted for the components of "cash in hand" and wages and salaries in kind.

Data source (DS28) provides information on wages and salaries and contributions paid for condominium concierges.

#### Sector S.15

## A. Sources

Census survey of non-profit institutions 2011 (CISINP) (DS22)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Uniemens Archive (DS28)

#### B. Methods

The main source used to estimate the compensation of employees of non-profit institutions (NPIs) other than social cooperatives is the Census of Non-profit Institutions. The detail of expenses available in the CISINP allows estimating the compensation of employees incurred by market NPIs and NPISHs surveyed in 2011 census. In particular, the compensation of employees (D.1) is calculated by using the labor costs item, that includes both wage and salaries, and employers social contributions. An indirect approach is used for the years following 2011.

A specific source was used to assess the compensation of employees of the religious organisations in their activities that belong to Division 94: the "Report envisaged by art. 44 of Law No. 222 of 20 May 1985, relating to the use of the sums received in 2011 by the Central Institute for the Sustenance of the Clergy and the Italian Episcopal Conference under Articles 46 and 47 of the same Law".

An indirect approach is applied to estimate the compensation of employees of the NPIs not included in the census survey: the average hourly compensation of employees by industry and by enterprise's size class are calculated for market NPIs and NPISHs included in the census; these values are then applied to the hours worked by employees of the non-surveyed institutions.

To disaggregate compensation of employees in its components for both NPIs and NPISHs, an indirect approach is followed. The latter is based on the structure by industry and size class of the components of compensations of employees of market enterprises.

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

The BoP provides wages and salaries received by resident workers from foreign enterprises.

Compensation of employees is calculated using various combined sources, mainly data provided by the so-called counterparty countries that concern individuals residing in Italy who are employed in those countries. The main counterparty countries are Switzerland, San Marino and Monaco.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### **RESOURCES**

S.1

□ Data for S.1 correspond to resources of S.14C

#### Sector S.14C

This transaction for consumer households includes wages and salaries paid to resident workers by resident and non-resident units.

Sector S.2

### A. Sources

Balance of Payments (DS1)

### B. Methods

The BoP provides information on wages and salaries received by foreign workers from resident enterprises and institutions.

The calculation of labour income paid to foreign workers in Italy makes use of information on the number of non-EU seasonal workers in agriculture and tourism, published annually by the Ministry of the Interior. The total amount of labour income is derived by multiplying the number of seasonal workers (available in detail by region of employment) by the national average income. With regards to cross-border workers in the fields of industry and services, the main data source is represented by the sample survey of the Bank of Italy (direct reporting) on non-financial transactions made by non-financial and insurance companies. The picture is made complete by Treasury data on wages paid by the Bank of Italy to the local staff of Italian embassies and consulates abroad, on behalf of Government units.

In order to comply with the principle of gross remuneration, both revenues and payment estimates are adjusted to account for taxes and contributions paid by workers and companies (the adjustment is made by using annual coefficients supplied by the OECD). No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## 22. D.12 – Employers' social contributions

Table D.33 - Employers' social contributions - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	175,127	174,943
S.11	Non-financial corporations	0	109,486
S.12	Financial corporations	0	9,390
S.13	General government	0	49,251
S.14	Households	175,127	6,042
	S.14/C Consumer Households	175, 127	1,443
	S.14/P Producer Households	0	4,599
S.15	NPISH	0	774
S.2	Rest of the world	822	1,006

The domain of observation of the estimation of employers' social contributions extends to all institutional sectors. Each institutional unit, as employer, is obliged to pay a share

of social contributions, corresponding to a rate on wages and salaries, in order to provide their employees with access to social benefits. These benefits include both those provided while on the job (for example to cover risks/events such as sickness, maternity, disability, etc.), and those due after the employee's retirement.

The employers' social contributions may be actual or imputed. Both are recorded on the uses side of the generation of primary income account (respectively, as D.121 and D.122) in correspondence to the sectors that give rise to the payment; on the resources side, the contributions are recorded in the secondary distribution of income account (respectively, as D.611 and D.612) attributing them to the institutional sectors that receive the payments made by employers. The two amounts are the same at the level of total economy (S.1), although with a different distribution between sectors.

## 23. D.121 – Employers' actual social contributions

Table D.34 - Employers' actual social contributions - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	163,697	163,513
S.11	Non-financial corporations	0	104,019
S.12	Financial corporations	0	7,644
S.13	General government	0	45,313
S.14	Households	163,697	5,803
	S.14/C Consumer Households	163,697	1,386
	S.14/P Producer Households	0	4,417
S.15	NPISH	0	735
S.2	Rest of the world	822	1,006

## 23.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of private market producers (S.11, S.12, S.14), NPISHs (S.15) and GG (S.13)

Sector S.11, S.12, S.14

### A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Financial statement of the Bank of Italy (DS38)

Supervisory reports to the Bank of Italy (DS8)

Financial statements of insurance corporations (DS2)

Report on the financial statements of social security institutions (BICEP) (DS40)

InfoCamere archive of financial statements (DS24)

COVIP annual report (DS3)

Archive of domestic work relationships (DS29) Uniemens Archive (DS28)

### B. Methods

The quantification of the actual contributions for the total economy (S.1) is obtained from the side of the units receiving payments from employers. In Italy most of the actual social contributions are paid to Social Security Funds (sub-sector S.1314) and to a lesser extent to Pension Funds (sub-sector S.129), the latter fulfilling the function of "supplementary pensions". Actual contributions also include the annual provision to the severance fund. The estimation method ensures complete coverage of the field of observation through the use of reliable sources such as the financial statements of institutions receiving payments. The sub-sector that collects the largest share of contributions, about 88% of the total of actual social contributions paid by public and private employers, is that of Social Security Funds. The source used is the Istat Report on the financial statements of social security institutions. The estimate is currently performed using the Time Adjusted Cash method. In addition to actual contributions collected by Social Security Funds and Pension Funds, there are contributions that remain with the employer, namely the provision for severance fund (TFR), also called settlement or severance pay, which in Italy constitutes a portion of wages and salaries that the employer pays directly to the employee upon termination of the work relationship. Employers must set aside yearly the amounts that form the fund needed to pay the severance indemnity. This component is estimated using information from enterprises (on the basis of the same sources used to estimate wages and salaries, depending on the economic activity sector).

The total amount of actual social contributions is therefore obtained as the sum of contributions collected by Social Funds and Pensions Funds and the provisions for severance fund.

The total amount net of the contributions paid by S.13 and non-profit institutions corresponds to the component paid by market private employers. An alternative source from the enterprises' side is that of financial statements which is used to estimate wages and salaries. The latter is used to subdivide the total amount of contributions estimated with primary sources by industry and institutional sector. The difference between the estimate on the enterprises side and the one on the side of Social Security Funds and Pension Funds is included in the column "Data validation" of the PT.

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.15

## A. Sources

Census survey of non-profit institutions 2011 (CISINP) (DS22)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Uniemens Archive (DS28)

### B. Methods

The actual contributions of NPISHs are estimated with an indirect approach, by applying to the compensation for employees the actual contributions rate (i.e. the ratio between

actual contribution and compensation of employees) estimated for enterprises in the same domains.

Sector S.2

## A. Sources

Balance of payments (DS1)

# B. Methods

The BoP data provides actual social contributions paid by foreign employers for resident workers.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## **RESOURCES**

Sector S.1

Data for S.1 corresponds to sector S.14C.

Sectors S.11, S.12, S.13, S.14P, S.15

Not applicable

Sector S.14C

This transactions for consumer households includes the social actual contributions paid by resident and non-resident employers for resident workers.

Sector S.2

### A. Sources

Balance of payments (DS1)

### B. Methods

The BoP data provides actual social contributions paid by resident employers for non-resident workers.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## 24. D.122 – Employers' imputed social contributions

Table D.35 - Employers' imputed social contributions - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	11.430	11.430
S.11	Non-financial corporations	0	5.467
S.12	Financial corporations	0	1.746
S.13	General government	0	3.938
S.14	Households	11.430	239
	S.14/C Consumer Households	11.430	57
	S.14/P Producer Households	0	182
S.15	NPISH	0	40
S.2	Rest of the world	0	0

## 24.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of private market producers (S.11, S.12, S.14), NPISHs (S.15), and GG (S.13)

Sectors S.11, S.12, S.14

## A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Survey on the Structure of wages and salaries and the labour costs(DS42)

Financial statement of the Bank of Italy (DS38)

Supervisory reports to the Bank of Italy (DS8)

Financial statements of insurance corporations (DS2)

InfoCamere archive of financial statements (DS24)

Archive of domestic work relationships (DS29)

Uniemens Archive (DS28)

## B. Methods

The imputed social contributions are estimated by splitting the balance sheet item "Other staff costs" between wages and salaries in cash, in kind or imputed contributions according to preliminary results obtainable from the Survey on the Structure of wages and salaries and the labour costs (referring to year 2012), taking into account the weight of the item "Other costs" on wages and salaries and the enterprise size class.

The cost of the first three days of sickness paid by the employer is subtracted from the wages and salaries and added to the imputed contributions. The estimation of this component is based on the preliminary data of the Survey on the structure of wages and salaries and labour costs, which allows to measure the average incidence (on the value of

wages and salaries) of this component for a given economic activity. The total value was consistent with the results of one-off studies carried out by INPS on total days of sickness (both paid by the employer and by the Social Security fund) in the private sector. There are no other sources available to update this information annually (the survey is carried out every four years), or to estimate it in more detail.

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.15

### A. Sources

Census survey of non-profit institutions 2011 (CISINP) (DS22)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Uniemens Archive (DS28)

## B. Methods

The imputed contributions of NPISHs are estimated with an indirect approach, by applying to the compensation for employees the imputed contributions rate (i.e. the ratio between imputed contributions and compensation of employees) estimated for enterprises of the same domains.

Sector S.2

Not applicable

#### RESOURCES

Sector S.1

Data for S.1 corresponds to sector S.14C.

Sectors S.11, S.12, S.13, S.14P, S.15

Not applicable

Sector S.14C

This transaction for consumer households includes the imputed social contributions payable by resident and non-resident employers for resident workers.

Sector S.2

Not applicable

# 25. D.21 – Taxes on products

Table D.36 - Taxes on products - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	188,877	191,128
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	188,877	0
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	2,251	0

# 25.1. Description of compilation procedures

### **USES**

Sector S.1

Total taxes on products are received by S.13 and S.2 and are allocated to total economy (S.1N not subdivided into sectors).

# **RESOURCES**

Sector S.1

Data for S.1 corresponds to the resources of S.13

Sectors S.11, S.12

Not applicable.

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14, S.15

Not applicable.

Sector S.2

A. Sources

Balance of Payments (DS1)

B. Methods

Taxes on products received by RoW mainly refer to duties on imports (D.212) and taxes on products except VAT (D.214) and they include: customs and agricultural duties, sugar levies, milk and grains co-responsibility levies and other levies, compensatory monetary amounts on exports.

Istat calculates taxes on products paid by Italy to the European Union on the basis of the information on unilateral transfer flows provided by the State General Accounting Department (GAD). These figures are used by the Bank of Italy in the compilations of the Balance of Payments.

## 26. D.29 – Other taxes on production

Table D.37 - Other taxes on production - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	S.1 Total economy		60,739
S.11	Non-financial corporations	0	25,488
S.12	Financial corporations	0	6,000
S.13	General government	60,739	9,697
S.14	Households	0	19,447
	S.14/C Consumer Households	0	8,720
	S.14/P Producer Households	0	10,727
S.15	NPISH	0	107
S.2	Rest of the world	0	0

## **26.1.** Description of compilation procedures

### **USES**

## Sector S.1

Taxes on production paid by S.1 correspond to the resources of S.13. Table D.38 shows the detail of other taxes on production by type as included in National Accounts for the year 2015.

Taxes on production by type are allocated to economic activities. The "Regional tax on productive activities" (IRAP) is broken down according to the distribution of the tax revenue by economic activity, that is provided by the Department of Finance. Some types of taxes on production may be directly assigned to a specific industry. Otherwise, the breakdown criterion refers to the distribution by economic activity of the relevant tax base

Additional information enables to estimate other taxes on production at the level of 98 industries, separately for private market producers (S.11, S.12, S.14), NPISHs (S.15) and GG (S.13) (see table D.39).

Table D.38 - Other taxes on production by type - Year 2015 (million EUR)

D.29 - Other taxes on production 60,739			
Regional tax on productive activities (IRAP)	28,072		
Municipal real estate tax (IMU)	19,828		
Surcharge accruing to chambers of commerce	1,277		
Motor vehicle duty paid by enterprises	1,446		
Duty on official franchises	1,132		
Mucipal tax on collective services (TASI)	4,760		
Local tax for environmental protection	571		
Other special taxes on production	289		
Other taxes on production n.e.c.	608		
National resolution fund contributions	2,346		
Other	410		

Sectors S.11, S.12. S.14P

## A. Sources

General Government non-financial accounts (DS15)

## B. Methods

The estimate of other taxes on production paid by these sectors follows an indirect approach. The total amount of D.29 paid by private market producers is allocated to sectors according to the distribution by industry of output.

#### Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14C

## A. Sources

General Government non-financial accounts (DS15)

### B. Methods

Other taxes on production paid by consumer households only include the Municipal real estate tax, which is referred to owner-occupied dwellings.

Table D.39 - Other taxes on production by sectors and divisions - Year 2015 (million  $\,\,$  EUR)

Divisions	S.11	S.12	S.13	S.14/P	S.14/C	S.14	S.15	Total
1 2	232 8	0 0	0 28	1,004 9	0 0	1,004 9	0	1,236 45
3	7	0	0	3	0	3	0	10
4	0	0 0	0	0 0	0 0	0	0	16.3
5 6	162 0	0	0	0	0	0	0	16 2 0
7	28	0	0	0	0	0	0	28
8 9	9 623	0	0	0 28	0 0	0 28	0	9 6 5 1
10	111	0	0	0	0	0	0	112
11	9	0	0	0	0	0	0	9
12 13	187 215	0 0	0	7 19	0 0	7 19	0	19 4 2 3 4
14	236	0	0	12	0	12	0	248
15	129	0	0	19	0	19	0	14 8
16 17	183 90	0	0	1 5	0 0	1 5	0	18 5 9 5
18	121	0	0	0	o	ő	0	121
19	390	0	0	1	0	1	0	391
20 21	405 417	0	0	0 4	0 0	0 4	0	405
22	280	Ö	0	8	o	8	Ö	287
23	301	0	0	1	0	1	0	302
24 25	855 174	0	0	38 1	0 0	38 1	0	892 175
26	265	0	0	3	0	3	0	268
27	957	0	0	6	0	6	0	964
28 29	260 124	0	0	0 0	0 0	0	0	261 125
30	189	0	0	8	0	8	0	197
31	153	0	0	18	0	18	0	171
32 33	235 1,363	0	2	34 10	0 0	34 10	0	269 1,375
34	219	0	0	0	0	0	0	2 19
35	50 342	0	0	2 2	0 0	2 2	0	52
36 37	29	0	0	1	0	1	0	344
38	479	0	19	140	0	140	0	637
39 40	237	0	15 0	5	0 0	5	0	256
41	6 19 54 8	0	0	290 81	0	290 81	0	9 10 6 2 9
42	1,949	0	0	252	0	252	0	2,201
43 44	1,178 652	0	0	301 77	0 0	301 77	0	1,479 733
45	21	0	0	0	0	0	0	21
46	39	0	0	0	0	0	0	39
47 48	1,248 55	0 0	14 0	14 1	0 0	14 1	0	1,275 56
49	572	0	0	40	0	40	0	6 13
50	417	0	5	98	0	98	0	519
51 52	84 56	0	0	1 3	0 0	1 3	0 0	8 5 59
53	31	Ö	0	0	o	0	Ö	31
54	305	0	0	2	0	2	0	307
55 56	394 151	0	5 0	24 9	0 0	24 9	0	423 160
57	0	5,421	0	0	o	0	0	5,421
58	0	479	0	0	0	0	0	479
59 60	119 4,331	100 0 <b>►</b>	0 6	83 6,907	0 0	83 6,907	0 0 <b>F</b>	303 11,243
61	0	0	0	0	8,720	8,720	0	8,720
62 63	167 195	0	0	388	0	388	0	555
63 64	195 93	0	0	48 133	0 0	48 133	0	244
65	49	0	271	12	0	12	2	333
66	72	0 0	0	17 85	0 0	17 9.5	0	89
67 68	88 0	0	18	85 6	0	85 6	0	173 25
69	391	0	0	12	0	12	0	403
70 71	32 38	0	2	0 5	0 0	0 5	0	3 4 4 6
72	42	0	0	1	0	1	0	43
73	136	0	10	17	0	17	0	16 3
74 75	357 0	0	11 3.883	50 0	0 0	50 0	0	4 18
75 76	136	0	3,883 2,739	10	0	10	0 5	3,883 2,889
77	290	0	2,404	242	0	242	4	2,940
78 79	76 44	0	35 117	0 1	0 0	0 1	2 1	113 16 3
79 80	15	0	6	26	0	26	1	48
81	11	0	94	0	0	0	2	108
82 83	78 145	0	0 8	5 17	0 0	5 17	0 9	83 178
83	55	0	0	0	0	0	9 82	137
85	22	0	0	15	0	15	0	37
86 87	114 0	0 0	1 0	64 0	0 0	64 0	0	179 0
88	0	0	0	0	0	0	0	0
Total	25,488	6,000	9,697	10,727	8,720	19,447	107	60,739

Sector S.15

# A. Sources

General Government non-financial accounts (DS15)

## B. Methods

An indirect approach based on a labour-input model is used to identify for each industry the share of taxes paid by NPISHs. The other taxes on production paid by NPISHs include motor vehicle taxes, the municipal real estate tax and the Regional tax on productive activities.

Sector S.2

Not applicable.

### **RESOURCES**

Sector S.1

Data for S.1 corresponds to resources of GG

Sectors S.11, S.12, S.14, S.15, S.2

Not applicable

Sector S.13

For S.13 the estimation method of this transaction is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

## 27. D.31 – Subsidies on products

Table D.40 - Subsidies on production - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	24,294	24,127
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	24,127
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	167

## 27.1. Description of compilation procedures

## **USES**

### Sector S.1

Data for S.1 corresponds to uses of sectors S.13

#### Sector S.13

For S.13, the estimation method of this transaction is described in the Italy EDP Inventory (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

# Sector S.2

## A. Sources

Balance of payments (DS1)

## B. Methods

Subsidies on products paid by RoW mainly consist of endowments granted by the European Structural Funds (ESF, EAGF) and by EU institutions. Istat uses the information on unilateral transfers provided by the State General Accounting Department (GAD) to estimate these flows. These figures are provided to the Bank of Italy and included in the Balance of Payments.

### **RESOURCES**

## Sector S.1

The amount of subsidies on products is allocated to the total economy (S.1N not subdivided into sectors) and it corresponds to uses figures for S.13 and S.2.

## 28. D.39 – Subsidies on production

Table D.41 - Subsidies on production - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	8,533	4,050
S.11	Non-financial corporations	4,849	0
S.12	Financial corporations	4	0
S.13	General government	0	4,050
S.14	Households	3,672	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households	3,672	0
S.15	NPISH	8	0
S.2	Rest of the world	0	4,483

## 28.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 corresponds to uses of S13

Sectors S.11, S.12. S.14, S.15, S.2

Not applicable

Sector S.13

For S.13, the estimation method of this transaction is described in the Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

#### A. Sources

Balance of payments (DS1)

## B. Methods

Subsidies on productions paid by RoW mainly consist of endowments granted by the European Structural Funds (ESF, EAGF) and by EU institutions. Istat estimates these flows on the basis of the information on unilateral transfers provided by the State General Accounting Department (GAD). Bank of Italy uses these figures in the compilations of the Balance of Payments.

### **RESOURCES**

Sector S.1

Subsidies on production received by S.1 correspond to uses of S13 and S2.

They are measured from the side of the units that provide the subsidy. This way of recording ensures the exhaustive coverage of the units that grant the subsidies and the exhaustive coverage of transactions performed during the year.

The main data sources used to compile GG accounts are the State budget (Rendiconto generale dello Stato), the financial statements of all public units included in S.13 and the comprehensive surveys of central and local public administrations. These sources are integrated with highly detailed information provided by other entities involved in the granting activity on behalf of the State (namely, the Ministry for Agricultural Policies, AGEA, Artigiancassa, Mediocredito centrale, etc.) or the EU.

Subsidies on production mainly include:

- subsidies to producers granted through the national intervention agencies (e.g. FEAGA co-financing);
- grants for interest relief provided by the State and local authorities;
- other economic support transfers to producers, paid irrespective of the volume of output (e.g. vocational training, wage subsidies, support for employment, etc.)

Other subsidies on production are broken down by industry on the basis of the distribution of the output of the industries which receive them.

Table D.42 - Subsidies on production by sector and divisions- Year 2015 (million EUR)

1	Divisions	S.11	S.12	S.13	S.14/P	S.14/C	S.14	S.15	Total
1		766	0	0	3,255	0	3,255		4,021
4									
6	4						0		
S									
10									
11									
2									
13									
65	13	38	0	0	3	0	3	0	41
60									
1									
99	17	14	0	0	1	0	1	0	15
20									
21									
23									
24									
25									
27									
28	26	53					1	0	53
29									
30									
32	30	28	0	0	1	0	1	0	30
33									
34									
36	34	4	0	0		0	0	0	4
37									
38									
40									
41	39								20
42									
43         116         0         0         30         0         34         0         34         0         350         34         0         344         0         345         0         34         0         34         0         350         0         464         46         30         0									
45         458         0         0         5         0         5         0         464           46         30         0         0         0         0         0         0         0         30           48         0	43	116	0	0	30	0	30		146
46         30         0									
47         1         0									
49         1         0         0         0         0         0         0         50           51         0									
50         40         0         0         9         0         9         0         50           51         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
51         0									
53         48         0         0         0         0         0         0         0         25         55         24         0         0         1         0         1         0         26         56         14         0         0         1         0         1         0         1         0         15         57         0         3         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
54         25         0         0         0         0         0         0         25         55         24         0         0         1         0         1         0         26         56         14         0         0         1         0         1         0         15         57         0         3         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
55         24         0         0         1         0         1         0         26         56         57         0         3         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
56         14         0         0         1         0         1         0         15         57         0         3         0         1         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
58         0         1         0         0         0         0         0         0         1           60         0         0         0         0         0         0         0         1           60         0         0         0         0         0         0         0         44         0         44         0 <td>56</td> <td>14</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>15</td>	56	14	0	0	1	0	1	0	15
59         0         0         0         0         0         0         0         1         44         0         44         0         44         0         44         0         44         0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
60         0         0         0         44         0         44         0         44           61         0         0         0         0         0         0         0         0         0           62         0         0         0         0         1         0         1         0         1           63         17         0         0         4         0         4         0         21           64         9         0         0         13         0         13         0         22           65         20         0         0         5         0         5         0         25           66         9         0         0         2         0         2         0         12           67         7         0         0         7         0         7         0         14           68         0         0         0         0         0         0         0         0         0           69         0         0         0         0         0         0         0         0         0         0         0         0									
62         0         0         0         1         0         1         0         1           63         17         0         0         4         0         4         0         21           64         9         0         0         13         0         13         0         22           65         20         0         0         5         0         5         0         25           66         9         0         0         2         0         2         0         12           67         7         7         0         0         7         0         7         0         14           68         0	60	0	0	0	44	0	44	0	44
63         17         0         0         4         0         4         0         21         64         9         0         0         13         0         13         0         22         65         20         0         0         0         25         0         5         0         55         0         25         66         9         0         0         0         2         0         2         0         12         0         12         0         12         0         12         0         12         0         12         0         12         0         12         0         12         0         12         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
64         9         0         0         13         0         13         0         22           65         20         0         0         5         0         5         0         25           66         9         0         0         2         0         2         0         12           67         7         0         0         0         0         7         0         7         0         14           68         0         <									
66         9         0         0         2         0         2         0         12           67         7         0         0         7         0         7         0         14           68         0 <td>64</td> <td>9</td> <td>0</td> <td>0</td> <td>13</td> <td>0</td> <td>13</td> <td>0</td> <td>22</td>	64	9	0	0	13	0	13	0	22
67         7         0         0         7         0         7         0         14         68         0							5		
68         0									
69         0	68	0	0	0					0
71         30         0         0         4         0         4         0         35           72         0 <td>69</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	69	0	0	0	0	0	0	0	0
72         0									
73         32         0         0         4         0         4         0         36           74         1         0         0         0         0         0         0         0         0         2           75         0         3         9         3         1,104         7         18         0         0         21         0         21         0         3         3         0         0         4         4         0         <									
75         0	73	32	0	0	4	0	4	0	36
76         997         0         0         99         0         99         8         1,104           77         18         0         0         21         0         21         0         39           78         4         0         0         0         0         0         0         0         4           79         0									
77         18         0         0         21         0         21         0         39           78         4         0         0         0         0         0         0         0         4           79         0         5         5         81         50         0         0         1         0         1         0         51         0         51         82         0         <									
78         4         0         0         0         0         0         0         0         4           79         0         5         5         81         50         0         0         0         1         0         1         0         51         82         0 </td <td>77</td> <td>18</td> <td>0</td> <td>0</td> <td>21</td> <td>0</td> <td>21</td> <td>0</td> <td>39</td>	77	18	0	0	21	0	21	0	39
80     2     0     0     3     0     3     0     5       81     50     0     0     1     0     1     0     51       82     0     0     0     0     0     0     0     0       83     37     0     0     4     0     4     0     4       84     0     0     0     0     0     0     0     0       85     0     0     0     0     0     0     0     0       86     0     0     0     0     0     0     0     0       87     0     0     0     0     0     0     0     0       88     0     0     0     0     0     0     0     0		4							4
81     50     0     0     1     0     1     0     51       82     0     0     0     0     0     0     0     0     0       83     37     0     0     4     0     4     0     42       84     0     0     0     0     0     0     0     0     0       85     0     0     0     0     0     0     0     0     0       86     0     0     0     0     0     0     0     0     0       87     0     0     0     0     0     0     0     0     0       88     0     0     0     0     0     0     0     0									
82         0									
84     0     0     0     0     0     0     0       85     0     0     0     0     0     0     0     0       86     0     0     0     0     0     0     0     0       87     0     0     0     0     0     0     0     0       88     0     0     0     0     0     0     0	82	0	0	0	0	0	0	0	0
85     0     0     0     0     0     0     0       86     0     0     0     0     0     0     0       87     0     0     0     0     0     0     0       88     0     0     0     0     0     0     0									
86     0     0     0     0     0     0     0     0       87     0     0     0     0     0     0     0     0       88     0     0     0     0     0     0     0     0									
88 0 0 0 0 0 0 0 0 <b>0</b>	86	0	0	0	0	0	0	0	0

Sectors S.11, S.12. S.14P

## A. Sources

General Government non-financial accounts (DS15)

#### B. Methods

The estimate of subsidies on production follows an indirect approach. For each industry the total amount of D.39 received by private market producers is allocated to sectors according to the value of their output.

Sector S.13

Not applicable

Sector S.14C

Not applicable

Sector S.15

### A. Sources

General Government non-financial accounts (DS15)

## B. Methods

Subsidies on production (D39) received by NPISHs only concern the Education division. An indirect approach based on a labour-input model is used to identify for this industry the share of subsidies received by NPISH.

Sector S.2

Not applicable.

## 29. D.41g – Total interest before FISIM allocation

Table D.43 - Total interest before FISIM allocation - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	151,848	173,664
S.11	Non-financial corporations	10,113	37,169
S.12	Financial corporations	106,734	43,263
S.13	General government	2,994	71,436
S.14	Households	31,101	21,302
	S.14/C Consumer Households	29,295	16,296
	S.14/P Producer Households	1,806	5,006
S.15	NPISH	906	493
S.2	Rest of the world	42,205	20,389

## 29.1. Description of compilation procedures

## **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

## A. Sources

The data sources are Financial Accounts (DS13) and statistics on market interest rates and stocks of deposits, loans and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy" (DS9).

## B. Methods

Interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts.

If direct sources are available for the counterpart sector, these are used instead of the method described above.

Sector S.12

#### A. Sources

For S121 data are gathered from Bank of Italy's financial statement (DS38).

For S128 aggregate financial statements of insurance corporations data are available. Data are collected by IVASS (DS2).

For S122 aggregate financial statements of banks data are available. This data are collected and published by Bank of Italy (DS32). This data are integrated with the amounts obtained from the annual financial statements of "Cassa depositi e Prestiti S.p.a."(DS11)

For the subsectors other than those mentioned above, the data sources are Financial Accounts (DS13) and the statistics on market interest rates on deposits, loans and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy"(DS9).

#### B. Methods

For the sectors for which direct balance sheet data are available, the amounts are allocated on the basis of the direct information and if this isn't possible, the allocation is based on the stocks by instrument and counterpart sector available in Financial Accounts. For the sectors for which direct information isn't available, interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts. If direct sources are available for the counterpart sector, these are used instead of the

If direct sources are available for the counterpart sector, these are used instead of the method described above.

#### Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110">http://ec.europa.eu/eurostat/documents/1015035/7110</a>762/IT-EDP-Inventory-201512.pdf).

Sector S.14

### A. Sources

The data sources are Financial Accounts (DS13) and statistics on market interest rates and stocks of loans securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy" (DS9).

## B. Methods

Interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts.

If direct sources are available for the counterpart sector, these are used instead of the method described above.

The interests of S.14C, S.14P and NPISH are processed according to a top-down method. The values estimated at the aggregate level (S.14 + S.15), once balanced, are broken down on the basis of the stock of loans.

Sector S.15

## A. Sources

The data sources are Financial Accounts (DS13) and statistics on market interest rates and stocks of loans securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy" (DS9).

### B. Methods

Interest are estimated through a detailed procedure through which the average market rates (average of the end of period data of quarters) are multiplied by the average stocks (average of the quarters) deriving from Financial Accounts for each instrument and for each counterpart sector.

If direct sources are available for the counterpart sector, these are used instead of the method described above.

The interests of S.14C, S.14P and NPISH are processed according to a top-down method. The values estimated at the aggregate level (S.14 + S.15), once balanced, are broken down on the basis of the stock of loans.

Sector S.2

### A. Sources

Balance of payments (SD1), Imported and exported FISIM (SD10)

## B. Methods

Interests are calculated separately according to the type of instrument and the functional class of the BoP (direct investment, portfolio investment, other investment, reserve assets).

Interest on debt instruments classified as portfolio investments.

Revenues resulting from ownership by a resident investor of financial instruments issued by non-residents are recorded as receivables, while revenues resulting from ownership by a non-resident investor of financial instruments issued by residents are recorded among payables.

The information needed is derived from the *Centralized Securities Database* (CSDB), which registers all euro-denominated securities, all securities issued by entities established in the EU as well as those that may be held or traded by EU resident investors.

Interests on debt securities represent the amount that the debtor is committed to pay to the creditor over a given period of time, under the terms established by the financial instrument, without affecting the capital loaned. They are calculated according to the *debtor approach* and are recorded on an accrual basis. The accrued income is obtained by multiplying the average stock by the quota of daily interests and the number of relevant days. The calculation of daily interest is based on the information available in the CSDB, such as the coupon rate, the frequency of payments and the date from which interest becomes payable. The use of the information in the CSDB, which is updated on a monthly basis, ensures consistency with the standards of the BPM6, also with respect to index-linked securities and the collection of fees and taxes.

Interest on accounts and deposits, loans, trade receivables and payables and other assets, classified as direct investments and other investments.

The estimation process of the interest consists of several phases.

First of all, the interest for the banking sector is calculated based on the information on interests earned on deposits and loans with non-resident counterparties, provided quarterly in the Account Matrix.

Therefore, a matrix is built containing the interest rates differentiated by instrument (accounts and deposits, loans, trade receivables and payables, technical reserves of insurance companies) and groups of currencies (euro, US dollar, other): the rates are obtained by integrating the information coming from the banking sector with the market rates for non-financial loans and deposits for households. The main sources of information are the sample survey of interest rates, published monthly by the Bank of Italy, the ECB Statistical Data Warehouse and Bloomberg.

Finally, the interest rates are applied to the relevant stocks of financial assets and liabilities.

The use of a model based on the accrued interest rates ensures the compliance with the accrual principle and does not require corrections and adjustments related to taxes and contributions.

Interests on accounts and deposits and loans are calculated net of the FISIM component, whose estimate is based on the difference between the rate applied and the reference rate (which is assumed to be equal to the interbank rate derived from the Account Matrix). The component is thus included in the Financial Services, in accordance with the recommendations of the BPM6

Interest on debt instruments of direct investments

Interests on debt securities are computed with the methodology outlined for *portfolio investments* whereas interests on other financial instruments are calculated using the approach laid down for *other investments*. The accrual principle and, just in the case of debt securities, the debtor approach are adopted.

Interest on the instruments classified as reserves

Interests in this category are calculated on the SDRs, the reserve position in the IMF and other reserve assets. They are derived from the internal accounting data of the Bank of Italy and are recorded according to the accrual principle (point 2).

The remuneration rate of each asset is applied to their stock.

For SDRs and the reserve position in the IMF, the income is determined by applying to the relevant stock the rate of remuneration published by the IMF. In particular, for the SDRs included in the liabilities of the monetary authority, the interests paid as allocation are accounted as income from other investments.

For accounts and deposits, the interbank interest rate used is the one that refers to the prevailing currency.

For debt securities, the calculation is made according to the methodology used for *portfolio investments* income.

The BoP provides the D.41 payable by Row to resident units, broken down by counterpart geographical area and counterpart sector. Moreover BoP provides data on interbank FISIMs to make the adjustment needed to ensure consistency of the BoP data (BPM6 definitions) with ESA 2010 definitions: in fact interbank FISIM with Row must be null according to ESA2010, while they are included in BoP flows.

#### RESOURCES

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

#### A. Sources

The data sources are Financial Accounts (DS13) and the statistics on market interest rates and stocks of deposits, loans and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy"(DS9).

## B. Methods

Interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts.

If direct sources are available for the counterpart sector, these are used instead of the method described above.

Sector S.12

## A. Sources

For S121 data are gathered from Bank of Italy's financial statement (DS38).

For S128 aggregate financial statements of insurance corporations data are available. Data are collected by IVASS. (DS2)

For S122 aggregate financial statements of banks data are available. This data are collected and published by Bank of Italy (DS32). This data are integrated with the amounts obtained from the annual financial statements of "Cassa depositi e Prestiti S.p.a."(DS11).

For the subsectors other than those mentioned above, the data sources are Financial Accounts (DS13) and the statistics on market interest rates on deposits, loans and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy" (DS9).

#### B. Methods

For the sectors for which balance sheet data are available, the amounts are allocated on the basis of the direct information and if this isn't possible, the allocation is based on the stocks by instrument and counterpart sector deducible from the Financial Accounts.

For the sectors for which direct information aren't available, interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts.

If direct sources are available for the counterpart sector, these are used instead of the method described above.

#### Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14

### A. Sources

The data sources are Financial Accounts (DS13) and the statistics on market interest rates and stocks of deposits and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy" (DS9).

#### B. Methods

Interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts...

If direct sources are available for the counterpart sector, these are used instead of the method described above.

The interests of S.14C, S.14P and NPISH are compiled according to a top-down method. The values estimated at the aggregate level (S.14 + S.15), once balanced, are broken down on the basis of the stocks of deposits and securities.

Sector S.15

#### A. Sources

The data sources are Financial Accounts (DS13) and the statistics on market interest rates and stocks of deposits and securities collected and published by the Bank of Italy in the reports of the "Statistics series of the Bank of Italy"(DS9).

### B. Methods

Interest are estimated through a detailed procedure where for each instrument and for each counterpart sector the average market rates (annual average of quarterly data at the end of the quarter) are multiplied by the average stocks (quarterly average) deriving from Financial Accounts..

If direct sources are available for the counterpart sector, these are used instead of the method described above.

The interests of S.14C, S.14P and NPISH are compiled according to a top-down method. The values estimated at the aggregate level (S.14 + S.15), once balanced, are broken down on the basis of the stocks of deposits and securities.

#### Sector S.2

#### A. Sources

Balance of payments (SD1), Imported and exported FISIM (SD10)

### B. Methods

Please refer to methods for D.41 Uses described above.

The BoP provides the D.41 receivable by Row to resident units, broken down by counterpart geographical area and counterpart sector. Moreover BoP provides data on interbank FISIMs to make the adjustment needed to ensure consistency of the BoP data (BPM6 definitions) with ESA 2010 definitions: in fact interbank FISIM with Row must be null according to ESA2010, while they are included in BoP flows.

## 29.2. Balancing adjustments across all sectors

Once estimated the flows of interest paid and received by each sector, they are balanced through a whom-to- whom matrix. The balancing procedure is based on the Stone-based<sup>22</sup> method, that involves the use of a reliability rate, defined by variances assigned to each cell according to the robustness and coverage of the data used in the estimation procedure. Of course flows that are gathered from direct sources have variance equal to zero and are not changed; only the flows initially estimated through a stock X interest rate approach are modified.

## **30. D.41** – Interest

Table D.44 - Interest - Year 2015 (million EUR)

Institutional sectors		Resources	Uses	
S.1	Total economy	112,968	134,095	
S.11	Non-financial corporations	11,054	16,141	
S.12	Financial corporations	66,041	45,149	
S.13	General government	2,840	68,061	
S.14	Households	32,042	4,535	
	S.14/C Consumer Households	30,090	4,068	
	S.14/P Producer Households	1,952	<i>4</i> 68	
S.15	NPISH	990	209	
S.2	Rest of the world	40,970	19,842	

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<sup>&</sup>lt;sup>22</sup> Stone, R., D.G. Champernowne and J.E. Meade (1942) 'The Precision of National Income Estimates', *Review of Economic Studies*, vol. IX, no. 2, pp. 111–25.

# 30.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

D.41 paid are obtained by subtracting FISIM on loans consumed by the sector from the D.41g.

Sector S.12

To obtain D.41 paid, FISIM on loans consumed by the sector is subtracted from D.41g and output of FISIM on deposits is added.

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14

D.41 paid are obtained by subtracting FISIM on loans consumed by the sector from the D.41g.

Sector S.15

D41 paid are obtained by subtracting FISIM on loans consumed by the sector from the D.41g.

Sector S.2

### A. Sources

Balance of payments (SD1), Imported and exported FISIM (SD10)

# B. Methods

The BoP compilers provide D.41 payable by Row to resident units, broken down by counterpart geographical area and counterpart sector and data on interbank FISIMs to make the adjustment needed to ensure consistency of the BoP data (BPM6 definitions) with ESA 2010 definitions, where interbank FISIM must be null.

#### RESOURCES

Sector S.1

Data S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

D.41 received are obtained adding FISIM on deposits consumed by the sector to D.41g.

D.41 received are obtained adding to D.41g FISIM on deposits consumed by the sector and subtracting output of FISIM on loans.

### Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

#### Sector S.14

D.41 received are obtained adding FISIM on deposits consumed by the sector to D.41g.

# Sector S.15

D.41 received are obtained adding FISIM on deposits consumed by the sector to D.41g.

### Sector S.2

### A. Sources

Balance of payments (SD1), Imported and exported FISIM (SD10)

## B. Methods

The BoP compilers provide D.41 receivable by Row from resident units, broken down by counterpart geographical area and counterpart sector and data on interbank FISIMs to make the adjustment needed to ensure consistency of the BoP data (BPM6 definitions) with ESA 2010 definitions, where interbank FISIM must be null.

### 31. **D.421** – **Dividends**

Table D.45 - Dividends - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	63,545	56,226
S.11	Non-financial corporations	18,638	40,315
S.12	Financial corporations	19,405	15,911
S.13	General government	4,273	0
S.14	Households	21,229	0
	S.14/C Consumer Households	21,229	0
	S.14/P Producer Households		0
S.15	NPISH	0	0
S.2	Rest of the world	9,923	17,242

# 31.1. Description of compilation procedures

For incorporated enterprises where no self-employed workers are identified by the procedure used to calculate labour input (see paragraph 56 of section D), dividends are estimated through a whom-to-whom matrix approach applied to micro-data.

In this context, information gathered from Chamber of Commerce Archive and from Information System on employment (DS43) allows to delineate the structure of the ownership of incorporated enterprise (taking into account both the typology of firms and the typology of the owner in terms of institutional sector). The structure of ownership related to S.2 is defined starting from the information gathered from Balance of Payments.

This structure of ownership (for resident and non-resident owners and enterprises) is used to determine the whom-to-whom matrix of dividends paid and received, through a two-steps procedure. In the first step, total dividends paid by institutional sectors are defined and broken-down by receiving sector according to the whom-to-whom structure of ownership (taking into account relative constraints on total paid dividends or on some peculiar relationship). In the second step, dividends received are calculated starting from the composition of dividends paid (also in this case taking into account possible constraints on total received dividends or on some peculiar relationship). Finally, a Stone-based balancing procedure is used to obtain coherence between total dividends paid and received.

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

# A. Sources

Frame-SBS (DS12)

### B. Methods

For S.11 Frame-SBS is used to define the whole amount of "regular" profits for each enterprise. To define the amount of dividends paid, legal reserve is subtracted from profits

Sector S.12

### A. Sources

Frame-SBS (DS12), Supervisory reporting by the FIs to the Bank of Italy (DS8), Financial Statements of Insurance Companies (DS2), InfoCamere archive of Financial statements (DS24), Information system on employment (D43)

# B. Methods

In order to estimate dividends of financial corporations, S.12 is broken down into four components: financial intermediaries; Holding Corporations (HC); insurance companies; financial auxiliaries. Data on dividends paid are gathered from Supervisory reporting by the FIs to the Bank of Italy for financial intermediaries, from InfoCamere archive of financial statements for HC, from Frame-SBS for financial auxiliaries, from Financial Statements of Insurance Companies for insurance companies. For financial intermediaries, Supervisory reporting by the FIs to the Bank of Italy provides the information about total dividends paid; the same is true for Insurance corporations, since their financial statements allow to calculate the amount of distributed dividends. For HC and financial auxiliaries, the amount of profits is determined as in the case of S.11.

Sector S.13, S.14, S.15

Not applicable

Sector S.2

#### A. Sources

Balance of payments (DS1)

#### B. Methods

Balance of Payments contains information about total outward dividends of non-resident units. The structure of ownership (resident shareholders of non-resident enterprises) is defined by applying a theoretical sub-structure to the information about the stock of (domestic and foreign) financial and non-financial assets owned by resident and non-resident agents.

#### RESOURCES

Sector S.1

₩ Da

Data for S.1 are obtained as sum of all relevant resident sectors.

#### Sector S.11

Dividends received by S.11 are determined from the structure of the whom-to-whom matrix representing the share of dividends paid by resident and non-resident institutional units that are received by S.11 (please refer to the description of the compilation method, page 160).

Sector S.12

## A. Sources

Frame-SBS (DS12), Supervisory reporting by the FIs to the Bank of Italy (DS8), Financial Statements of Insurance Companies (DS2), InfoCamere archive of Financial statements (DS24)

### B. Methods

For financial intermediaries, total received dividends are gathered from Supervisory reporting by the FIs, while total inward dividends for insurance companies are derived from Financial Statements of Insurance Companies. Relating to financial auxiliaries and HC, the same method as in case of S.11 is followed.

### Sector S.13

General Government non-financial accounts (DS15) contains information about the whole amount of dividends that are received by S.13. The estimation method is described in Italy EDP Inventory. (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

## Sector S.14

For household consumers, the approach to calculate incoming dividends is the same as in case of S.11.

Up to now, S.15 does not receive any dividends.

Sector S.2

### A. Sources

Balance of payments (SD1)

# B. Methods

Balance of Payments contains information about total inward dividends of non-resident agents, while the same informative source also contains information about the structure of non-resident shareholders of resident units.

# 31.2. Balancing adjustments across all sectors

Using methods described along this section a whom-to-whom matrix can be built. In order to balance total inward and outward dividends a Stone balancing procedure is applied, taking as constraint information for total (inward and, if applies, outward) dividends for S.13, S.2 and financial intermediaries.

# 32. D.422 – Withdrawals from the income of quasi-corporations

Table D.46 - Withdrawals from the income of quasi-corporations - Year 2015 (million EUR)

Institut	Institutional sectors		Uses	
S.1	Total economy	58,512	58,509	
S.11	Non-financial corporations	0	56,303	
S.12	Financial corporations	0	2,206	
S.13	General government	0	0	
S.14	Households	58,512	0	
	S.14/C Consumer Households		0	
	S.14/P Producer Households		0	
S.15	NPISH	0	0	
S.2	Rest of the world	0	3	

# 32.1. Description of compilation procedures

# **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11

A. Sources

Frame-SBS (DS12)

### B. Methods

The information provided by Frame-SBS allows to calculate profits of the whole population of quasi-corporations operating in all industries (including financial auxiliaries). The withdrawal, completely received by consumer households (S.14), is calculated on total profit, including the share generated by non-observed activities, by applying, to each quasi-corporation, a coefficient (defined taking into account different strata in terms of industry, size and turnover class), which represents the share of profits which is actually withdrawn (and, consequently, is not reinvested in the productive unit or used as legal reserve).

Sector S.12

### A. Sources

Frame-SBS (DS12)

#### B. Methods

Withdrawals from the income of quasi-corporations are only applicable to financial auxiliaries, whose income is received by consumer households (S.14). The amount of income to be withdrawn from quasi-corporation is calculated as in the case of S.11 (see above).

Sector S.13, S.14, S.15

Not applicable

Sector S.2

Not applicable

#### RESOURCES

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11, S.12, S.13, S.15, S.2

Not Applicable

Sector S.14: Income distributed by producer households to consumer households

As explained in Section A par. 6, given the large number of very small productive units to be classified, according to their features, in the Households sector, separate accounts are compiled and disseminated in Italy for HH as consumers and HH as producers. This implies some assumptions to be made on the share of mixed income that the entrepreneur makes available for final consumption, it is to say that he "ideally" transfers to his family for consumption purposes. This flow is the "Income distributed by producer households to consumer households" (Table D.47): in short, it is calculated as gross mixed income less what is retained in the enterprise for self- financing, it is property income and current taxes paid by producer households and consumption of fixed capital, as a proxy of GFCF.

Table D.47 - Income distributed by producer households to consumer households - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	228,226	228,226
S.11	Non-financial corporations	0	0
S.12	Financial corporations	0	0
S.13	General government	0	0
S.14	Households	228,226	228,226
	S.14/C Consumer Households		o
	S.14/P Producer Households		228,226
S.15	S.15 NPISH		0
S.2	Rest of the world	0	0

# 33. Other income distributed by corporations

Table D.48 - Other income distributed by corporations - Year 2015 (million EUR)

Institut	Institutional sectors		Uses	
S.1	S.1 Total economy		41,056	
S.11	Non-financial corporations	0	40,639	
S.12	Financial corporations	0	417	
S.13	General government	0	0	
S.14	Households	41,056	0	
	S.14/C Consumer Households	41,056	0	
	S.14/P Producer Households		0	
S.15	NPISH	0	0	
S.2	Rest of the world	0	0	

In Italy, sector S.11 includes corporations employing self-employed workers (see Section A, par.6 "The level of the profit share in Italy"). In order to represent the remuneration of self-employed workers in corporations, the same methodology applied for quasi-corporations is used (see above). In the national publication, this income is disseminate as "Other income distributed by corporations" with the code D.423.

# 33.1. Description of compilation procedures

# **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

# A. Sources

Frame-SBS (DS12)

## B. Methods

Frame-SBS provides the information allowing to calculate profits of the corporations employing self-employed workers classified in sector S.11. The income, <u>including the share generated by non-observed activities</u>, is received by consumer households (S.14) and is calculated by applying, to each enterprise, a coefficient (defined taking into account different strata in terms of industry, size and turnover class), which allows to define the share of profits which is actually withdrawn (and, consequently, is not reinvested in the productive unit or used as legal reserve).

Sector S.12

# A. Sources

Frame-SBS (DS12)

### B. Methods

Other income distributed by enterprise employing self-employed workers is only applicable to financial auxiliaries, whose income is received by consumer households (S.14). The amount is calculated as in the case of S.11 (see above).

Sector S.13, S.14, S.15, S.2

Not applicable

### **RESOURCES**

Sector S.11, S.12, S.13, S.15, S.2

Not applicable

Sector S.14

Income distributed by corporations that employ self-employed workers is received by consumer households (S.14).

# 34. D. 43 - Reinvested earnings on foreign direct investments

Table D.49 - Reinvested earnings on FDI by institutional sectors - Year 2015 (million EUR)

Institut	Institutional sectors		Uses	
S.1	S.1 Total economy		6.732	
S.11	Non-financial corporations	-5.140	4.914	
S.12	Financial corporations	2.360	1.818	
S.13	General government	0	0	
S.14	Households	0	0	
	S.14/C Consumer Households	0	О	
	S.14/P Producer Households		О	
S.15	NPISH	0	0	
S.2	Rest of the world	6.732	-2.780	

# 34.1. Description of compilation procedures

# **USES**

#### Sector S.1

Reinvested earnings on FDI (D.43) payable for total economy (S.1) are obtained as sum of uses of sectors S.11 and S.12.

Sector S.11

# A. Sources

Balance of payments (DS1)

## B. Methods

The BoP provides information on the reinvested earnings on FDI paid by non-financial corporations to non-resident units broken down by counterpart geographical area. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

Sector S.12

### A. Sources

Balance of payments (DS1)

# B. Methods

The BoP provides information on the reinvested earnings on FDI paid by financial corporations to non-resident units broken down by counterpart geographical area. Information is available for the following sub-sectors: central bank, MFIs, financial corporations other than MFIs. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

There are no transactions of reinvested earnings between the GG and the RoW.

Sectors S.14-S.15 Not applicable

Sector S.2

#### A. Sources

Balance of payments (DS1)

#### B. Methods

The Framework for Direct Investment Relationships (FDIR) defines the population of investors and investee companies to be included in the statistics on direct investments. According to the FDIR, all creditor and debtor relationships between companies belonging to the same group have to be classified as direct investments. This also applies to the balance of assets and liabilities between fellow enterprises, i.e. enterprises that belong to the same group.

Reinvested earnings (RIE) represent the direct investors' proportion, in terms of equity held, of the earnings that foreign subsidiaries, associates and branches do not distribute as dividends. They are defined as the direct investor's share of the total consolidated profits earned by the direct investment enterprise in the reference period (after allowing for tax, interest and depreciation) less dividends due for payment in the reference period, even if these dividends relate to profits earned in previous periods. Reinvested earnings are to be recorded in the period in which they are earned.

Data on reinvested earnings are compiled by the Bank of Italy. The current system, in place since 2010, is mainly based on direct reporting by the parties involved in cross-border transactions. Data is collected on a sample basis for non-financial and insurance companies and on a census basis for financial intermediaries. The sample of non-financial companies includes companies with total assets of more than one million euro. The choice of the threshold is based on the results of several preliminary analyses conducted on resident companies involved in FDI relations with foreign counterparties. The analyses showed a strong correlation between FDI phenomena and company size, measured by total assets. They also showed that for companies with total assets below the 1 million mark, FDI phenomena become rather insignificant over time (the last estimate refers to 2012 and shows an incidence below 1% for outward investments and 3% for inward investments); therefore, their inclusion in the sample would not be efficient.

Non-financial companies in the sample were selected based on specific stratification variables: the size (assessed by the balance sheet assets), the geographic area and the presence or absence of foreign direct investments. In order to cover the whole universe of Italian enterprises, with the relevant stratification variables, the Bank of Italy set up its own Register of Companies. The register combines different sources of information, its fulcrum being the list of all corporations registered with the Chambers of Commerce (around one million in 2015). The list of national enterprises is enriched with registry data, financial statement information (in particular assets and value of production), data on foreign investments included in the note to the financial statements, information about the list of shareholders (for determining the non-resident ones), data on payments made by means of a resident bank.

FDI stock and flows data, collected through sample surveys, are regularly checked and validated by comparison with other administrative sources (list of shareholders filed with the chambers of commerce, annual statements of the companies and press releases).

All information used for the calculation of current operating income based on the Current Operating Performance Concept (COPC), including capital gains and losses, are provided separately by the reporting agents, both in the case of foreign direct investment (data referred to the foreign counterpart) and of direct investment in the reporting country (data referred to the reporting company). The same reporting agents also provide information on the dividends deliberated within each direct investment relationship, as debtor or creditor (method I in the GNIC/052).

Both outward and inward direct investments in unlisted companies are valued at the Own Funds at Book Value (OFBV), which should ensure the inclusion of indirect relations. Instead, the equity of listed companies is evaluated, at market value.

The BoP data provides the reinvested earnings on FDI paid by Row to resident institutional units broken down by counterpart geographical area and counterpart sector. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### **RESOURCES**

Sector S.1



Reinvested earnings on FDI (D.43) receivable from economy are obtained as sum of resources of Non-financial corporations and Financial Corporations

Sector S.11

### A. Sources

Balance of payments (DS1)

# B. Methods

The BoP provides the flows of reinvested earnings on FDI received by non-financial corporations from the RoW broken down by counterpart geographical area. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

Sector S.12

## A. Sources

Balance of payments (DS1)

### B. Methods

The BoP provides the flows of reinvested earnings on FDI received by non-financial corporations from non-resident units broken down by counterpart geographical area. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

Sectors S.13, S14, S.15

There are no transactions of reinvested earnings between the GG and the RoW.

Sector S.2

## A. Sources

Balance of payments (DS1)

# B. Methods

The BoP provides the flows of reinvested earnings on FDI received by RoW from the resident institutional units broken down by counterpart geographical area. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

# 35. D. 441 – Investment income attributable to insurance policy holders

Table D.50 - Investment income attributable to insurance policy holders - Year 2015 (million EUR)

Institutional sectors		Resources	Uses	
S.1 Total economy		17,859	17,403	
S.11	Non-financial corporations	586	0	
S.12	Financial corporations	31	17,403	
S.13	General government	0	0	
S.14	Households	17,238	0	
S.15	S.15 NPISH		0	
S.2	Rest of the world	92	548	

# 35.1. Description of compilation procedures

## **USES**

Sector S.1

Data for S.1 correspond to uses of Insurance corporations (S.128).

Sector S.11

Not applicable

Sector S.12

# A. Sources

Financial Statements of Insurance Corporations (DS2)

### B. Methods

The estimate of D.441 payable by insurance corporations is carried out separately for life and non-life insurance. The transaction D.441 corresponds to implicit premium supplements included in the output of insurance corporations and it consists in the sum of all incomes received from the investments of insurance technical reserves. Table D.51 shows the calculation of D.441 payable by S.128 in 2015.

Table D.51 - D.441 payable by insurance corporations - Year 2015 (million EUR)

	Non-life insurance	Life insurance
D.441 payable by insurance corporations =	1,899	13,462
+ interest received - interest paid	1,844	12,700
+ dividend received	644	945
+ real estate operating surplus	92	20
- income from insurer own funds	687	1,080
+ balance between income and charges related to investment for policy holder who bear the investment risk	-	877

All figures are based on a proper reclassification of the financial statements of insurance corporations gathered by IVASS for supervisory purposes. The income earned on own funds is excluded from D.441 applying the guidelines of the GNP Committee Task Force on Insurance Measurement, separately for life and non-life insurance. Total property income from the joint investment of technical reserves and own funds of the insurance corporations is partitioned through a *pro-rata* approach according to the ratio:

Capital and reserves + Profit for financial year

Capital and reserves + Profit for financial year + Technical provisions + Technical provisions for life insurance policies where the investment is borne by policy holders

As to D.441 from life insurance, the counterpart sectors are S.14 and S.2. The data sources available do not provide information on the counterpart sectors of D.441 from non-life insurance paid by domestic insurance corporations. For the latter, the estimate of the income receivable by each counterpart sector is obtained with the following formula:

$$D.441 \text{ from} \\ D.441 \text{ rec by } S_i = \begin{cases} D.441 \text{ from} \\ \text{non-life} \end{cases} = \begin{cases} D.441 \text{ from} \\ \text{non-life} \end{cases} \times \begin{cases} Cross \text{ non-life insurance premiums paid by } S_i \\ Total \text{ gross non-file insurance premiums paid} \end{cases}$$

Sectors S.13, S.14, S.15 Not applicable Sector S.2

#### A. Sources

Balance of payments (DS1)

#### B. Methods

The estimation process is broken down into several phases and follows the method used in BoP to calculate interests on the other investments. Two rates are determined: a reference rate for the banking sector (differentiated by currency) and an interest rate for technical reserves of insurance companies (equal to the reference rate plus a spread). These rates are then multiplied by the reference stock of assets and liabilities. In particular, for the assets (amounts paid by resident units) the stock is equal to the amount of technical reserves attributable to non-resident policyholders, as reported by insurance companies in the financial questionnaires of the survey of Bank of Italy regarding the transactions of resident non-financial and insurance corporations with the Row (DR -

direct reporting system). For the liabilities (income received by resident units), the stock is equal to the value of foreign policies underwritten by households, as estimated from the reports of premiums paid abroad included in the non-financial questionnaire of DR.

The BoP provides total D.441 paid by Row to resident units broken down by counterpart geographical area and counterpart sector. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sectors S.11, S.12, S.15

### A. Sources

Financial Statements of Insurance Corporations (DS2)

Survey on the financial statements of large enterprises (SCI) (DS6)

Survey on small and medium-sized enterprises and on the exercise of arts and professions (PMI) (DS7)

Supervisory reporting by the MFIs to the Bank of Italy (DS8)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Balance of payments (DS1)

### B. Methods

D.441 receivable by each of the three sectors S.11, S.12 and S.15 is estimated as:

(GPP<sub>Si</sub>/TGPP) X D.441Pay

where:

 $GPP_{Si} = gross non-life premiums paid by Sector S<sub>i</sub>$ 

TGPP = total gross non-life premiums paid by private resident units

D.441Pay= total D.441 from non-life insurance payable by insurance corporations

Sector S.13

There are no transactions of D.441 for GG.

Sectors S.14

#### A. Sources

Balance of payments (DS1)

# B. Methods

The D.441 receivable by households includes:

- the D.441 from life insurance payable by S.128 and S.2 to resident units;
- the D.441 from non-life insurance payable by insurance corporations to households. It is estimated with the algorithm described above for the other resident sectors.

# A. Sources

Balance of payments (DS1)

## B. Methods

The BoP provides the total D.441 received by Row from domestic insurance corporations broken down by counterpart geographical area and counterpart sector. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

# 36. D. 442 – Investment income payable on pension entitlements

Table D.52 - Investment income payable on pension entitlements - Year 2015 (million EUR)

Institutional sectors		Resources	Uses	
S.1 Total economy		1,171	1,171	
S.11	Non-financial corporations	0	0	
S.12	Financial corporations	0	1,171	
S.13	S.13 General government		0	
S.14	Households	1,171	0	
S.15 NPISH		0	0	
S.2	Rest of the world	0	0	

# 36.1. Description of compilation procedures

### **USES**

Sector S.1

☑ Data for S.1 correspond to uses of Pension Funds (S.129).

Sector S.11

Not applicable

Sector S.12

# A. Sources

COVIP Annual Report (DS3)

COVIP report for SBS (DS4)

# B. Methods

COVIP provides the aggregate investment income of reserves of PFs supervised. No adjustment is needed to ensure consistency of the COVIP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

D.442 payable by resident PFs is attributable only to resident households.

Sectors S.13, S.14, S.15, S2

Not applicable

# **RESOURCES**

Sector S.1

Data S.1 correspond to resources of Households (S.14)...

Sectors S.11, S.12, S.13, S.15

Not applicable

Sectors S.14

A. Sources

COVIP Annual Report (DS3) and COVIP report for SBS (DS4)

B. Methods

Total D.442 payable by PFs is receivable by resident households.

Sector S.2

Not applicable

# 37. D. 443 – Investment income attributable to collective investment fund shareholders

Table D.53 - Investment income attributable to collective investment fund shareholders - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	S.1 Total economy		3,917
S.11	Non-financial corporations	151	0
S.12	S.12 Financial corporations		3,917
S.13	S.13 General government		0
S.14	S.14 Households		0
S.15 NPISH		0	0
S.2	Rest of the world	93	7,338

# 37.1. Description of compilation procedures

### **USES**

Sector S.1

☑ Data for S.1 correspond to uses of S.124.

Sectors S.11

Not applicable

### A. Sources

Financial accounts (DS13)

Bank of Italy report on mutual investment funds (DS14)

#### B. Methods

Bank of Italy provides information on the primary income received and reinvested on behalf of shareholders' by Non-MMF investment funds that it supervised. No adjustment is needed to ensure consistency of the data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

Sectors S.13, S.14, S.15

Not applicable

Sector S.2

### A. Sources

Balance of payments (DS1)

## B. Methods

The income receivable by resident units resulting from the ownership of mutual investment fund shares are calculated on a security-by-security basis, depending on the stock data (calculated in the context of portfolio investments) and using the information on individual securities contained in the Centralized Securities Database (CSDB). This information is related to the daily accrued interest and the amount, timing and date of dividend payment. In detail:

- if the fund paid dividends at the end of the reference period, the income recorded is equal to the dividend;
- if the fund did not pay dividends during the reporting period (or in the case of accumulation funds), income is calculated as the product of the daily income, the average stock, the average price and the number of days in the reference period; this amount is entirely considered reinvested income;
- if the fund paid dividends during the reference period, the income is made up of two elements: the dividend paid and the reinvested income (the product of the daily income, the average stock, the average price and the number of days following the dividend payment).

The method is the same both for income received by resident investors in foreign funds (liabilities side) and for income paid by Italian funds to non-resident underwriters (asset side).

The BoP provides the D.443 payable by Row to resident units, broken down by counterpart geographical area and counterpart sector. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates

# **RESOURCES**

Sector S.1

Data S.1 are obtained as sum of all relevant resident sectors..

Sectors S.11, S.12, S.14

# A. Sources

Financial accounts (DS13)

Bank of Italy report on mutual investment funds (DS14)

Balance of payments (DS1)

### B. Methods

Financial accounts (FA) data on the stock of mutual fund held by resident units are used to estimate the D.443 attributable to each institutional sector. The estimate of D.443 receivable by each sector is carried out separately for Italian and foreign mutual funds.

Sectors S.13, S.15

Not applicable

Sector S.2

### A. Sources

Balance of payments (DS1)

# B. Methods

The BoP provides the D.443 receivable by non-resident underwriters from Italian funds, broken down by counterpart geographical area and counterpart sector. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates

#### 38. D. 45 – Rent

Table D.54 - Rent - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	5,448	5,448
S.11	Non-financial corporations	168	3,104
S.12	Financial corporations	0	0
S.13	General government	4,250	46
S.14	Households	1,031	2,298
	S.14/C Consumer Households	647	163
	S.14/P Producer Households		2,135
S.15	NPISH	0	0
S.2	Rest of the world	0	0

# 38.1. Description of compilation procedures

#### **USES**

Sector S.1

# A. Sources

General Agricultural Census (DS17)

Farm Structure Survey (FSS) (DS19).

GG non-financial accounts (DS15)

Annual report of Council for Agricultural Research and Economics (CREA) (DS18)

#### B. Methods

Rents of land for S.1 includes the following items:

- Rents of agricultural land;
- Other rents of land paid to S.13

The estimate of the first component is calculated grossing up the average rental value through the rented surface of agricultural land. The latter is provided by the 6th General Agricultural Census and from the Farm Structure Survey (FSS). The average rental value is taken from the annual report of the Council for Agricultural Research and Economics (CREA).

The second component is taken from GG accounts.

Sector S.11, S.14

Rents of agricultural land of S.1 are allocated to these sectors using information from the 6th General Agricultural Census and from the Farm Structure Survey (FSS).

An indirect approach is used to allocate the other rents received by GG based on the distribution of output between sectors.

Sector S.12

Not applicable

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.15

Not applicable

Sector S.2

Not applicable

## **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors.

Sector S.11, S.14

Rents of land received by private sectors are estimated according to the stock of owned land, other than land underlying buildings, by sector.

Sector S.12

Not applicable

Sector S.13

The estimation method is described in Italy EDP Inventory

(http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

Sector S.15
Not applicable

Sector S.2
Not applicable

### 39. D.51 – Taxes on income

Table D.55 - Taxes on income - Year 2015 (million EUR)

Institut	Institutional sectors		Uses
S.1	Total economy	234,549	233,343
S.11	Non-financial corporations	0	26,464
S.12	Financial corporations	0	5,731
S.13	General government	234,549	1,388
S.14	Households	0	199,708
	S.14/C Consumer Households		197,231
	S.14/P Producer Households	0	2,477
S.15	NPISH	0	52
S.2	Rest of the world	1,734	2,940

# 39.1. Description of compilation procedures

#### **USES**

#### Sector S.1

Taxes on income paid by S.1 correspond to the sum of the entries of S.13 and S.2.

As for current taxes receivable by S13, the estimate of the tax burden imposed on the other units is carried out by type of tax. Table D.56 - shows the detail of current taxes by type as received by GG and as paid by counterpart sectors for the year 2015. Most types of taxes are levied by GG on the income or wealth of units classified into one definite institutional sector, such as capital gains tax (only paid by consumer households) or substitute tax on the budget revaluation of business assets (only paid by the corporate sector) and are, hence, directly attributable. When a one-to-one matching is not possible, generally the estimate of amount paid by each sector or group of sectors relies on the distribution of the relevant tax base.

The information available only provides total current taxes paid to GG by corporations and non-commercial entities, including GG. Ones subtracted current taxes paid by S.13, the remaining amount has to be allocated to sectors S.11 and S.12. Taxes paid by S.12 are taken from supervisory data; hence the amount paid by the non-financial corporations is obtained as residual.

Only private resident units pay taxes to non-resident institutions: BoP data provide separately the amounts paid by Financial corporations, on one side, and all other sectors, on the other; to allocate this total to households and non-financial corporations the relevant proportion of D5 paid by these sectors to GG is used as a proxy.

Table D.56 - Current taxes on income and wealth paid by type - Year 2015 (million  $\overline{\mbox{EUR}})$ 

	Current taxes paid to GG by				Total taxes		
	S.11, S.12, S.13	S.14	S.14/C	S.14/P	S.15	S.2	received by S.13
D.5 - Current taxes	35,087	204,393	201,600	2,793	52	2,940	242,471
D.51 - Taxes on income	33,377	198,181	195,725	2,456	52	2,940	234,549
Personal income tax (IRPEF)	0	179,065	179,065	0	0	2,557	181,622
Corporate income tax (IRES)	31,819	0	0	0	0	0	31,819
Local tax on income (ILOR)	12	0	0	0	0	0	12
Withholding tax on interest, other property income, asset management income	765	11,281	10,851	430	52	121	12,218
Capital gains tax on transfer of companies' shares	0	2,263	2,263	0	0	0	2,263
Withholding tax on life insurance and pension fund	0	1,563	1,563	0	0	0	1,563
Withholding tax insurance tecnical provisions	0	547	547	0	0	0	547
Tax on income from secutiries w ealth	0	134	134	0	0	0	134
Municipal capital gains tax on buildings	5	0	0	0	0	0	5
Withholding on distributed income of corporations	0	613	613	0	0	263	875
Tax on net wealth of enterprises	4	0	0	0	0	0	4
Substitute tax onbusiness assets' budget revaluation	772	0	0	0	0	0	772
Taxes on winnings from lottery	0	581	581	0	0		581
Substitute tax on rental income	0	2,026	0	2,026	0		2,026
Tax on capital abroad disclosure	0	108	108	0	0		108
D.59 - Other current taxes	1,710	6,212	5,876	336	0	0	7,922
Local tax on buildings plots	582	388	388	0	0	0	970
Tax on licenses	0	85	85	0	0	0	85
Motor vehicle duty paid by housel	0	4,618	4,618	0	0	0	4,618
Other taxes on income	1,121	1,121	785	336	0	0	2,242
Tax on boats and aircrafts	7	0	0	0	0	0	7

#### A. Sources

General Government non-financial accounts (DS15)

# B. Methods

Taxes on income paid by non-financial corporations mainly refer to corporate income tax (IRES). As pointed out above, for S.11 this transaction is calculated by deducting the amounts paid by S.13 and S.12 from the total taxes liabilities of corporations and non-commercial entities.

Sectors S.12

## A. Sources

General Government non-financial accounts (DS15) Financial Statements of Insurance Corporations (DS) Supervisory reporting by the FIs to the Bank of Italy (DS8) InfoCamere archive of financial statements (DS24) Covip annual report (DS3)

### B. Methods

Data sources provide direct information on the current taxes paid by the MFIs, other FIs, holding corporations, insurance corporations and financial auxiliaries. The note to annual financial statements provide all data to identify all types of taxes paid by corporations and to exclude those types to be classified as other taxes on production (mainly IRAP) or capital taxes.

#### Sector S.13

The taxes on income paid by GG mainly refer to tax on income of non-commercial entities included in sector S.13 and withholding tax on interests and other property income. The estimation method is described in Italy EDP Inventory (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

Sector S.14

#### A. Sources

General Government non-financial accounts (DS15)

#### B. Methods

Most part of taxes paid by households are directly attributable to the sub-sectors of consumer households or producer households according to the precondition of the tax. Taxes on income paid by consumer households (S.14C) mainly refer to personal tax on income (IRPEF) and withholding tax on interest and other property income. For the latter, the amounts paid by households are computed according to the distribution of the relevant tax base, namely gross interests or other property income. For the producer households (S.14P), the most relevant tax is the tax on rentals.

# A. Sources

General Government non-financial accounts (DS15)

## B. Methods

NPSHIs only paid withholding tax on interest and the amount is estimated on the basis of the share of gross interests received by the sector.

Sectors S.2

# A. Sources

Balance of Payments (DS1)

# B. Methods

BoP provides taxes on income paid by non-resident units to GG, that mainly refer to current taxes paid by cross-border workers and foreign investors. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### RESOURCES

Sector S.1

Data for S.1 corresponds to the resources of S.13

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

## A. Sources

Balance of Payments (DS1)

### B. Methods

BoP provides the value of taxes on income received by RoW from resident units brokendown by counterpart institutional sector and geographical area. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates

### 40. D.59 – Other current taxes

Table D.57 - Other current taxes - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	7,922	7,922
S.11	Non-financial corporations	0	1,419
S.12	Financial corporations	0	291
S.13	General government	7,922	0
S.14	Households	0	6,212
	S.14/C Consumer Households	0	5,876
	S.14/P Producer Households	0	336
S.15	NPISH	0	0
S.2	Rest of the world	0	0

# 40.1. Description of compilation procedures

### **USES**

### Sector S.1

Other current taxes paid by S.1 correspond to the resources of S.13.

The estimation method is the same as taxes on income and it is described in paragraph 39.

# Sectors S.11

# A. Sources

General government accounts (DS15)

## B. Methods

S.11 only pays a particular type of Other current taxes, it is "Other taxes on income": half of this type of taxes is allocated to total households (30% to S.14C and 20% to S.14P) and half to non-financial corporations (Table D.56).

#### Sectors S.12

# A. Sources

General government accounts (DS15)

Financial Statements of Insurance Corporations (DS2)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

InfoCamere archive of financial statements (DS24)

Covip annual report (DS3)

#### B. Methods

Data sources provide information to identify the payments for other current taxes made by financial corporations.

Not applicable

Sectors S.14

# A. Sources

General government accounts (DS15)

# B. Methods

Most part of other current taxes paid by households are directly attributable to the subsectors of consumer households (S.14C). D.59 paid by consumer households mainly refer to motor vehicle duty; while only a 20% of "other taxes on income" is allocated to producer households (Table D.56).

Sectors S.15

Not applicable

Sectors S.2

Not applicable

# **RESOURCES**

Sector S.1

Data for S.1 corresponds to the resources of S.13

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

Not applicable

# 41. D.611 – Employers' actual social contributions

Table D.58 - Employers' actual social contributions - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	163,513	163,697
S.11	Non-financial corporations	11,064	0
S.12	Financial corporations	7,583	0
S.13	General government	143,304	0
S.14	Households	1,423	163,697
	S.14/C Consumer Households	<i>4</i> 61	163,697
	S.14/P Producer Households	962	0
S.15	NPISH	139	0
S.2	Rest of the world	1,006	822

# 41.1. Description of compilation procedures

### **USES**

Sector S.1

Data for S.1 corresponds to uses of S.14

Sector S.14

This transaction corresponds to the total amount of D.121 received by consumer households (paragraph 23)

Sector S.2

# A. Sources

Balance of payments (DS1)

# B. Methods

BoP data provides actual social contributions received by resident employers from non-resident workers. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sector S.11, S.14, S.15

For these sectors, this transaction refers to the annual provision to the severance funds (see paragraph 23 of section D).

Sector S.12

Employers' actual contributions received by S.12 include:

- the annual provision to the severance funds for employees of the units classified in S.12 (see paragraph 23 of section D)
- the employers' actual contributions collected by the Pension Funds.

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

### A. Sources

Balance of payments (DS1)

# B. Methods

BoP data provides actual social contributions received by non-resident employers from resident workers. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

# 42. D.612 – Employers' imputed social contributions

Table D.59 - Employers' imputed social contributions - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	11,430	11,430
S.11	Non-financial corporations	5,467	0
S.12	Financial corporations	1,746	0
S.13	General government	3,938	0
S.14	Households	239	11,430
	S.14/C Consumer Households	57	11,430
	S.14/P Producer Households	182	0
S.15	NPISH	40	0
S.2	Rest of the world	0	0

# 42.1. Description of compilation procedures

# **USES**

Sector S.1

Data for S.1 corresponds to uses of S.14

Sector S.14

This transaction corresponds to the total amount of D.122 received by consumer households (see paragraph 24 of section D).

Sector S.2

Not applicable

### **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

All resident sectors

This transaction corresponds to the amount of D.122 paid by the sectors (see paragraph 24 of section D).

Sector S.2

Not applicable

# 43. D.613 – Households' actual social contributions

Table D.60 - Households' actual social contributions - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	74,398	74,398
S.11	Non-financial corporations	0	0
S.12	Financial corporations	2,576	0
S.13	General government	71,822	0
S.14	Households	0	74,398
	S.14/C Consumer Households	0	<i>74,</i> 398
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	0

# 43.1. Description of compilation procedures

### **USES**

Sector S.1

Data for S.1 corresponds to resources data for S.13 and S.12

Sector S.11, S.12, S.13, S.15

Not applicable

Sector S.14

This transaction corresponds to the total amount of social contributions paid on their own behalf by employees, self-employed and non-employer persons to Social Security Funds and to Pension Funds.

Sector S.2

Not applicable

### **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sector S.11, S.14, S.15

Not applicable

Sector S.12

A. Sources

COVIP annual report (DS3)

# B. Methods

This transaction refers to actual contributions paid by self-employed to Pension Funds.

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.2

Not applicable

# 44. D.61SC – Social insurance scheme services charges

Table D.61 - Social insurance scheme services charges - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	467	467
S.11	Non-financial corporations	0	0
S.12	Financial corporations	467	0
S.13	General government	0	0
S.14	Households	0	467
	S.14/C Consumer Households	0	467
	S.14/P Producer Households	0	0
S.15	NPISH	0	0
S.2	Rest of the world	0	0

# 44.1. Description of compilation procedures

# **USES**

Sector S.1

Data for S.1 corresponds to resources data of S.12

Sector S.11, S.12, S.13, S.15

Not applicable

Sector S.14

Pension Funds service charges (D61SC) correspond to output of PFs (see paragraph 2 pf section D).

Sector S.2

Not applicable

# **RESOURCES**

Sector S.1

Data for corresponds to resources data of S.12

Sector S.11, S.14, S.13, S.15

Not applicable

Sector S.12

# A. Sources

COVIP annual report (DS3)

# B. Methods

Output of PFs (see paragraph 2 of section D) is imputed as Pension Funds service charges (D61SC)

Sector S.2

Not applicable

# 45. D.62 – Social benefits other than social transfers in kind

Table D.62 - Social benefits other than social transfers in kind - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	362.655	359.862
S.11	Non-financial corporations	0	15.712
S.12	Financial corporations	0	10.014
S.13	General government	0	332.792
S.14	Households	362.655	1.165
	S.14/C Consumer Households	362.655	517
	S.14/P Producer Households	0	648
S.15	NPISH	0	179
S.2	Rest of the world	1.543	4.336

# 45.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sector S.11, S.14P

## A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

InfoCamere archive of financial statements (DS24)

# B. Methods

For these sectors, Social benefits refer to social imputed contributions (see paragraph 24 of section D) and the severance pay (TFR) paid by the employers to employees at the end of the employment relationship. Data sources (DS12 and DS24) provide information to estimate these transactions.

Sector S.12

# A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Financial statement of the Bank of Italy (DS33)

Supervisory reports to the Bank of Italy (DS8)

Financial statements of insurance corporations (DS2)

InfoCamere archive of financial statements (DS24)

COVIP annual report (DS3)

## B. Methods

Social benefits in cash paid by S.12 include:

- the social imputed contributions (see paragraph 24 of section D);
  - the severance pay (TFR) paid by the employers to employees at the end of the employment relationship. Financial statement of Bank of Italy (DS33), financial intermediaries (DS8), insurance corporations (DS2), financial auxiliaries (DS12, DS24) provide the informations to estimate this transaction.
  - the benefits in cash paid by Pension Funds to the members. Data are provided by COVIP (DS3).

Sector S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sector S.14C, S.15

For these sectors, Social benefits refer to social imputed contributions (see paragraph 24 of section D) and the severance pay (TFR) paid by the employers to employees at the end of the employment relationship. No information is available for severance pay (TFR) paid

in the year by employers classified in sectors S.14C and S.15. We assume that this amount is equal to the annual provision to the relevant fund included in D.121.

Sector S.2

## A. Sources

Balance of payments (DS1)

# B. Methods

BoP data provides cash benefits paid by non-resident employers to resident workers. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### RESOURCES

Sector S.1

Data for S.1 corresponds to resources of S.14

Sector S.11, S.12, S.13, S.15

Not applicable

Sector S.14C

This transaction includes benefits in cash received by resident households from resident and non-resident units.

Sector S.2

# A. Sources

Balance of payments (DS1)

# B. Methods

BoP data provides benefits in cash received by non-resident households from resident units.

# 46. D.63 – Social benefits in kind

Table D.63 - Social benefits in kind - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	193.104	193.104
S.11	Non-financial corporations		
S.12	Financial corporations		
S.13	General government		183.994
S.14	Households	193.104	
	S.14/C Consumer Households	193.104	
	S.14/P Producer Households	0	
S.15	NPISH	0	9.110
S.2	Rest of the world		

# 46.1. Description of compilation procedures

### **USES**

Sector S.1

Data for S.1 are obtained as sum of uses of S.13 and S.15

Sector S.11, S.12, S.14

Not applicable

Sector S.13, S.15

This transactions corresponds to P.31 (see paragraph 7 of section D)

Sector S.2

Not applicable

### **RESOURCES**

Sector S.1

Data for S.1 corresponds to resources of S.14

Sector S.11, S.12, S.13, S.15

Not applicable

Sector S.14C

The benefits in kind received by consumer households corresponds to individual consumptions expenditure of S.15 and S.13.

Sector S.2

Not applicable

# 47. D.71 – Net non-life insurance premiums

Table D.64 - Net non-life insurance premiums - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	19,517	19,112
S.11	Non-financial corporations	0	5,841
S.12	Financial corporations	19,517	326
S.13	General government	0	863
S.14	Households	0	12,049
	S.14/C Consumer Households	0	10,912
	S.14/P Producer Households	0	1,137
S.15	NPISH	0	32
S.2	Rest of the world	1,380	1,785

# 47.1. Description of compilation procedures

#### **USES**

#### Sector S.1

Data for S.1 are obtained as sum of all relevant sectors.

Sectors S.11

## A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

## B. Methods

Data source provide information on non-life gross actual premiums paid by non-financial corporations to Italian and foreign insurance companies. Net non-life insurance premiums payable by private resident units are allocated to each sector according to the distribution of gross actual premiums.

Sectors S.12

### A. Sources

Financial Statements of Insurance Corporations (DS2)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

### B. Methods

Data sources provide information on gross actual premiums paid by insurance corporations (DS2), banks and OFIs (DS8) and financial auxiliaries (DS12) to Italian and foreign insurance companies. Like for S.11, the distribution of non-life gross actual premiums is used to estimate the share of net non-life premiums to be allocated to financial corporations

Sectors S.13

The estimation method is described in Italy EDP Inventory (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

Sectors S.14

## A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Household Expenditure Survey (DS5)

### B. Methods

Data source provide information on gross actual premiums paid by enterprises included in producer households (DS12) and consumer households (DS5). The distribution of non-life gross actual premiums is used to estimate the share of net non-life premiums to be allocated to producer and consumer households

Data sources do not provide information for sector S.15. An indirect approach is used. Non-life net and gross actual premiums paid by private non-market institutions are computed by applying to output of S.15 the ratio gross/net premium to output calculated for non-financial corporations.

Sectors S.2

#### A. Sources

Balance of Payments (DS1)

## B. Methods

BoP provides net premiums paid by non-resident units to Italian insurance corporations. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and the exhaustiveness of the estimates.

#### RESOURCES

Sector S.1

Data for S.1 corresponds to the uses of S.12

Sectors S.12

### A. Sources

Financial Statements of Insurance Corporations (DS2)

## B. Methods

Net non-life insurance premiums receivable by insurance corporations (S.128) are computed by deducting the insurance service charges from the total amount of actual premiums payable and the premium supplements attributable to insurance policy holders. The methodology to calculate premiums is described in paragraph 2 when the estimate of non-life insurance output is presented.

Sectors S.2

### A. Sources

Balance of Payments (DS1)

# B. Methods

BoP provides net premiums paid resident units to foreign insurance corporations. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and the exhaustiveness of the estimates.

### 48. D.72 – Non-life insurance claims

Table D.65 - Non-life insurance claims - Year 2015 (million EUR)

Institutional sectors		Resources	Uses
S.1	Total economy	18,537	19,517
S.11	Non-financial corporations	5,328	0
S.12	Financial corporations	150	19,517
S.13	General government	72	0
S.14	Households	12,968	0
	S.14/C Consumer Households	11,855	0
	S.14/P Producer Households	1,113	0
S.15	NPISH	19	0
S.2	Rest of the world	2,628	1,648

# 48.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 corresponds to uses data for S.12.

Sectors S.12

For S.12 the transaction corresponds to net non-life insurance premiums received by resident insurance corporations.

Sectors S.2

# A. Sources

Balance of Payments (DS1)

# B. Methods

BoP provides non-life insurance claims paid to residents by foreign insurance corporations. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and the exhaustiveness of the estimates.

# **RESOURCES**

Sector S.1

Data for S.1 are obtained as sum of the uses of the resident sectors.

Sectors S.11, S.12, S.14, S.15

The available data sources do not provide reliable information on claims received by households and enterprises. These data are estimate through an indirect approach: non-life insurance claims paid by resident and foreign insurance corporations to private resident sectors are allocated to each sector according to the distribution of net non-life premiums.

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

BoP provides non-life insurance claims received by non-resident units from Italian insurance corporations. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and the exhaustiveness of the estimates.

## 49. D.74 – Current international cooperation

Table D.66 - Current international cooperation - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	1,168	1,944
S.11	Non-financial corporations	0	0
S.12	S.12 Financial corporations		0
S.13	General government	1,168	1,944
S.14	Households	0	0
	S.14/C Consumer Households	0	0
	S.14/P Producer Households		0
S.15	NPISH	0	0
S.2	Rest of the world	1,944	1,168

## 49.1. Description of compilation procedures

## **USES**

Sector S.1

Data for S.1 corresponds to uses of sector S.13

Sectors S.11, S.12

Not applicable

Sectors S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14, S.15

Not applicable

Sectors S.2

A. Sources

Balance of Payments (DS1)

## B. Methods

BoP includes the estimates of contributions and other current transfers from international organisations to GG provided by Istat.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## **RESOURCES**

Sector S.1

Data for S.1 corresponds to resources of sector S.13

Sectors S.11, S.12

Not applicable

Sectors S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14, S.15

Not applicable

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

BoP includes the estimates of contributions and other current transfers from GG to international organisations provided by Istat.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## 50. D.75 – Miscellaneous current transfers

Table D.67 - Miscellaneous current transfers - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	S.1 Total economy		55,052
S.11	S.11 Non-financial corporations		6,246
S.12	Financial corporations	1,972	2,864
S.13	General government	18,462	9,477
S.14	Households	19,899	34,275
	S.14/C Consumer Households	19,590	32,414
	S.14/P Producer Households	309	1,861
S.15	NPISH	9,309	2,190
S.2	Rest of the world	6,581	2,530

## *50.1.* Description of compilation procedures

#### USES

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sectors S.11

## A. Sources

Balance of Payments (DS1)

General Government non-financial accounts (DS15)

2011 Census of non-profit institutions (CISINP) (DS22)

## B. Methods

Table D.68 - shows current transfers paid by S.11 to counterpart sectors.

GG accounts only provide current transfers paid from market enterprises to S.13. The information available on the revenues of GG for current transfers from the enterprises does not allow to identify the counterpart sectors. An indirect approach is followed: for about 85% of current transfers received by GG, the counterpart sectors are identified according to the relevant distribution of value added; about 8% of current transfers are allocated to counterpart sectors according to the relevant distribution of employers' actual contributions; about 7% is directly allocated to non-financial corporations.

BoP data provides the amount of current transfers to non-resident units from non-financial corporations.

The estimate of current transfers to NPISHs (Table D.69) uses the information provided by CISINP for the year 2011 and updated with an indicator (a ratio on total output of S.15) for the following years.

## A. Sources

Balance of Payments (DS1)

General Government non-financial accounts (DS15)

2011 Census of non-profit institutions (CISINP) (DS22)

Financial Statements of Insurance Corporations (DS2)

COVIP Annual Report (DS3)

Financial Statements of Bank of Italy (DS8)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

## B. Methods

Table D.68 - shows current transfers paid by S.12 to counterpart sectors.

Current transfers from FIs to GG are calculated as for S.11 (see above).

BoP provides information on current transfers to non-resident units.

Supervisory data for insurance corporations and financial intermediaries provides information on current transfers to NPISHs.

This transaction includes the current transfers from the central bank to MFIs. It corresponds to an adjustment carried out to compensate the output of the central bank registered as intermediate consumption of MFIs.

Table D.68 - Miscellaneous current transfers whom-to-whom - Year 2015 (million EUR)

				D.75	receivat	ole by se	ctor			D.75
			S.12	S.13	S.14	S14/C	S14/P	S.15	S.2	total uses
	S.11 Non-financial corporations			5,581				472	193	6,246
ō	S.12 Financial corporations		1,930	409				525	0	2,864
sector	S.13 General government	871	13		4,988	4,679	309	3,605		9,477
by	S.14 Households	202	0	12,472	10,506	10,506	О	4,708	6,388	34,275
payable	S.14/C Consumer Households	202		10,611	10,506	10,506		4,708	6,388	32,414
,5 pa	S.14/P Producer Households			1,861	0			0	0	1,861
D.75	S.15 NPISH	34			2,157	2,157		0	0	2,190
	S.2 Rest of the w orld	253	29		2,248	2,248				2,530
D.75 total resources		1,360	1,972	18,462	19,899	19,590	309	9,309	6,581	57,582

## Sectors S.13

The estimation method is described in Italy EDP Inventory (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

## Sectors S.14

## A. Sources

Balance of Payments (DS1)

General Government non-financial accounts (DS15)

2011 Census of non-profit institutions (CISINP) (DS22)

Eu Silc (DS41)

15th General Population and Housing Census (DS44)

## B. Methods

Table D.68 - shows current transfers paid households (S.14C and S.14P) to counterpart sectors.

Current transfers from producer households to GG are calculated as for S.11 (see above). Data sources allow to identify the current transfers from consumer households to S.13 and S.2.

The estimate of current transfers to NPISHs uses information provided by CISINP for the year 2011, updated with an indicator (a ratio on total output of S.15) for the following years.

Current transfers from consumer households to S.11 refer to transfers to market NPIs included in S.11 (source CISINP).

Current transfers between consumer households mainly refers to:

- current transfers for child support;
- current transfers to family members living away from home

The number of divorces and of students living in another location (calculated from the population census) is used to gross up the average amount of the current transfers mentioned above (mainly derived from Eu silc survey).

Sectors S.15

#### A. Sources

General government accounts (DS15)

2011 Census of non-profit institutions (CISINP) (DS22)

#### B. Methods

Current transfers from NPISHs to consumer households are estimated with CISINP information for year 2011 and updated with an indicator (a ratio on total output of S.15) for the following years.

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

BoP provides information on current transfers to resident units from non-resident units, broken down by counterpart sectors. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### RESOURCES

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sectors S.11, S.12, S.14, S.15

Current transfers received by resident sectors derive from counterpart sectors estimates.

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

BoP provides information on current transfers to non-resident units from resident units, broken down by counterpart sectors. No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## 51. D.76 – VAT-and GNI-based EU own resources

Table D.69 - VAT-and GNI-based EU own resources - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses		
S.1	S.1 Total economy		13,737		
S.11	Non-financial corporations	0	0		
S.12	Financial corporations	0	0		
S.13	General government	0	13,737		
S.14	Households	0	0		
	S.14/C Consumer Households	0	0		
	S.14/P Producer Households	0	0		
S.15	S.15 NPISH		0		
S.2	Rest of the world	13,737	0		

## 51.1. Description of compilation procedures

## **USES**

Sector S.1

■ Data for S.1 corresponds to uses of sector S.13

Sectors S.11, S.12, S.14, S.15

Not applicable

Sectors S.13

# Not applicable **RESOURCES**

Sector S.1

Not applicable

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

BoP includes the estimates of contributions of GG to the EU budget for the *third and fourth resource* and VAT refund to the UK provided by Istat.

## 52. D.8 – Adjustment for the change in pension entitlements (D.8)

Table D.70 - Adjustment for the change in pension entitlements - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	S.1 Total economy		3,912
S.11	Non-financial corporations	0	820
S.12	Financial corporations	0	2,596
S.13	General government	0	0
S.14	Households	3,912	496
	S.14/C Consumer Households	3,912	0
	S.14/P Producer Households	0	<i>4</i> 96
S.15	NPISH	0	0
S.2	Rest of the world	0	0

## *52.1.* Description of compilation procedures

The adjustment for the change in pension entitlements (D8) includes the following two components:

- the annual change in Provision for employee severance pay (in Italian "Fondo per il trattamento di fine rapporto del personale (TFR)") of the enterprises with employees. The TFR provision is a financial liability of the enterprises; it is comparable to a post-retirement defined benefit and it is recognised according to an actuarial estimate of the amount of benefit accrued by employees discounted to present value. This component of D.8 is computed by deducting the amounts for severance payments made by the enterprises and included in the social benefits (D.62) from the total corresponding provisions, included in D.121 and D.61.
- the annual change in Pension Funds reserves, obtained by the following formula

Annual change in Pension Funds reserves =

actual contributions paid to PFs by employers and employees

- + supplements contributions attributed to the PFs beneficiaries
- benefit paid by the PFs
- value of associated service charges

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant subsectors.

Sectors S.11

#### A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

## B. Methods

Data source provide information to estimate severance payments and corresponding provisions made by non-financial corporations. These figures are included in the estimate of D.62 and D.61, respectively.

Sectors S.12

#### A. Sources

Financial Statements of Insurance Corporations (DS2)

COVIP Annual Report (DS3) and COVIP report for SBS (DS4)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

#### B. Methods

Data sources DS3 and DS4 allow to compute all components of the change in PFs reserves.

Data sources DS2, DS8 and DS12 provide information to estimate severance payments and provisions of banks and other financial intermediaries, insurance corporations and financial auxiliaries, respectively

Sectors S.13

Not applicable

Sectors S.14

#### A. Sources

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

## B. Methods

The data refer to severance payments and provisions of producer units classified as producer households (S.14P).

Sectors S.15

For NPISHs, severance payments are equal to provisions of the year.

Sectors S.2

Not applicable

## **RESOURCES**

Sector S.1

Data for S.1 corresponds to the resources of S.14

Sector S.14

Only resident households are beneficiaries of change in pension entitlements (D.8)

Sector S.2

Not applicable

## 53. D.91 – Capital taxes

Table D.71 - Capital taxes - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	S.1 Total economy		1,333
S.11	Non-financial corporations	0	163
S.12	Financial corporations	0	211
S.13	General government	1,214	0
S.14	Households	0	959
	S.14/C Consumer Households	0	948
	S.14/P Producer Households	0	11
S.15	S.15 NPISH		0
S.2	Rest of the world	119	0

## 53.1. Description of compilation procedures

## **USES**

Sector S.1

Capital taxes paid by S.1 correspond to resources of sector S.13.

Table D.73 shows the detail of capital taxes by type as paid to GG by counterpart sectors for the year 2015. Most type of taxes are levied by GG on the value of assets of units classified into one definite institutional sector and a one-to-one attribution is possible. When a tax amnesty occurs, the amount paid by each sector or group of sectors is carried out according to the distribution of the relevant tax-base.

## A. Sources

General government accounts (SD15)

## B. Methods

Capital taxes paid by non-financial corporations are computed by deducting the amounts paid by S.12 from the total taxes paid by corporations (Table D.72 - .

## Sectors S.12

## A. Sources

General government accounts (SD15)

Financial Statements of Insurance Corporations (DS2)

Supervisory reporting by the FIs to the Bank of Italy (DS8)

Integrated statistical system of administrative and survey data for SBS estimations (Frame-SBS) (DS12)

## B. Methods

Data sources provide information to identify the payments for capital taxes made by financial corporations.

## Sectors S.13

Not applicable

Table D.72 - Capital taxes paid by type - Year 2015 (million EUR)

	(		Total taxes					
	S.11, S.12	S.14	S.14/C	S.14/P	S.15	S.2	received by S.13	
D.9 - Capital taxes	255	959	948	11	0	0	1,214	
Taxes on inheritance and gifts	0	674	674	0	0	0	674	
Tax amnesty	21	64	54	10	0	0	85	
Tax on adaptation to Accounting								
Standards (IAS)	229	0	0	0	0	0	229	
Tax on voluntary disclosure of								
capitals abroad	0	212	212	0	0	0	212	
Other capital taxes	5	9	8	1	0	0	14	

## Sectors S.14

## A. Sources

General government accounts (SD15)

## B. Methods

Most part of capital taxes paid by households are directly attributable to the sub-sector of consumer households (S.14C). D.91 paid by consumer households mainly refers to taxes on inheritance and gifts; while to producer households only a share of the tax amnesty is allocated (Table D.73).

## Sectors S.15

Not applicable

Not applicable

## **RESOURCES**

Sector S.1

Data for S.1 corresponds to resources of S.13

Sector S.13

Sector S.2

Not applicable

## 54. D.92 – Investment grants

Table D.73 - Investment grants - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	21,221	15,682
S.11	Non-financial corporations	14,753	0
S.12	Financial corporations	0	0
S.13	General government	4,463	15,682
S.14	Households	2,005	0
	S.14/C Consumer Households	1,614	0
	S.14/P Producer Households	391	0
S.15	NPISH	0	0
S.2	Rest of the world	856	6,395

## 54.1. Description of compilation procedures

## **USES**

Sector S.1

☐ Data for S.1 corresponds to uses of sector S.13

Sectors S.11, S.14P

Not applicable

Sectors S.12

Not applicable

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14. S.15

Not applicable

Sectors S.2

## A. Sources

Balance of Payments (DS1)

#### B. Methods

Investment grants consist of contributions paid by the European Structural Funds (ERDF, EAFRD, EAGF, EAGGF) to resident units: such amounts may be paid directly to beneficiaries (mainly corporations) or delivered to the Central or Local Government, which transfer them to the final beneficiaries.

Istat elaborates the capital revenues from EU institutions according to the information on unilateral transfer flows provided by the State General Accounting Department (GAD). These estimates are included by the Bank of Italy in the BoP.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

#### RESOURCES

Sector S.1

Investment grants receivable by S.1 correspond to the sum of the uses data for sectors S.13 and S.2.

Sectors S.11, S.14P

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

## B. Methods

BoP data allow to identify the investment grants received from the European institutions by the non-financial corporations sector.

As for the amounts paid by GG, the information available allows to assign most types of the investment grants directly to the non-financial corporations sector. A residual category of capital grants is divided between the sectors S.11 and S.14P according to the distribution of the relevant gross fixed capital formation.

#### Sectors S.12

No investment grants to the financial corporations have been reported in the data sources so far.

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14C

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

## B. Methods

No investment grants to the households sector have been reported in the BoP data so far. GG accounts provide the value of investment grants received by consumer households (S.14C).

## Sectors S.15

No investment grants to the NPISHs have so far reported in the data sources.

Sectors S.2

## A. Sources

Balance of Payments (DS1)

## B. Methods

Investment grants consist of payments to the European Structural Funds (ERDF, EAFRD, EAGF, EAGGF) made by S.13. Istat elaborates the capital payments to the European institutions according to the information on unilateral transfer flows provided by the State General Accounting Department (GAD). These estimates are used by the Bank of Italy in the compilations of the Balance of Payments.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## 55. D.99 – Other capital transfers

Table D.74 - Other capital transfers - Year 2015 (million EUR)

Institut	ional sectors	Resources	Uses
S.1	Total economy	17,573	17,909
S.11	Non-financial corporations	4,293	858
S.12	Financial corporations	8,505	10
S.13	General government	1,176	15,323
S.14	Households	2,200	1,718
	S.14/C Consumer Households	2,200	1,718
	S.14/P Producer Households		0
S.15	NPISH	1,400	0
S.2	Rest of the world	336	0

## 55.1. Description of compilation procedures

#### **USES**

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sectors S.11

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

## B. Methods

Data source DS15 allows to identify the payments made by non-financial corporations sector to S.13 as other capital transfer.

No capital transfers other than investment grants have so far reported in the BoP for non-financial corporations sector.

Sectors S.12

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

## B. Methods

Data sources allow to identify the payments made by financial corporations sector to S.13 and to S.2 as other capital transfers.

Sectors S.13

The estimation method is described in Italy EDP Inventory (<a href="http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf">http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf</a>).

Sectors S.14

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

Census of non-profit institutions (CISINP) (DS22)

## B. Methods

Data sources allow to identify the amounts paid by consumer households (S.14C) to S.13, S.2 and S.15. No other capital transfers paid by producer households (S.14P) have so far reported in the data sources.

Sectors S.15

No other capital transfers paid by NPISHs have so far reported in the data sources.

Sectors S.2

Not applicable

#### RESOURCES

Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sectors S.11, S.12

## A. Sources

General government accounts (SD15)

#### B. Methods

The information available allows to identify the types of GG capital transfers to S.11 and S.12, separately. Only tax-credit refunds are equally subdivided between the two sectors.

Sectors S.13

estimation method The is described **EDP** Inventory in Italy (http://ec.europa.eu/eurostat/documents/1015035/7110762/IT-EDP-Inventory-201512.pdf).

Sectors S.14

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

## B. Methods

GG accounts provides the payment for other capital transfers made to consumer households (S.14C).

Sectors S.15

## A. Sources

General government accounts (DS15)

Balance of payments (DS1)

Census of non-profit institutions (CISINP) (DS22)

## B. Methods

Capital transfers receivable by NPISHs consist of legacies made by consumer households. CISINP provides information to estimate this amounts in 2011; for the following years, this transaction has been updated with an indicator (a ratio on total output of S.15).

No GG capital transfers to NPISHs have so far been reported.

Sectors S.2

#### A. Sources

Balance of Payments (DS1)

## B. Methods

This transaction consists of the other current transfers made by S.13 to non-resident institutions. Istat provides the estimate to the Bank of Italy for the compilations of the Balance of Payments.

No adjustment is needed to ensure consistency of the BoP data with ESA 2010 definitions and to ensure the exhaustiveness of the estimates.

## **56. EMP – EMPLOYMENT**

## *56.1.* Description of compilation procedures

Employment in NA is obtained at micro-level starting from two different databases that collect and integrate surveys and administrative sources. The aim of the calculation procedure is the measurement of employment in terms of jobs, persons employed and hours worked through an integration of information on labour demand (database on employers) and on labour supply (database on workers). A complete data set of micro data is available in time for the September release of annual labour input estimates referred to year t-2.

The current approach has been implemented for the first time on September 2014 on the reference year 2011. At the moment, definitive estimates are updated every year with the same approach. Provisional estimates are compiled through a simplified approach based on quarterly estimates (QNA).

The current approach to estimate labour input incorporates innovations and changes connected both to the sources of information, mainly represented by administrative sources, and to the methods that exploit data integration techniques at the micro level.

A set of integrated sources (statistical and administrative ones) is produced yearly that allows to estimate persons employed, jobs, hours worked and FTEUs according to ESA definitions and classifications. In particular, this set of integrated sources allows to produce two main databases:

- 1) the first one includes data on declared jobs collected from employers operating on the economic territory (so called database on employers);
- 2) the second one includes data on declared and undeclared workers engaged by resident production units (database on workers).

In the table below there is the list of the main sources used to produce the two databases.

Table D.75 - Sources used for the compilation of the two databases on employment

Sources on employers	Sources on workers
Employees:	Employees:
Asia Enterprises Business Register	Labour Force Survey
Asia Legal-Units Register	Multipurpose survey on households: aspects of daily life
Updated Census of public institutions 2011	Tax Register
Updated Census of non -profit institutions 2011	National archive of residence permits
Updated General Agricultural Census 2010	Archive of employees in private sector – INPS
Annual account of General Government employees compensation	Archive of employees in agriculture - INPS
Survey on financial statement of large enterprises (SCI)	Archive of employees in the entertainment industry - INPS
Survey on local units of large enterprises (IULGI)	Archive of employees in the public sector - INPS
Archive of domestic work relationship – Nat. Social Security Inst. (INPS)	Archive of domestic work relationship - INPS
	Archive of Italian journalists pension fund
Self-employed:	Self-employed:
Asia Enterprises Business Register	Labour Force Survey
Asia Legal-Units Register	Tax Register
Updated General Agricultural Census 2010	National archive of residence permits
Survey on financial statement of large enterprises (SCI)	Archive of separate management - INPS
Survey on local units of large enterprises (IULGI)	Archive of Italian journalists pension fund
Archive of separate management - National Social Security Institute (INPS)	Archive of self-employed in agriculture - INPS

The database on employers is based on sources providing information on the annual average of declared jobs for employees and self-employed per production unit. The database covers all the institutional units included in the ESA production boundary: enterprises, public and private institutions, households. In particular, the database is obtained integrating the business register (ASIA register of active enterprises), with units excluded from its coverage but included in the ESA production boundary. Integration is made at the level of institutional unit (identified by a fiscal code).

The database on workers is developed integrating statistical and administrative sources for each person employed, resident and non-resident, on the economic territory. The Labour Force Survey (LFS) integrated with administrative files (hereafter, LFS\_ADMIN) is the main source on workers for coverage and richness of information. Integration at micro level of survey data with administrative files is made every year through an innovative process based on micro linkage techniques and statistical models. This process identifies all the jobs of each individual included in the sample survey, merging information collected through the survey questionnaire (occupational status and detailed characteristics of the main and secondary jobs) with information on social contributions paid for each job resulting from administrative files. Consistency between jobs declared in the survey and those resulting from administrative files is checked yearly.

The results of the micro-linkage highlight the existence of a bias in the measure of employment in all sources, i.e. a possible under-coverage of the Labour Force Survey and over-coverage of administrative files. In particular, over-coverage of administrative files concerns payments of social contributions to labour input with weak signals in administrative files (for example, working positions for short periods or with low remuneration, or persons declaring themselves "not employed" or "not active" in the LFS). On the other hand, under-coverage of the survey concerns persons who do not declare to be employed, although there are significant signals in administrative files that they actually are employed.

A probabilistic model has been developed in order to measure and correct the statistical bias. The validation process is based on a probabilistic model which combines information collected by the survey and administrative information on the same individual in order to validate or discard administrative signals. Once administrative signals are validated, the estimation model assumes the existence of significant administrative signals as indicator of employment also for those persons declaring themselves not employed or not active in the survey. This latter assumption caused the reclassification of a relevant amount of persons resulting "not employed" or "not active" in the survey as employed in national accounts estimates. The LFS\_ADMIN database is the result of the above integration process.

In addition, combining survey information with administrative signals allows to classify each job as declared, when a validated administrative signal is linked to it (i.e. social contributions are paid for it), or as undeclared, in case of absence of validated administrative signals: The procedure allows to identify declared and undeclared persons employed and jobs (as annual average) in the same data source and to calculate for each job the corresponding amount of hours worked as recorded by the survey.

The LFS\_ADMIN database excludes, by definition, some components not covered by the sample survey. In particular, estimates are integrated to include the employed persons living in institutions, for whom data are derived from the 2011 Population census, and the non-resident workers.

Non-residents persons working for resident production units can be split in two subgroups: persons who have a permission to stay and to work in the country, with a declared and/or an undeclared job; persons without a legal permission to stay in the country and who can only perform undeclared jobs.

The list of non-resident persons is linked, at micro level, with administrative files on social contributions in order to identify the declared jobs. For these people, a specific adjustment is made to take into account also the component of undeclared working positions: a coexistence ratio of declared and undeclared working positions is calculated for foreign residents in LFS\_ADMIN.

As regards to foreigners illegally staying in the country, the estimation of jobs is based only on an indirect approach.

The two databases on employers and on workers cover different components of employment which overlap with respect to the declared component (employees and self-employed); the undeclared component is covered only by the database on workers. Since there is a statistical convergence (checked every year between the two measures of declared persons employed), an additive approach is used. In particular, a first estimate of persons employed is obtained summing up declared workers who are employed according to the database on employers (this last considered the main source of information for national accounts) and undeclared persons who are employed on the basis of the database on workers.

However, other specific adjustments are needed to guarantee exhaustiveness and coverage of the ESA production boundary. In particular, labour input is integrated for the following industries and components:

- the industry of households as employers for domestic work;
- the accommodation and food service activities (Nace rev 2 cod 55, 56);
- the industry for land transports of passengers and goods (Nace rev 2 cod 49.3, 49.4);
- the households and own production for construction and agricultural activities;
- the illegal activities.

The compilation process described above permits to obtain labour input in terms of persons employed and jobs. Total hours worked are estimated multiplying per capita hours worked registered in the LFS\_ADMIN database by job type. Per capita data and jobs are identified by domain of estimation. The number of domains is influenced by sample constraints and reflects those labour characteristics which are relevant for hours worked such as: the economic activity of the production units, its size and legal status, employment status of the worker and kind of job, i.e. main or secondary job and declared or undeclared status. In the LFS\_ADMIN, per capita hours actually worked for declared employees is subjected to specific quality controls using other sources, such as business surveys (annual and quarterly) and temporary layoff hours provided by the National Institute of Social Security (INPS).

Starting from the annual estimate by industry, data by institutional sectors are derived as follows:

for declared employment, the availability of data at micro level allows to obtain employment by institutional sector directly, classifying each unit/job on the basis of its economic characteristics. The variables used for the allocation in each sector are: the legal status, the size class of the enterprise and the economic activity. Please see the table 2 below

for undeclared employment, the classification by sectors is obtained applying (separately for employees and self-employed) to annual data by industry (division level of Nace rev.2) and size of enterprise (undeclared employment is included only in small enterprises, with less than 20 persons employed) the structure by institutional sector of declared employment (net of S15 and S13 and Nace code 97). Separate structures are built for jobs, persons employed, hours worked and FTEUs.

Table D.76 - Declared work by institutional sector

		Legalistatus	Size class of persons employed	Economic activity (Nace rev 2)	Sources for declared employment
	Corporations	Limited Companies (join-stock company, limited-liability company, cooperative) Market non-profit institutions	all sites	section K and Tensluded	Sustretz Register Asia Enterprises -for sector & Updawad Agricultural Census 2010
511		Untimited partnerships	all sizes :	section K and Texcluded	(Business Register Asia Agricoliture aveilable yearly
	Quasi-corporations	Sole proprietor ships and simple partnerships	more than five persons employed	section K and Textfuded	starting from 2019), Administrative files of INPS, Asia-LaU
		Branches and other national resident units		section K and Textfuded	
	Corporations	Limited Compenies (join-stock company, limited-liability sompany, cooperative)		section K + Head office (Nece code 70100)	
		Market non-profit institutions		section K only	
512		Unlimited pertnerships		section Konty	#usiness Register Asia Enterprises
	Quesi-corporations	Sole proprietorships and simple partnerships	units with employees	section K only	
	53.	Branches and other notional resident units	22	section K only	75
S13	Public non-merket producers	Fublic con-market producers	all sizes	zection K and Textfuded	Annual account of General Government employees compensation (Register of public institutions evaluable searly starting from 2019)
	Consumer Househelds	Dun final use producers		section A and T	Updated Agricultural Census 1030 Farm Register and Business Register Asia Agriculture available yearly attenting from 2019! Estemate of production for own final consumption (Agriculture and Construction)
		Households as employers of domestic personal		section T only	Archive of domestic work relationship of the National Social Security Institute (INPS)
S14		Sole proprietor ships and simple partnerships if active in sections other than K	less than five persons employed;	section fi and Tercluded	Business Register Asia Enterprises
		Sole proprietor ships and simple partnerships	self employed with no employees	Nace code 66 only	Business Register Asia Enterprises
	Producer Households	Non-structured microenterprise that can be identified with the entrapreneur himself and that are classified as "not active" from business Register (min. threshold)	self employed	section K and Textluded	Sample based estimate from Labour Forces unvey incegrated with a dministrative files (LFS-ADMIN)
		Outworkers	self employed	section K and Texcluded	Archive of separate management - INPS
§15	Private non-market producers (non-market NPIs)	Recognised and not recognised associations, Religious societies, frounded and, Public concommercial isolated and	all street	section K and Tercluded	Updated Census of public institutions 2011 Updated Census of non-profit institutions 2011 (Register of private no profit institutions and Registe of public institutions available yearly starting from 2019)

## Sector S.1

Data for S.1 are obtained as sum of all relevant resident sectors

Sector S.11

A. Source

See Table D.75

B. Methods

See Table D.76 and general description of compilation process

Sector S.12

A. Source

See Table D.75

## B. Methods

See Table D.76 and general description of compilation process

Sector S.13

A. Source

See Table D.75

#### B. Methods

See Table D.76

A specific feature of this sector is the estimation of hours worked that are not derived multiplying per capita hours worked detected in the LFS\_ADMIN per jobs. In this case worked hours are estimated starting from the total amount of contractual hours of work for full time workers, for each professional category in each collective bargaining area (hours theoretically workable correspond to the weekly hours workable by contract multiplied by the 52 weeks in a year and by the number of jobs). This amount represents the hours that employees should work if they were never absence from work during the year. Then, survey information allows to adjust this amount with:

- the number of hours corresponding to the public holidays occurring during the year;
- the number of hours not worked because of vacations or illness, strikes, leaves (paid or not);
- the number of hours not worked for part-time employment;
- overtime hours, to be added.

Undeclared employment is not present in this sector.

Sector S.14

## A. Source

See Table D.75

Multipurpose survey on households: aspects of daily life and time use survey (SD21)

## B. Methods

See Table D.76 and general description of compilation process

Exhaustiveness adjustments (non-response, missing units, non-registered units, deliberate misreporting, illegal activities)

## Households as employers for domestic work (Nace rev 2 cod 97)

The «Multipurpose survey on households: aspects of daily life» contains specific questions about the use of domestic work in households. Therefore the survey allows to measure the total amount of persons who work for households. Jobs measured by the Multipurpose survey exceeding the direct estimates of declared and undeclared jobs in this industry are added as not declared in the NA estimates and classified in S14 (Households as consumers).

## Construction activities of households for their own use.

Jobs and hours worked are estimated using statistical data gathered by the "Time Use Survey", available every 4 years. The statistical survey is also aimed at collecting information on hours spent by family members to maintain their own dwelling. Jobs are

classified as declared self-employed jobs involved in secondary activities in S14 (Households as consumers).

## Agricultural activities of households for their own use.

The labour input estimate is based on Agricultural Census data updated with a production index and annually integrated with a component that is indirectly obtained comparing this information with the total value of production for own use estimated independently in the Directorate for national accounts. Jobs are classified as declared self-employed involved in secondary activities in sector S14 (Households as consumers).

## **Unstructured microenterprises**

These are units classified as not active by the business register, i.e.\_units resulting "not active in the year" and without employees. These units are excluded from ASIA-Enterprises but some of them may result "active" when the self-employed engaged by a specific unit is classified as employed in the unit itself in the LFS\_ADMIN database. The estimation of self-employed jobs engaged in these units is not obtained summing up jobs from an exhaustive list of units but is sample-based. In particular, it is obtained integrating three different sources of information: an internal source on employers for to each legal institutional unit (ASIA-LeU register), the LFS and the complete set of administrative files on social contribution (LFS\_ADMIN). The integration process allows to estimate jobs to be included in national accounts estimates: firstly, self-employed responding to the LFS and for whom a significant amount of social contributions is paid are identified; secondly, in the corresponding group a further selection is made, identifying among them only the workers who are recorded as owners of units listed in ASIA-LeU register; finally, among the production units identified in the first two steps, only those not present in other employers sources are accounted for. The final estimate is obtained grossing up jobs of the selected pool of workers using the Labour Force Survey sample weights. These are classified as declared self-employed in sector S14 (Producer Households).

## Illegal activities

Persons involved in illegal activities are estimated using an indirect method starting from the estimates of the value added in the corresponding economic activities (wholesale and retail for drugs and smuggling of tobacco, personal services for prostitution) and comparing them to an average value per job. Employed persons in illegal activities are classified as undeclared self-employed in S14 (Households as producer).

Sector S.15

A. Source

See Table D.75

B Methods

See Table D.76. Not declared work is not considered in this sector.

# Annex D.1 - Share of estimates per transaction/sector

E80 - estimates dominate in the final value by more than 80%

E50 - estimates dominate in the final value between 50-80%

OE - observed value dominate final value, though estimates were used

OV - only observed values

Transac	tion/ sectors	S11	S12	S13	S14	S15	S2
P.11		OE	OE	OV	E50		
P	.12	E80	E80	OV	E80	E80	
P	.13			OV		E80	
P	.2	OE	OE	OV	OE	E80	
P	.31			OV	E50	E80	
P	.32			OV			
P	.51G	E50	OE	OE	E50	E80	
P	.52	OE	OE	OE	OE		
P	.53	E80	E80		E80		
P	.61						OV
P	.62						OV
P	.62F						OV
P	.71						OV
P	.72						OV
P	.72F						OV
D 11	uses	OE	OE	OV	OE	E80	OV
D.11	resources				OE		OV
D 10	uses	OE	OE	OV	OE	E80	OV
D.12	resources				OE		OV
D 21	uses						
D.21	resources			OV			OV
D 20	uses	E80	OE	OV	E50	E80	
D.29	resources			OV			
D 21	uses			OV			OV
D.31	resources						
D 20	uses			OV			OV
D.39	resources	E80	E80	OV	E80	E80	
D 41	uses	E80	E50	OE	E80	E80	OV
D.41	resources	E80	E50	OE	E80	E80	OV

Transaction/ sectors		S11	S12	S13	S14	S15	S2
	uses	E50	OE				OV
D.421	resources	E80	E50	OV	E80		OV
D.422	uses	E80	E80				OV
	resources				E80		
	uses	OE	OE				OV
D.43	resources	OE	OE				OV
D.441	uses		OE				OV
	resources	E80	E80		E80	E80	OV
	uses		OE				
D.442	resources				OE		
	uses		E50				OV
D.443	resources	E80	E80		E80		OV
	uses	E80		OE	E50		
D.45	resources	E80		OE	E80		
	uses	E80	OE	OE	E80	E80	OV
D.41G	resources	E80	OE	OE	E80	E80	OV
	uses	E80	OE	OV	E80	E80	OV
D.41G	resources	E80	OE	OV	E80	E80	OV
5.71	uses	OE	OE	OV	OE	E80	OV
D.51	resources			OV			OV
P. 70	uses	E80	OE		E50		OV
D.59	resources			OV			
D.611	uses				OE		
	resources	OE	OE	OV	OE	E80	OV
D.612	uses				OE		
	resources	OE	OE	OV	OE	E80	
D.613	uses				OE		
	resources		OV	OV			
D.614	uses						
	resources						
D.61SC	uses				OE		
	resources		OE				
D.62	uses	E50	OE	OV	E80	E80	OV
	resources				OE		OV
D.63	uses			OV		E80	
	resources				OE		

Transaction/ sectors		S11	S12		S13		S14	S15	S2	
D.71	uses	E80	OE		OV		E80	E80		OV
	resources			OE						OV
D.72	uses		OE							OV
	resources	E80		OE		OV	E80	E80		OV
D.74	uses				OV					OV
	resources					OV				OV
D.75	uses	E50	OE		OV		OE	E80	OV	
	resources	E50	OE		OV		OE	E50	OV	
D.76	uses				OV					
	resources								OV	
D.8	uses	E50	OE				E50	E80		
	resources						E50			
D.91	uses				OV					
	resources	E80	OE				OE	E80		
D.92	uses				OV				OV	
	resources	E50					E50			
D.99	uses	E50	E50		OV		E50	E80	OV	
	resources	E50	E50		OV		E50	E50	OV	
P51C		E80	E80		E80		E80	E80		
NP		E50	E50		OE		E50		OE	
EMP		OE	OE		OV		E80	OV		

## Annex D.2 - List of abbreviations used

BoP	Balance of Payments				
BS	Balance sheet				
Confidi	Consorzio garanzia collettiva di fidi - Credit consortia				
CISINP	2011 census of the non-profit institutions				
COVIP	Commissione di vigilanza sui fondi pensione - Supervisory Commission on Pension Funds				
FDI	Foreign direct investments				
FISIM	Financial intermediation services indirectly measured				
FA	Financial Accounts				
FI	Financial institution				
GG	General Government				
IC	Insurance Corporation				
IVASS	Istituto per la Vigilanza sulle Assicurazioni - Insurance Supervisory Authority				
MFI	Monetary financial institution				
NPISH	Non-profit institution serving households				
NA	National accounts				
NPI	Non profit institution				
OFI	Other financial intermediary				
PF	Pension Fund				
PIM	Permanent inventory model				
P&L	Profit and loss accounts				
RoW	Rest of the world				
SBS	Structural business statistics				
SSF	Social Security Fund				