

# **Supplements to the Statistical Bulletin Methodological Notes**

## Italian General Government Debt Time Series

**New series** 

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#### **GENERAL INFORMATION**

- I Unless indicated otherwise, figures have been computed by the Bank of Italy.
- II Symbols and Conventions:
  - the phenomenon in question does not occur;
  - .... the phenomenon occurs but its value is not known;
  - .. the value is known but is nil or less than half the final digit shown.

Figures in parentheses in roman type () are provisional, those in parentheses in italics () are estimated.

- III The tables are identified both by a number and by an alphanumeric code that defines the content of the table in the database in the electronic archive in which information to be released to the public is held. A similar code identifies the different aggregates shown in each table.
- IV The methodological notes in the last part of the Supplement are identified by electronic codes that refer to the tables and, within each table, to the individual aggregates. Notes that refer to a single observation are also identified by the date of that observation.

#### SUPPLEMENTS TO THE STATISTICAL BULLETIN

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The Financial Market (monthly)

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#### ITALIAN GENERAL GOVERNMENT DEBT TIME SERIES

#### 1. Definition of the public debt

Together with net borrowing, the general government debt is one of the public accounts indicators relevant to the Maastricht Treaty's excessive deficit procedure under Article 104. The definition of general government debt given in the Treaty was specified, in relation to the 1995 version of the European System of Accounts, in EC Regulation 3605/1993. Based on that definition, the public debt is understood to be "the nominal gross debt in being at the end of the year, consolidated among the sectors of general government".

That is, on the principle of prudence, the debt is calculated as the sum of liabilities, gross of any possibly offsetting assets. The liabilities included in the aggregate are those least open to subjective valuation and also those easiest to observe.

The nominal value of the debt is used in order to estimate the volume of resources to be reimbursed at maturity as regards principal. The consolidation procedure reflects the need to highlight the total exposure of public entities taken as a whole vis-à-vis the other sectors of the economy.

Under the statistical rules set forth in the ESA95 manual on public deficit and debt, we have that:

- 1) debt is equal to the sum of liabilities classed in the following categories of financial instruments:
  - a. currency and deposits (AF.2);
  - b. securities other than shares (AF.3), excluding financial derivatives (AF.34);
  - c. loans (AF.4);
  - d. other accounts payable, such as commercial debt (category AF.7) are not counted. Given consolidation, liabilities that constitute assets of other general government subsectors are excluded;
- 2) as a rule, accrued interest is not counted towards the amount of liabilities;
- 3) for index-linked securities (e.g. BTP€) the nominal value must be increased by the increment in the capital value accrued during the period considered;
- 4) for no-coupon paper (e.g. BOT), nominal value is the redemption value;

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<sup>&</sup>lt;sup>1</sup> Eurostat (2002), ESA95 manual on public deficit and debt.

- 5) for securities on which interest accrues as principal (e.g. postal savings certificates), the nominal value is the issue value:
- 6) liabilities in foreign currency are converted into euro at the end-of-period exchange rate;
- 7) if a foreign-currency liability is subject to a contractual agreement fixing the exchange rate at redemption, that rate must be used in converting the debt into euro.

#### 2. The sector: General government

The relevant sector is general government. Under national accounts rules this sector comprises the institutions whose main functions are producing non-market services for the community and redistributing income and wealth. For Italy, general government consists of three sub-sectors<sup>2</sup>:

- a) *Central government* (S.1311), comprising central government departments and agencies other than social security entities whose jurisdiction extends to the entire national territory: the central government itself, constitutional bodies, the agency for southern development (formerly the Southern Development Fund), until 2003 the Deposits and Loans Fund,<sup>3</sup> former autonomous agencies whose services are free of charge to users, such as the National Road Agency (ANAS)<sup>4</sup> and the agency managing former state-owned forests,<sup>5</sup> and other minor entities (see the Glossary in the Bank of Italy's annual reports, Italian version, various years).
- b) *Local government* (S.1313), comprising institutions whose jurisdiction is limited to only a part of the national territory: regions, provinces and metropolitan areas, municipalities and unions of municipalities, universities, chambers of commerce, local health units and hospitals, and other minor entities (see the Glossary in the Bank of Italy's annual reports, Italian version, various years).
- c) *Social security funds* (S.1314), comprising the agencies whose main activity is paying social benefits funded by contributions (ordinarily compulsory): INPS, INAIL, INPDAP and others (see the Glossary in the Bank of Italy's annual reports, Italian version, various

<sup>2</sup> Pursuant to the Finance Law for 2005, Istat publishes the list of institutional units included in the sector. Available also on Istat's website, the list is regularly updated.

With this Fund's transformation into a public limited company on 11 December 2003, Istat excluded it from the general government sector.

ANAS was instituted by Law 1094 of 17 May 1928 as the Autonomous Road Agency, whose main task was maintenance and improvement of state highways and provision of the related services, functions previously performed by the Ministry of Public Works (Repaci, 1962). ANAS has now been transformed into a public limited company

The state forest agency was created by Royal Decree 324 of 17 February 1927 to conserve, extend and improve the state's forest assets and develop activities to expand and improve the economy of woodland regions (Repaci, 1962).

years), plus some now-abolished institutions, including the social security funds administered by the Deposits and Loans Fund prior to 1946 and by the Treasury afterwards.

#### 3. Data sources

To create time series for so extensive a period, a large number of statistical sources had to be exploited. In general, for the period since the Second World War the main sources are the publications of the Bank of Italy, above all *Bollettino del Servizio Studi* (the Research Department's bulletin), and the databases successively created as part of the Bank's institutional activities (the Central Credit Register, founded in 1966, and the prudential reporting form instituted in 1989, supplemented by ad hoc observations on some debt instruments made since the 1950s). For the prewar period Treasury publications are available, as well as scholarly statistical reconstructions, supplemented as needed by the information drawn from the publications of the Bank of Italy's series of historical essays.

The sources and methodologies of reconstruction for the liabilities classed in the categories of financial instrument listed in Section 1 are given below.

#### *Currency and deposits* (AF.2) category:

a) *Postal fundraising*, consisting of: post office current accounts, postal savings books and savings certificates. Post office current accounts are included as a consequence of vice-regal decree 1451 of 6 September 1917 and subsequent conventions between the Post Office and the Treasury requiring the former within three working days to transfer current account deposits to its deposit with the Treasury, so that de facto the Post Office was engaged in raising funds for the government. Given consolidation, the component that counts towards the public debt is only the postal current accounts of private-sector persons (i.e. excluding those of general government bodies). The Finance Law for 2007 provided that the portion of postal current accounts held by private-sector persons shall no longer be paid in to the Treasury but invested by the Post Office in EU member state government securities.

The sources are: *a)* up to 1936 De Mattia (1990); *b)* for 1937-1948, *Bollettino del Servizio Studi*; *c)* for 1949-1997, Bank of Italy calculations based on data from the Post Office; *d)* since 1998, data supplied to the Bank of Italy periodically by the Ministry of the Economy and Finance, based on reports from the Post Office. Note that for the period up to 1948, in

the absence of other data, it is assumed that all postal current accounts were held by nongeneral-government persons.

Postal savings books and certificates form part of the public debt as liabilities of the Deposits and Loans Fund, an institution that was included under general government until its transformation into a limited company in December 2003. Since that date only the postal savings certificates specified in Law 269/2003, whose redemption will be charged to the government budget, are included (see Bank of Italy Economic Bulletin no. 28, 2004). Postal savings certificates are counted at issue value following the methodological revisions agreed with Eurostat in 1995 (see Banca d'Italia, Relazione Annuale per il 1996, the Bank of Italy's annual report for 1996); in publications prior to that date, they are counted at redemption value. Starting in December 2003 postal savings books are excluded from the public debt in that the Deposits and Loans Fund, at its transformation into a public limit company, was made fully liable for their redemption.

The sources are: *a)* up to 1961, data published by the Post Office in its *Relazione sul servizio* delle casse di risparmio postali; *b)* for 1962-2000, Post Office reports to the Bank of Italy; *c)* for 2001-May 2007, data provided to the Bank of Italy by the Deposits and Loans Fund; *d)* from June 2007 onwards, Post Office statistical reports.

b) Currency in circulation comprises: banknotes and coins net of the holdings of the Treasury and the Bank of Italy (by convention the latter are counted as "loans", AF.4); banknotes issued during the period of non-convertibility instituted by Decree 2873 of 1 May 1866; non-convertible notes issued on the account of the state by the consortium of banks of issue formed pursuant to Law 1920 of 30 April 1874; state scrip certificates; AM-lire issued by the Allies in 1943-1945. The so-called "commercial notes" (banknotes issued by banks of issue on their own account) are not included, as they were liabilities of the issuing banks.

The sources are: *a)* up to 1936, De Mattia (1967); *b)* from 1937 on, the monthly *Conto Riassuntivo del Tesoro* (Treasury summary accounts), after deducting the holdings of the Treasury reported by the *Bollettino del Servizio Studi* and the holdings of the Bank of Italy, given for the period up to 1960 in Banca d'Italia (1993), for 1961-1998 in the consolidated Banca d'Italia-UIC accounts, and afterwards by the Bank of Italy's calculations for the monetary statistics agreed with the European System of Central Banks.

c) Third-party cash deposits with the Deposits and Loans Fund.

The sources are: *a)* up to 1915, reports and financial statements to the Supervisory Committee for the management of the Deposits and Loans Fund and related accounts; *b)* for

1916-1933, Della Torre (2000); *c*) for 1934-1960, Ministero del Tesoro, *Relazioni e Rendiconti della Cassa depositi e prestiti*; *d*) for 1961-2003, Deposits and Loans Fund reports to the Bank of Italy; *e*) from 2004 on, following the Fund's transformation into a limited company and the transfer of deposits to the Ministry of the Economy and Finance, data observed by the State Treasury Service.

d) Third-party deposits with the State Treasury, which consist of liquidity held by persons who, though not included within the general government sector, make voluntary or legally compulsory deposits in treasury current accounts in their own names and carry them as balance-sheet assets.

The relevant current accounts here are: a) the interest-bearing account with Banco di Napoli and other institutions, part of the floating debt; b) the interest-bearing current account of the State Railways and various other special interest-bearing accounts in which the net proceeds of loans were deposited; c) the interest-bearing accounts in the name of the Azienda Nazionale Idrogenazione Combustibili, of Assicurazioni Generali Trieste, of Compagnia Imprese Nazionali Turistiche Italia-Africa, of Cassa di Risparmio di Libia, and of Società per le Importazioni-Esportazioni; d) the current accounts of Istituto per il credito alle imprese di pubblica utilità and of Crediop; e) the EEC own resources account, as a result of the studies undertaken following the Eurostat decision of 15 February 2005; f) the interest-bearing accounts of securitization vehicles in the context of securitizations effected by the Ministry of the Economy and Finance; g) the accounts of the Deposits and Loans Fund subsequent to its transformation into a limited company. The source for this category of deposits is the *Conto Riassuntivo del Tesoro*.

e) *Residual items* include advances to tax concessionaries in 2004-2005 as a result of the Eurostat decision of 23 May 2005.

#### Long-term securities other than shares (AF.332) category:

- a) government securities;
- b) the securities issued by the Deposits and Loans Fund through December 2003;
- c) the securities issued by local authorities;
- d) the securities issued by entities outside the general government sector but which will be redeemed by the central government.

Specifically, this category includes: a) consolidated redeemable securities; b) Treasury bonds (BTP); c) Treasury credit certificates (CCT, CTR, CTE, CTO); d) zero coupon Treasury certificates (CTZ); e) the BTPs assigned to the Bank of Italy in 1993 in connection with the abrogation of the provincial treasury current account, part of a swap effected in December 2002; f) the BTPs assigned to the Bank of Italy to fund the balance on the account designated "Disponibilità del Tesoro per il servizio di tesoreria" (Treasury liquidity for treasury service); g) the BTPs assigned to the Bank of Italy in connection with the repayment of the debts of agrarian consortia pursuant to Law 410/1999; h) the special Treasury bonds issued in England pursuant to the vice-regal decree of 13 June 1915 and renegotiated under the London agreement of 27 January 1926, whose redemption was charged to "Cassa autonoma di ammortamento dei debiti di guerra" (independent fund for the repayment of war debts); i) the "Morgan" loan issued following the Washington agreement of 14 November 1925 on the settlement of pre-war debts; j) Republic of Italy bond issues abroad; k) the BTPs indexed to euro-area inflation, the revaluation of the principal on which is also included in the debt; l) securities administered by the Directorate general of the Treasury, such as those for the repurchase of Ferrovie dell'Alta Italia (northern Italy railways); m) Deposits and Loans Fund credit certificates to municipal and provincial governments; n) regional bonds (BOR); o) provincial bonds (BOP); p) municipal bonds (BOC); q) the bonds issued by the municipalities of Rome and Milan in the United States in 1927; r) State Railway bonds for which the central government has assumed redemption liability; s) the securities issued by Infrastrutture S.p.A. for the high speed rail link project, included as a result of the decision of Eurostat of 23 May 2005 (see the Bank of Italy's annual report for 2004), transfer of liability for which to the central government was completed in 2006.<sup>6</sup>

#### *Short-term securities* (AF.331) category:

- a) Treasury bills (BOT);
- b) Treasury bills in ECU (BTE);
- c) special series Treasury bills for the World Bank;
- d) the annual savings certificates issued by Deposits and Loans Fund;

The inclusion of this liability in the public debt came following Eurostat's decision of 23 May 2005 (see the Bank of Italy's annual report for 2004). In 2006 the central government directly assumed responsibility for this liability.

#### e) commercial paper.

The sources for these times series are as follows. For government securities: *a)* for 1861-1874, Zamagni (1998), which reconstructs the nominal value of the principal based on the coupon yield; *b)* for 1875-1915, *Relazioni del Direttore generale alla Commissione di Vigilanza sul Rendiconto dell'amminstrazione del debito pubblico*; *c)* for 1916-1922, *Situazione dei debiti pubblici interni compresa nel Bilancio dello Stato*, reported in *Bollettino del Servizio Studi*; *d)* for 1923-1969, data from *Conto riassuntivo del Tesoro*, reported in *Bollettino del Servizio Studi*; from 1970 on, data from Ufficio Italiano Cambi (the Italian Foreign Exchange Office, UIC)<sup>7</sup> and the central government securities depository. For pre-war issues, the source is *Cassa autonoma di ammortamento dei debiti di guerra* (independent fund for the repayment of war debts). For securities issued abroad from the end of the Second World War to 1980, calculations based on data from *Relazione generale sulla situazione economica del paese*. After 1980, the data are checked against those of the Bank of Italy, which is responsible for the settlement service.

The sources for the securities issued by the Deposits and Loans Fund are as follows: a) for 1861-1915, the Fund's own annual financial statements and accounts; b) for 1916-1933, Della Torre (2000): c) for 1934-1960, again the Fund's annual financial statements and accounts; d) after 1960, monthly reports by Deposits and Loans Fund.

The sources on securities issued by local governments are as follows: up to 1943, Ministry of Agricuture, Industry and Commerce (1899), Ministry of Industry, Commerce and Labour (1918 and 1917), and Cavigioli (1934)<sup>8</sup>; for 1944-1970, *Bollettino del Servizio Studi*; after 1970, based on data from Ufficio Italiano Cambi and, for recent years, checked periodically with issuers in cooperation with the Bank of Italy's regional economic research units. For 1927-1950, also includes two bond issues of \$30 million each by the cities of Rome and Milan in the United States, converted after the Second World War into Crediop loans.<sup>9</sup>

The UIC was merged into the Bank of Italy in January 2008; the data are now collected by a unit of the Bank of Italy that performs the same functions.

The values for 1877, 1878, 1880, 1882, 1885, 1888, 1891, 1896, 1899 and 1900 are taken from *Ministero per l'Industria, il commercio e il lavoro* (1917, 1918); for 1894, from *Ministero di Agricoltura, industria e commercio* (1899); for 1930-1933, from Cavigioli (1934). For the missing years, the values are our own calculations based on the amortization schedules reported by *Veritas Finanziario* (1888) and Tronci (1891). For a study of financing to municipalities and provinces from 1864-1915, see also Della Torre (2004). For further analysis of local finance in 1860-1890, see Volpi (1962). For years after 1934, the data are calculated on the basis of the amortization schedules given in Cavigioli (1934).

The conversion was at exchange rates fixed, for purposes of redemption, by the Treasury for Rome at 22.028 lire to the dollar (Royal Decree law 370 of 27 March 1927) and for Milan at 18.821 lire to the dollar (Royal Decree law 1923 of 14 November 1926). See Crediop (1989), files 72 and 73 at Archivio Centrale dello Stato.

#### **Loans** (AF.4) category:

a) *Treasury liabilities with Bank of Italy-UIC*, which include cash on hand, advances to the Treasury and the Deposits and Loans Fund, the Treasury's current account <sup>10</sup> with the Bank (when it shows a net debit) and other lira and foreign currency liabilities <sup>11</sup> not consisting in securities.

The sources are: *a*) for 1861-1893, De Mattia (1967), which gives the cash certificates and consortium bills held by banks of issue, De Mattia (1990) for public sector liabilities, and *Conto riassuntivo del Tesoro* for advances to the Treasury; *b*) for 1894-1969, Banca d'Italia (1993); for 1969-1998, *Situazione consolidata Banca d'Italia-UIC*; *d*) from 1999 onwards, the data produced for compilation of monetary statistics as agreed within the European System of Central Banks.

b) Liabilities with Monetary Financial Institutions. This item includes also: a) some liabilities of bodies outside the general government sector, such as the debts of "other former autonomous agencies" (State Railways Corporation, State Monopolies Corporation, Postal and Telegraph Corporation and Telephone Services Corporation), the central government having assumed liability for principal and interest repayments; b) the debt deriving from the assumption, between 1977 and 1981, by the Treasury and ANAS of loans made by special credit institutions to, respectively, local authorities and SARA (see Banca d'Italia, Relazione sul 1996, "Note metodologiche", Appendix ); d) the liabilities for the high speed rail link project, previously assigned to Infrastrutture S.p.A.

The sources are: *a)* for 1861-1936, De Mattia (1967), which gives the data on ordinary savings banks, commercial banks and agricultural credit institutes; *b)* for 1920-1965, calculations based on data from Crediop<sup>13</sup> supplemented by the data from the *Bollettino del* 

To 31 December 1936 the balance on the Treasury account was the difference between item 11 and item 108 of the Bank of Italy's sectoral accounts. Up to that date, in fact, the Treasury was required to keep with the Bank a metal reserve against currency in circulation. Only afterward was the balance on the account determined solely by movements of banknotes (see Banca d'Italia, 1993).

Includes, from 1936-1954, special transactions of the *Consorzio per Sovvenzioni su Valori Industriali* and from 1941 on the value of farm storage agency bills (those for 1915-1940 were counted as part of the Bank of Italy's advances to the Treasury; see Banca d'Italia, 1993, and Gigliobianco, 1989. The Treasury's debt for these bills was settled in 2000 by the issue of BTP IT0000366804 and its assignment to the Bank of Italy under Law 410 of 28 October 1999.

<sup>&</sup>lt;sup>12</sup> These are those whose services are provided at a charge (Morcaldo, 1993).

For 1920-1945, calculations based on loan contracts to cover the deficits of provincial and municipal authorities taken from the time series on "Mutui" (loans) in the Crediop files at the Archivio Centrale dello Stato (Crediop, 1989); for later years, based on data on repayment schedules from the Bank of Italy Historical Archives (Vigilanza, pratt. no. 9230). For 1946-1960 the stock of debt is reconstructed based on the flows of loans reported in Asso and De Cecco (1994), p. 419. Pursuant to Laws 1014/1960 and 1574/1962, loans taken out by municipalities that are not provincial capitals were transferred from Crediop to the Deposits and Loans Fund.

Servizio Studi on loans by special credit institutions<sup>14</sup>; c) for 1966-1988, Centrale dei Rischi (the Central Credit Register); for 1989, the banks' prudential reporting forms. Loans of non-resident intermediaries are taken from Relazione generale sulla situazione economica del paese from the end of the Second World War to 1979; from 1980 onwards, direct reports from the creditor intermediaries.

c) Loans to general government entities from the Deposits and Loans Fund after its transformation into a limited company in December 2003.

The data are calculated based on the Deposits and Loans Fund's statistical reports to the Bank of Italy. In September 2006 the Fund was included among Monetary Financial Institutions.

d) *Other liabilities: a)* loans to local authorities disbursed starting in 1926 by *Istituto Nazionale delle Assicurazioni* (INA)<sup>15</sup>; *b)* loans in connection with securitizations, classed as debt as a result of the decisions of Eurostat of 3 July 2002 and 25 June 2007.

The sources are: *a)* for 1926-1964, calculations based on INA's annual accounts, from INA's historical archives; from 1965 on, reports by INA; *b)* for the securitization transactions, calculations based on data transmitted to the Bank of Italy by the intermediaries and checked against their periodic reports.

**Consolidation items** comprise liabilities that are assets of another component of general government. They consist in:

a) securities issued by general government bodies and subscribed by other general government bodies.

The sources are: *a*) for 1861-1907, *Annuario statistico italiano* for securities held by central government needed to avoid duplication in connection with non-convertible currency<sup>16</sup>; *b*) for securities purchased by "Cassa autonoma di ammortamento dei debiti di guerra",

A possible alternative to this calculation was the data on loans for economic activity in the *Bollettino* and reported also in Colonna and Garofano (1999). However, the sector given there was "public entities" (see the Glossary to Banca d'Italia, *Relazione annuale* for 1965); this made it impossible to isolate the component of autonomous agencies not part of the general government sector, in particular the State Railways, and also made it impossible to disaggregate the loans according to the three sub-sectors of general government and highlight the contribution of local governments. The possible underestimate of total loans due to the methodology used here is equivalent to at most 0.8 per cent of GDP in the period 1948-1965.

Royal Decree 966 of 29 April 1923, converted into law in 1925, extended the range of permissible investments for INA's mathematical reserves and other assets, allowing among other things loans to provinces and municipalities.

Against the issue of non-convertible notes, the banks of issue demanded securities deposits as collateral. Excluding this component avoids the debt item duplication that would come from including both consortium notes and the securities used as collateral. See Zamagni (1998) and Artoni and Biancini (2004).

balance-sheet situations annexed to *Conto riassuntivo del Tesoro; c) Relazioni e rendiconti della Cassa depositi e prestiti* (Depostis and Loans Fund statements and accounts), Della Torre (2000) and Della Torre (2002) and, starting in 1984, direct reports to the Bank of Italy for securities held by the Fund in its main sub-funds and reserves<sup>17</sup>; *d)* the annual financial statements of INPS, INAIL, the social security funds administered by the Deposits and Loans Fund up to 1946 and by the Treasury from 1947 on, supplemented by Mediobanca (1964). Starting with 1989 the data on securities held are taken from the banks' reporting forms and supplemented, until the entry into force of Legislative Decree 213 of 24 June 1998, by queries to individual entities concerning securities not deposited with banks.

b) Loans from general government entities to other general government entities.

The sources are the following. For Deposits and Loans Fund (*Cassa Depositi e Prestiti*): *a*) for 1861-1915, the Fund's own annual reports and accounting statements; *b*) for 1916-1933, Della Torre (2000); *c*) for 1934-1987, the Fund's annual reports and accounts; *d*) for 1988-1999, calculations based on Fund's annual accounting statements, reworked based on the Fund's reports to the Bank of Italy; *e*) after 1999, data transmitted by the Fund. Note that prior to 1999 the data refer to the immediate borrower and not the final debtor<sup>19</sup> and the amount indicated is the value of the loan granted, not the amount actually disbursed. For social security funds (including INPS, INAIL, and the social security funds administered by the Treasury), the data are taken from the funds' own annual statements and accounts and may have the same problems as those for the Deposits and Loans Fund.

#### 4. Composition of debt by holder's sector

The series disaggregating the debt by holder's sector are constructed using the sources described below.

- a) Bank of Italy: the Treasury's liabilities with Bank of Italy-UIC, point (a) under Loans above;
- b) other resident monetary financial institutions: 1861-1936, De Mattia (1967); 1920-1965, calculations based on Crediop data plus data drawn from *Bollettino del Servizio Studi*; 1966-1988, Centrale dei Rischi data; 1989 onwards, banks' prudential reporting forms;

Prior to 1970, when the nominal value is not available, the balance-sheet value is used.

The values given in Mediobanca (1964) are not nominal but balance-sheet.

<sup>&</sup>lt;sup>19</sup> The Fund first began releasing data on loans according to final debtor only with its financial statement for 1999.

- c) other financial intermediaries (series begins December 1970): 1970-1988, Bank of Italy's annual reports and *Bollettino del Servizio Studi*, referring only to insurance companies, plus, starting in 1985, data for investment funds; from 1989 on, the data are taken from the banks' reporting forms and, for insurance companies, from ISVAP and ANIA;
- d) *non-residents* (series begins December 1988): calculations based on balance-of-payments reports;
- e) *other residents*: as a residual, this series is available only for the years for which the data on all the foregoing categories are available.

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