

**Italy: Report on the Observance of Standards and Codes—
Data Module, Response by the Authorities, and Detailed Assessment Using the
Data Quality Assessment Framework (DQAF)**

This Report on the Observance of Standards and Codes on Data Module for Italy was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on February 22, 2007. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Italy or the Executive Board of the IMF.

The Response by the Authorities to this report, and the Detailed Assessments Using the Data Quality Assessment Framework (DQAF) are also included.

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ITALY

Report on the Observance of Standards and Codes (ROSC)—Data Module

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February 22, 2007

The Report on the Observance of Standards and Codes (ROSC) data module provides an assessment of Italy's macroeconomic statistics against the Special Data Dissemination Standard (SDDS) complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework (DQAF July 2003). The DQAF presents internationally accepted practices in statistics, ranging from good governance in data producing agencies to practices specific to datasets.

This report updates the ROSC data module for Italy, which was prepared in 2002, for the following four datasets: national accounts, consumer and producer price indices, and government finance statistics (monetary and balance of payments statistics have not been updated). The agencies that compile the four datasets assessed in this report are the National Institute of Italy (Istat), the Ministry of Economy and Finance (MEF) and the Bank of Italy (BI).

The datasets to which this report pertains can be accessed in print and on the Internet:

Istat's website (<http://www.istat.it/>)
MEF's website (<http://www.tesoro.it/>)
BI's website (<http://www.bancaditalia.it/>)

This report is based on information provided during a staff mission and from publicly available information. The mission team was headed by Ms. Lucie Laliberté and included Mr. Cornelius Gorter, Messrs. David Collins and Dieter Glatzel (experts), and Ms. Janice Irving (Senior Administrative Assistant).

Italy is a member of the European Statistical System (ESS), which comprises the Statistical Office of the European Communities (Eurostat) and the statistical offices, ministries, and central banks that collect statistics in the countries of the European Economic Area. These countries presently comprise the European Union (EU) Member States, Iceland, Liechtenstein, and Norway.

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ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
ATECO	Attività economica (the Italian classification of economic activity)
BI	Bank of Italy
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activity
CPI	Consumer Price Index
DQAF July 2003	Data Quality Assessment Framework, July 2003 version
DSBB	Dissemination Standards Bulletin Board
EC	European Commission
EDP	Excessive Deficit Procedure
EMU	Economic and Monetary Union
<i>ESA 95</i>	<i>European System of Accounts 1995</i>
ESS	European Statistical System
EU	European Union
Eurostat	Statistical Office of the European Union
FISIM	Financial Intermediation Services Indirectly Measured
GFS	Government Finance Statistics
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual 2001</i>
HBS	Household Budget Survey
IMF	International Monetary Fund
Istat	National Institute of Statistics
MEF	Ministry of Economy and Finance
NACE	Statistical Classification of Economic Activities in the European Communities
PPI	Producer Price Index
PRODCOM	List of Products of the European Communities
ROSC	Report on the Observance of Standards and Codes
SBS	Structural Business Statistics
SCI	Survey of Economic and Financial Accounts of Large Enterprises
SDDS	Special Data Dissemination Standard
SISTAN	National Statistical System
VAT	Value Added Tax

I. OVERALL ASSESSMENT

1. Italy subscribed to the SDDS on August 13, 1996 and started posting its metadata on the Dissemination Standards Bulletin Board (DSBB) on September 19, 1996. Italy is in observance of the Special Data Dissemination Standard (SDDS), meeting the specifications for coverage, periodicity, timeliness, and the dissemination of advance release calendars. To meet its dissemination requirements under the standard, Italy uses two flexibility options, namely for the timeliness of data on central government operations and production indices. The Appendix provides an overview of Italy's dissemination practices compared to the SDDS.
2. This Report on the Observance of Standards and Codes (ROSC) data module covers the national accounts, the consumer price index (CPI), the producer price index (PPI), and the government finance statistics (GFS). For these datasets, the report constitutes an update of the data module for Italy conducted in 2002 that, in addition, covered the monetary and the balance of payments statistics.
3. One of the main findings of this report, in comparison with the situation in 2002, is that Istat has the primary responsibility for the dissemination of general government statistics to the public. This is consistent with Istat having established and still chairing a formal inter-agency working group—made up of Istat, the Ministry of Finance (MEF), and the Bank of Italy (BI)—to enhance the consistency of the GFS produced by these agencies, and Istat transmitting the general government statistics to Eurostat. The responsibility for compiling and disseminating a comprehensive and integrated set of general government statistics remains to be specified. In doing so, it would be useful to preserve the valuable interagency data cross-checking, a trademark of the Italian GFS statistics, by maintaining each agency's responsibilities for the separate components. A further noteworthy improvement since 2002 is the benchmark revision of the national accounts, which was successfully implemented in spite of continuing severe strains on staff resources. With regard to the CPI, innovative development work is well advanced on implementing random sampling techniques and the price collection period has been adjusted to fully reflect the reference month.
4. Section II provides a summary assessment by agency and dataset, based on a four-part scale. This is followed by staff recommendations in Section III. The Appendix summarizes Italy's practices compared with the SDDS. The authorities' response to this report and an annex with detailed assessments are presented in separate documents.
5. The remainder of this section presents the mission's main conclusions using the IMF's Data Quality Assessment Framework (DQAF), July 2003.
6. **Prerequisites of quality:** The Italian data-producing agencies rely on a legal and institutional framework that supports the quality of the datasets assessed in this report except for the GFS where the responsibility for compiling and disseminating a comprehensive and integrated set of general government statistics remains to be specified. Resources are broadly commensurate with the existing statistical programs of the data categories under review, with the exception of the National Accounts Directorate of Istat. The staff in the Directorate is

well qualified and highly motivated but their number is insufficient to deal with the considerable expansion of work in both the GFS and the national accounts.

7. **Assurance of integrity:** All agencies demonstrate professionalism, are transparent in their practices, and provide guidelines on ethical conduct to their staff.

8. **Methodological soundness:** All four datasets reviewed follow internationally accepted guidelines in terms of concepts and definitions, classification and sectorization, and basis of valuation. However, the scope of the national CPI could be improved by including the services of owner-occupied dwellings as articulated in the *Consumer Price Index Manual*, and the GFS are yet to be presented in the integrated and comprehensive set of statements for general government of the *Government Finance Statistics Manual 2001 (GFSM 2001)*.

9. **Accuracy and reliability:** The 2005 revision of the national accounts changed the benchmark year from 1992 to 2000, revised the calculation and allocation of financial services indirectly measured (FISIM), improved many compilation methods and introduced chained volume and price measures (work is still ongoing on a few series). However, the estimates are affected by certain weaknesses that remain regarding the data sources. Sound data sources and techniques are used to compile the CPI. The PPI has been rebased from 1995 to 2000 but there is scope to improve some of the statistical techniques and the weighting data sources. The consistency of various components of the GFS has been enhanced through better interagency coordination. The validation process at Istat is constrained by important time lags in assessing the economic nature of transactions and practices that limit revisions to the published aggregates. This may lead to inconsistencies with the GFS component that is under the responsibility of the BI.

10. **Serviceability:** The Italian datasets fully conform to the periodicity and timeliness requirements of the SDDS with the exception of the timeliness of data on monthly central government operations and the production indices, for which flexibility options are taken. In fact, Italy exceeds the SDDS requirements in key areas such as the CPI (which has a timeliness of 15 days versus the SDDS requirement of 30 days) and the GFS (quarterly estimates on both an accrual and cash bases versus a SDDS annual periodicity on a cash or accrual requirements). As well, in addition to the SDDS required quarterly central government debt data published by the MEF, the BI also publishes monthly government debt data. Data are consistent and revision policies are sound although practices could be improved in certain areas, such as identifying revised data and providing more details on GFS revisions.

11. **Accessibility:** All four datasets are readily available to the public and are accompanied by suitable, comprehensive documentation on concepts, scope, classification, basis of recording, data sources, and statistical techniques. Serviceability to users is adequate, including clear identification of contact persons in all Istat releases.

II. ASSESSMENT BY AGENCY AND DATASET

12. The assessment of the quality of four macroeconomic datasets—national accounts, CPI, PPI, and GFS—was conducted using the July 2003 version of the DQAF (a refinement of the 2001 version that was used for the 2002 data module ROSC). In this section, the results are presented at the level of the DQAF elements, making use of a four-point rating scale (Table 1). Tables 2a–b present the staff’s assessments regarding the Prerequisites of data quality and Assurances of integrity (dimensions “0” and “1” of the DQAF). Tables 3a–d show, for each dataset, the assessments of Methodological soundness, Accuracy and reliability, Serviceability, and Accessibility (dimensions “2” through “5” of the DQAF).

Table 1. Italy: Data Quality Assessment Framework July 2003—Summary Results

Key to symbols: O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; NA = Not Applicable		Consumer Price Index	Producer Price Index	Government Finance Statistics
Datasets				
Dimensions/Elements				
0. Prerequisites of quality				
0.1	Legal and institutional environment	O	O	LO
0.2	Resources	LO	O	LO
0.3	Relevance	O	O	O
0.4	Other quality management	O	O	O
1. Assurances of integrity				
1.1	Professionalism	O	O	O
1.2	Transparency	O	O	O
1.3	Ethical standards	O	O	O
2. Methodological soundness				
2.1	Concepts and definitions	O	O	LO
2.2	Scope	O	LO	O
2.3	Classification/sectorization	O	O	O
2.4	Basis for recording	O	O	O
3. Accuracy and reliability				
3.1	Source data	LO	O	O
3.2	Assessment of source data	O	O	O
3.3	Statistical techniques	O	O	O
3.4	Assessment and validation of intermediate data and statistical outputs	O	O	LO
3.5	Revision studies	O	O	O
4. Serviceability				
4.1	Periodicity and timeliness	O	O	LO
4.2	Consistency	O	O	O
4.3	Revision policy and practice	O	O	LO
5. Accessibility				
5.1	Data accessibility	O	O	O
5.2	Metadata accessibility	O	O	O
5.3	Assistance to users	O	O	O

Practice observed: current practices generally in observance meet or achieve the objectives of DQAF internationally accepted statistical practices without any significant deficiencies.
Practice largely observed: some departures, but these are not seen as sufficient to raise doubts about the authorities' ability to observe the DQAF practices. **Practice largely not observed:** significant departures and the authorities will need to take significant action to achieve observance. **Practice not observed:** most DQAF practices are not met. **Not applicable:** used only exceptionally when statistical practices do not apply to a country's circumstances.

Table 2a. Italy: Assessment of Data Quality—Dimensions 0 and 1—Istat

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment Istat is at the center of the National Statistical System (SISTAN) under Legislative Decree No. 322/1989. It is responsible, among other things, for the national accounts, the CPI, and PPI. At the time of the 2002 ROSC data module, the overall responsibility for GFS was not clearly established. It is now clear that Istat has the primary responsibility for disseminating GFS on the general government to the public, although the responsibility for producing the integrated set of statistics remains to be specified. (See Table 2b for more details). Legislative Decree No. 322/1989 and subsequent legislation, especially the legislation under which Istat was reorganized in 2000, provides a sound legal and institutional environment for Istat’s activities, supports data sharing and coordination among statistics producing agencies, calls for protection of the confidentiality of individual responses, and contains legal provisions for statistical reporting, including the identification of surveys with mandatory reporting. The statistical environment was further strengthened in 2003 with the adoption of legislation on the protection of personal data.</p> <p>Resources The staff resources of the National Accounts Directorate continue to be under pressure in meeting the statistical requirements of users, notably the European Union (EU) and the Economic and Monetary Union (EMU). Istat indicated that financial (and legal) constraints pose some limits to human resources management. Staff resources to compile the price indices are adequate. Computer resources are generally adequate. The progressive introduction of hand-held computers for consumer price collection in the municipalities, as recommended in the 2002 ROSC data module report, is scheduled for completion in 2007, and is significantly improving the efficiency and accuracy of data collection.</p> <p>Relevance The preparation of the National Statistical Program provides a framework for addressing the relevance of Istat’s statistical series. Istat maintains regular contacts with users through focus groups and users’ surveys to gauge the relevance of its products. The staff also participate in meetings of groups where users are represented, including those organized by the EU and the EMU.</p> <p>Other quality management Istat demonstrates a high sense of quality awareness, as evidenced by the “Overview of Quality Measures Adopted” in the 2001 <i>Italian Statistical Yearbook</i>. The existence of an independent oversight body in the form of the Guarantee on Statistical Information Commission, the Quality Circles that participate in formulating and tracking the National Statistical Program, and the Information System for Survey Documentation and Quality Control are among the processes put in place to monitor quality and to deal with quality considerations.</p>	<p>1. Assurances of integrity</p> <p>Professionalism Istat, supported by its designation as a research entity, maintains a high degree of professionalism. All evidence shows that statistics are compiled on an impartial basis. Choices of sources and statistical techniques are informed by statistical considerations at the national and European levels. Commenting on misuse of statistics is an explicit part of Istat’s communication strategy. Istat also actively promotes statistical literacy.</p> <p>Transparency Transparency of statistical policies and practices is promoted, inter alia, by the wide dissemination of the terms and conditions under which Istat works, easy access to the National Statistical Program, the identification of Istat’s products, and the practice of providing advance notice of major changes in methodology. The 2006 budget documentation introduced a proposal that the Guarantee of Statistical Information Commission should report directly to Parliament. A more recent draft bill proposes that this Commission report to the President and expands the Commission’s resources.</p> <p>Ethical standards Guidelines on the ethical standards expected of Istat staff are in place.</p>
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Table 2b. Italy: Assessment of Data Quality—Dimensions 0 and 1—Istat, Ministry of Economy and Finance, and the Bank of Italy—Government Finance Statistics Components

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment Compared to 2002 when the first ROSC data module was prepared, it is now clear that Istat has the prime responsibility for disseminating general government statistics to the public. This is consistent with Istat having established and chairing a formal working group responsible for coordinating and integrating the government finance statistics (GFS) produced by Istat, the MEF, and the BI, and transmitting the general government statistics to Eurostat.</p> <p>The legal and institutional environment of the MEF broadly supports its responsibility for the compilation and dissemination of data on budget execution. Although there is no specific legal mandate stipulating that such data should be published, MEF staff view the provisions of Legislative Decree 468/1978 as supporting publication. They also note that almost all units of general government publish their data. The BI, which compiles and disseminates finance data for general government, has a legal and institutional environment that supports its statistical activities.</p> <p>However, the responsibility for compiling and disseminating a comprehensive and integrated set of general government statistics remains to be determined, and in doing so it would be useful to preserve the valuable data cross-checking undertaken by the three agencies, a trademark of the Italian GFS statistics, by maintaining each agency's responsibilities for the separate components.</p> <p>Resources The staff resources available at Istat for GFS are not commensurate with the data demands, notably from the EU institutions. This means that staff work under pressure to meet the increasing data requirements. In recent years, the MEF, which traditionally has had almost no statistical capacity, has made efforts to develop such capacity and is currently undergoing a reorganization to improve its statistical work. BI resources are commensurate with its statistical functions.</p> <p>Relevance The GFS cover highly relevant information on the subject field. This is further highlighted by their use in EU fiscal convergence criteria. In Italy, elements of GFS are compiled and disseminated by the three agencies. Istat publishes annual <i>ESA 95</i> data and quarterly nonfinancial general government accounts. (It plans to publish the annual deficit and debt data for the Excessive Deficit Procedure (EDP) twice a year in a user friendly format starting in 2007). The MEF disseminates quarterly and annual cash data, and the BI disseminates monthly and annual financing and debt data, quarterly and annual financial accounts, and the financial net worth of general government and its subsectors.</p> <p>Other quality management Italian data-producing agencies have legal and institutional frameworks that support statistical quality.</p>	<p>1. Assurances of integrity (For an assessment of Istat for this dimension, please refer to Table 1a above.)</p> <p>Professionalism MEF and BI staff demonstrate professionalism. The compilation of data on an impartial basis is supported by the MEF's accounting requirements, and by the BI's statutory provisions of impartiality as well as its longstanding traditions of independence and professionalism. Both agencies are available to provide expert advice on technical aspects of the data. They both participate in appropriate European-level committees where the choices of sources and methods are informed by statistical considerations.</p> <p>Transparency The terms and conditions under which the MEF compiles data are available to the public. BI evidences transparency with respect to the terms and conditions under which it undertakes statistical work and in its procedures for the release of statistical information.</p> <p>Ethical standards Both the MEF and BI provide their staff with guidance on ethical standards.</p>
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Table 3a. Italy: Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The national accounts follow the definitions and concepts of <i>ESA 95</i>.</p> <p>Scope The scope of the national accounts includes, in addition to the range of recommended annual and quarterly national accounts tables, various extensions such as regional accounts, agricultural accounts, and environmental accounts.</p> <p>Classification/sectorization The classification/sectorization and basis for recording are in accordance with international standards. The ATECO 2002 (derived from the NACE Rev.1.1) was recently introduced.</p> <p>Basis for recording The basis for recording is in accordance with international guidelines.</p>	<p>The change of the benchmark year from 1992 to 2000 has been used to introduce many improvements regarding accuracy and reliability.</p> <p>Source data The range of source statistics is extensive. Istat's business register, introduced in 1996, has been made more comprehensive. Local kind of activity units were added to the register in 2001. The response rates of some of the major enterprise surveys remains low. The cost structure survey (important for reliable use tables) that was planned for 2005 was postponed. Short-term sources on changes in inventories are still lacking. While some short-term indicators become available rather late, this does not affect however the quarterly estimates significantly.</p> <p>Assessment of source data Istat assesses the source data routinely. Important innovations in validating enterprise data were introduced on occasion of the benchmark revision.</p> <p>Statistical techniques Statistical techniques are in accordance with good practice. Using various sources on labor, Istat makes large adjustments for the nonobserved economy. Chained volume and price measures were recently introduced. For health and education, output methods are used in making volume estimates. The product breakdown in supply-and-use tables could be increased. Balancing is not yet performed simultaneously at current and previous year prices. FISIM is allocated to users. No adjustments are made for holding gains/ losses on inventories.</p> <p>Assessment and validation of intermediate data and statistical outputs Systematic procedures are used to assess the potential discrepancies in intermediate data.</p> <p>Revision studies Istat investigates the direction and magnitude of revisions between preliminary and final estimates.</p>	<p>Periodicity and timeliness The provisional estimates of the quarterly accounts meets SDDS requirements. The timeliness with which the annual accounts are published is good.</p> <p>Consistency Consistent time series for the annual accounts are available from 1970 onward, and for the quarterly accounts from 1980 onward. The national accounts statistics are reconcilable with the balance of payments and with MEF data on government operations.</p> <p>Revision policy and practice Revisions follow a regular schedule with a few exceptions, and it would be useful to indicate whether the data are still prone to revision. The releases of annual and quarterly accounts contain explanations on revisions to the previously published data.</p>	<p>Data accessibility National accounts data are readily accessible, the publications present the statistics in a clear manner, and charts and tables are disseminated to facilitate the analysis of the data.</p> <p>Metadata accessibility Many publications provide metadata and glossaries. In addition, frequently publications on sources and methods are being produced. All metadata, including the inventory of methods prepared for the EU Gross National Income Committee, is published on Istat's website.</p> <p>Assistance to users Istat's means of dissemination and assistance to users are excellent.</p>

Table 3b. Italy: Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index

3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Source data The source data for the weights and prices for the CPI are comprehensive surveys. Beginning in 1997, the Household Budget Survey (HBS) became a continuous survey based on a two-stage stratified random sample. The response rates are high. The current CPI basket and weights are based on national accounts data for the year 2004, updated for price changes through to December 2005. As required by law, the monthly price survey is conducted in the chief towns of the provinces (86 out of 103 municipalities) thus necessitating the collection of an unusually large number of prices. A recommendation was made in the 2002 ROSC data module report that a possible over-sampling of prices, and a bias in outlet selection towards specialized stores, be addressed. Subsequently, Istat has been monitoring the outlet distributions by municipality over time, and local staff are being provided with clear outlet selection criteria; these guidelines are discussed at the annual Territory Officer Conferences prior to each rebase. Also, work on designing, and implementing, a random sampling approach to the selection of both outlets and products is very well advanced.</p> <p>From October 2006, the pricing period has been shifted from between the 16th of the preceding month and the 15th of the reference month; it has been brought forward and is now from the 1st to the 21st of the reference month, and is now fully within the index reference month, as recommended in the 2002 ROSC data module report.</p> <p>Assessment of source data Administrative prices received from government agencies are crosschecked in the markets. Other price data are thoroughly checked and edited by computer programs and by supervisors at municipal offices and at headquarters.</p> <p>Statistical techniques The statistical techniques used in calculating the index are sound. The index employs annual chaining, with weights based on national accounts data.</p> <p>Assessment and validation of intermediate data and statistical outputs Unusual movements in certain items and regions are thoroughly investigated.</p> <p>Revision studies Regarding the provisional and final monthly CPI, studies have not been undertaken as these two datasets rarely disagree at the national level.</p>	<p>Periodicity and timeliness The CPI's monthly periodicity conforms to the SDDS. Its two weeks timeliness exceeds the one month SDDS requirement.</p> <p>Consistency The all-items CPI and the aggregate of the regional CPIs are the same.</p> <p>Revision policy and practice The revisions policy and practice for the CPI are well known to users. Differences between the preliminary and the final estimates at the national level are rare and trivial.</p>	<p>Data accessibility The CPI is released on a pre-announced schedule and data are made available to all users at the same time. The monthly releases provide sufficient component detail on the indices.</p> <p>Metadata accessibility The CPI press release contains a summary of the methodology, while a comprehensive description of concepts and methods is contained in a specialized publication, which is also available on the Istat website.</p> <p>Assistance to users Assistance to users is available; contact persons are identified in the relevant publications and on the Istat website.</p>
<p>2. Methodological soundness</p> <p>Concepts and definitions The concepts and definitions and the basis for recording of the national CPI generally follow the standards set by the <i>ESA 95</i> and EU regulations.</p> <p>Scope The index coverage is final private consumption of all resident households. However, a measure of the services of owner-occupied dwellings is not included.</p> <p>Classification/sectorization Expenditures follow the COICOP classification.</p> <p>Basis for recording Valuation is at market prices, including VAT. Transactions are recorded on an accrual basis.</p>		

Table 3c. Italy: Assessment of Data Quality—Dimensions 2 to 5—Producer Price Index

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The PPI is based on the <i>ESA 95</i> concepts and definitions for the recording and valuation of product prices and weights.</p> <p>Scope All resident market enterprises are covered. As accepted by EU regulation, the PPI differs from the <i>1993 SNA</i> in excluding changes in inventories, own-account production of goods for own final consumption, illegal sales to willing buyers, and services. Coverage is over 90 percent of manufacturing value added.</p> <p>Classification/sectorization The classification of economic activities is based on NACE Rev. 1.1. Products are classified according to PRODCOM, derived from CPA 2002.</p> <p>Basis for recording The basis for recording weights and prices is billed sale prices, on an ex-factory basis, and excluding VAT and other specific taxes.</p>	<p>Source data The source data for the prices and weights are obtained from comprehensive data collection programs. About 12,000 price quotations are collected each month from 3,600 enterprises. Product weights are based on detailed PRODCOM data, while the upper-level activity-based weights are drawn from the Surveys of Structural Business Statistics (SBS).</p> <p>Despite creditable initiatives to improve the response rates of these surveys, which was recommended in the 2002 ROSC data module, response rates still remain low (around 50 percent to 60 percent), and the quality of the detailed results which fed into the 2000 rebase must be questioned.</p> <p>Assessment of source data Data reported by enterprises in the price survey are analyzed in detail each month, using a range of clerical and automated editing techniques. Istat's PPI staff specialize in different sectors and are industry specialists.</p> <p>Statistical techniques Most statistical techniques are sound. The current base is 2000, and the index is rebased every five years and linked to form continuous series.</p> <p>There is scope for improvement in the statistical techniques used to handle temporarily missing prices (seasonal or missing observations), and products that change in quality over time. Istat recognizes this need and plans to implement improved methods as part of the 2005 rebase; however it is considered that this improvement should be implemented as soon as practicable, rather than delaying it until the release of the rebased series in early 2009.</p> <p>Assessment and validation of intermediate data and statistical outputs PPI data are regularly compared with other information, e.g., with similar data from the CPI and the Agriculture PPI (especially for food), and external industry and administrative sources.</p> <p>Revision studies The discrepancies between preliminary and final PPI data are small and they are monitored.</p>	<p>Periodicity and timeliness Periodicity and timeliness are within the one month SDDS requirements.</p> <p>Consistency Aggregate and component PPIs are consistent.</p> <p>Revision policy and practice The revisions policy and practice for the PPI are made known to users.</p>	<p>Accessibility The PPI is released on a pre-announced schedule and is made available to all users at the same time. The monthly releases provide sufficient detail on the indices, and the formats are clear.</p> <p>Metadata accessibility The PPI press release contains a summary of the methodology, while a comprehensive description of concepts and methods is contained in a specialized publication, which is also available on the Istat website.</p> <p>Assistance to users The PPI release and the website lists the name and telephone number of a contact person who can assist with enquiries. A catalog of publications is available and is updated each year.</p>

Table 3d. Italy: Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The GFS concepts and definitions used are consistent with those of the general government sector defined in the <i>ESA 95</i>. However, they are not produced in the context of the comprehensive <i>GFSM 2001</i> framework that would fully integrate the components currently disseminated by the three agencies involved in GFS compilation.</p> <p>Scope The scope is consistent with the <i>ESA 95</i> general government sector.</p> <p>Classification/sectorization Data conform to national accounts sectorization standards, and the classifications used are linkable to the <i>GFSM 2001</i>.</p> <p>Basis for recording The GFS components are recorded on both an accrual basis (Istat) and cash basis (MEF). Data on financing and debt (BI) are valued and classified in accordance with international standards. For data on financial accounts and balance sheets (BI), time of recording and valuation are fully consistent with <i>GFSM 2001</i>.</p>	<p>Source data Source data include public accounting quarterly records of the MEF, monthly financing and debt data of the BI (compiled mainly through the BI's Monetary Policy and Foreign Exchange Rate Department, which manages bills and bonds auctions, the bank reporting system and Italian Foreign Exchange Office information), local health data from the Ministry of Health, and local government data from the Ministry of the Interior supplemented with surveys by Istat. The BI also uses information obtained from the Treasury and direct information from individual institutional units.</p> <p>Assessment of source data Compared to 2002, the data collection from local government units has improved with the General Government Network RUPA becoming operational in 2005. An other improvement is that security borrowing by local governments to finance capital spending is now being reported to the MEF. The BI collects data on all financing and debt of local government. However, arrears made by local health authorities are not captured unless refinanced with financial institutions. Source data are not always amenable in specifying the economic nature of transactions.</p> <p>Statistical techniques Adequate techniques are used for adjusting source data to accrual basis, to calculate the payables/receivables, and to apply the appropriate economic classification.</p> <p>Assessment and validation of intermediate data and statistical outputs A trademark of the Italian system is the capacity to cross-check data that are compiled from independent sources. A high-level commission investigated the causes of discrepancies among the measures of government borrowing requirements and financing. This work is pursued in a formal working group established and chaired by Istat. The validation process at Istat is constrained by important time lags in assessing the economic nature of transactions and practices that limit revisions to the published aggregates. This may lead to inconsistencies with the GFS component that is under the responsibility of the BI.</p> <p>Revision studies Revision studies are not routinely done, but are undertaken when major changes are made.</p>	<p>Periodicity and timeliness Data on general government operations are published annually within six months after the end of the year as prescribed in the SDDS. Furthermore, quarterly nonfinancial accounts for general government on an accrual basis are also published. In addition to the SDDS quarterly central government debt data disseminated by the MEF, central (and general) government debt data are published monthly by the BI within two months of the reference period, exceeding SDDS requirements. [Data are also made available to Istat and Eurostat on a quarterly basis.] Data on central government operations are published by the MEF, monthly in line with SDDS requirements, but only after 45 days compared to 30 days in the SDDS. The authorities use a flexibility option on timeliness. The MEF also publishes quarterly cash statistics on the general government.</p> <p>Consistency Consistency among the GFS components published by the various data agencies has improved in recent years.</p> <p>Revision policy and practice Istat has a clear revision policy but practices could be improved in certain areas, such as by identifying which data are revised and by providing more details on revisions.</p>	<p>Data accessibility Data accessibility is very good in most respects and data are usually published by each agency in a timely fashion (although the timing of the MEF quarterly release of quarterly cash statistics may fluctuate due to legislative arrangements).</p> <p>Metadata accessibility Istat provides extensive documentation on the general government sector of the national accounts. Publications prepared by the BI routinely include summary information of the concepts, sources, and methods used. The documentation on administrative data published by the MEF in its releases is limited, although an extensive commentary on fiscal developments is included.</p> <p>Assistance to users Assistance to users is provided through catalogs and an on-line list of documents. Contact persons are identified on Istat releases and the BI provides in each publication a contact e-mail address. The MEF provides the names of contact persons for central government debt.</p>

III. STAFF'S RECOMMENDATIONS

13. Based on the review of Italy's statistical practices, discussions with the data-producing agencies, and consultation with data users, the mission made a set of recommendations. They are designed to increase further Italy's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Italy's statistics. Some additional technical suggestions are included in the Detailed Assessments volume.

Cross-cutting Recommendations

- Increase the number of permanent staff in Istat's National Accounts Directorate in view of the expanded compilation program of the national accounts and GFS (short term).
- Istat to flag the status of published data (provisional, revised) and supply the necessary information to assess revision changes (short term).

National Accounts

- Implement existing plans to balance the supply-and-use tables simultaneously at current and constant prices (short term).
- Strictly adhere to the scheduled calendar of the cost structure surveys, which are essential for the accuracy of the supply-and-use tables (medium term).
- Develop short-term statistics on changes in inventories (short term).
- Continue to investigate and implement ways to improve the response rates of Istat's mandatory enterprise surveys (short term).

Consumer Price Index

- Continue to contribute to the development of a measure of the services of owner-occupied dwellings and to the debate on the preferred approach for inclusion in national CPIs with a view to incorporating this very important activity within the scope of the Italian National CPI (short term).

Producer Price Index

- Bring forward plans to introduce more sophisticated imputation and quality adjustment techniques within the PPI as soon as practicable (short term).
- Continue to work on the improvement in the response rates for the PRODCOM and SBS surveys, including the initiative to augment missing respondent data with data from the Chamber of Commerce register, especially the sales data required for PPI weights (short term).

Government Finance Statistics

- Establish the responsibility for compiling and disseminating a comprehensive and integrated set of general government statistics, preserving the valuable inter-agency cross-checking by maintaining each agency's responsibilities for the separate components (short term).
- Produce a comprehensive and integrated set of GFS using the *GFSM 2001* framework, integrating GFS data produced by Istat, the MEF, and the BI. The initiative currently underway to convert *ESA 95* data into the *GFSM 2001* format provides a good basis in that direction (medium term).
- Pursue the work on exploiting sources on the arrears and trade credits¹ of local health units (short term).
- In validating data, incorporate, in addition to methodological changes, new statistical information in the aggregate figures (short term).
- Pursue the inter-agency cross-checking work to eliminate the discrepancy between the borrowing requirement and the SGP deficit (short term).
- Provide more details on GFS revisions in tabular form (short term).
- Improve the timeliness of the data on the monthly central government operations in accordance with the SDDS (medium term).

¹ These categories of financial instruments are not part of the Maastricht debt definition.

Table 4. Italy: Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data

SDDS Data Category	Coverage (meets requirement)	Periodicity		Timeliness		Comments
		SDDS	Italy	SDDS	Italy	
Real Sector						
National accounts	Yes	Q	Q	1Q	70D	
Production Index/indices	Yes	M	M	6W (M encouraged)	43D	Flexibility option utilized for timeliness of data.
Employment	Yes	Q	Q	1Q	NLT 12W	Timeliness exceeds SDDS requirements.
Unemployment	Yes	Q	Q	1Q	NLT 12W	Timeliness exceeds SDDS requirements.
Wages/earnings	Yes	Q	M	1Q	30D	Periodicity and timeliness exceed SDDS requirements.
Consumer price index	Yes	M	M	1M	NLT 2W	Timeliness exceeds SDDS requirements.
Producer price index	Yes	M	M	1M	NLT 1M	
Fiscal Sector						
General govt. operations	Yes	A	Q, A	2Q	NLT 6M	Periodicity exceeds SDDS requirements.
Central govt. operations	Yes	M	M	1M	45D	Flexibility option utilized for timeliness of data.
Central govt. debt	Yes	Q	Q	1Q	NLT 1Q	
Financial Sector						
Analytical accounts of the banking sector	Yes	M	M	1M	1M	
Analytical accounts of the central bank	Yes	M (W recommended)	M	2W (W encouraged)	NLT 1W	Timeliness exceeds SDDS requirements.
Interest rates	Yes	D	D	^{1/}	D	Both daily and monthly data are disseminated.
Stock market: share price index	Yes	D	...	^{1/}	...	
External Sector						
Balance of payments	Yes	Q	M	Q	30D	Periodicity and timeliness exceed SDDS requirements.
International reserves	Yes	M (W recommended)	M	1W	NLT 1W	
Reserves template	Yes	M	M	1M	NLT 1M	
Merchandise trade	Yes	M	M	8W (4-6W encouraged)	1M and 7W	Extra EU trade: 1M Intra EU trade: 7W
International Investment Position	Yes	A (Q recommended)	Semi-annual	2Q (1Q encouraged)	130 days	Periodicity and timeliness exceed SDDS requirements.
External debt	Yes	Q	Q	1Q	1Q	
Exchange rates	Yes	D		^{1/}	D	
Addendum: population	Yes	A	A	...	NLT 6M	

Note: Periodicity and timeliness: (D) daily; (W) weekly or with a lag of no more than one week from the reference data or the closing of the reference week; (M) monthly or with a lag of no more than one month; (Q) quarterly or with a lag of no more than one quarter; (A) annually; NLT not longer than, and (...) not applicable.

¹ Given that the data are broadly disseminated by private means, the timeliness with which official data are disseminated is not time critical.

Data are released simultaneously to all interested parties, generally on the websites of the relevant agencies and on Italy's National Summary Data Page, which is maintained by Istat (<http://www.istat.it/fmi/ITALY-NSDP.html>).

INTERNATIONAL MONETARY FUND

ITALY

Report on the Observance of Standards and Codes (ROSC)—Data Module

Response by the Authorities

February 22, 2007

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Istituto Nazionale di Statistica

Il Presidente

SP/89.2007

Rome, 7 February 2007

Dear Mr Edwards,

with reference to your note of January 24, 2007, I inform you that we have received the final version of the Report on the Observance of Standard and Codes (ROSC) - Data Module and accompanying Detailed Assessments Using the Data Quality Assessment Framework (DQAF).

On behalf of the institutions involved in the ROSC (the National Institute of Statistics, the Ministry of Economy and Finance and the Bank of Italy), I want to express my deep appreciation for transposing corrections and revisions submitted by Italian authorities, since our contribution witnesses the effort carried out to comply with the international regulations on statistics, and for the kind collaboration with the IMF delegation.

Certainly, the Report represents an important tool for statistical development in order to meet the requirements identified in the needing improvements. As this regard, it will be enhanced the consistency among indicators on Government Finance preserving the interagency data cross-checking and maintaining each agency's responsibilities and competencies on the specific area..

To this end specific actions are going to be planned to strengthen statistics on national accounts and improve the quality of structural business statistics, by empowering processes to implement and increase the response rates of the structural business surveys.

Furthermore, I assure you that Italy is ready to have the three documents, the ROSC, the Response by the Authorities and the document containing the Detailed Assessment, published on the IMF's website.

Sincerely yours,

Luigi Biggeri

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INTERNATIONAL MONETARY FUND

ITALY

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by

Robert W. Edwards and Alessandro Leipold

February 22, 2007

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Italy's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as an appendix the DQAF generic framework.

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ACRONYMS

<i>ESA 95</i>	<i>European System of Accounts 1995</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
ASIA	Statistical Register of Active Enterprises
ATECO	Attività economica (the Italian classification of economic activity)
BI	Bank of Italy
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
CMFB	Committee on Monetary, Financial, and Balance of Payments Statistics
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
COMSTAT	Committee for Directing and Coordinating Statistical Information
COPNI	Classification of the Purposes of Nonprofit Institutions Serving Households
CPA	Classification of Products by Activity
CPI	Consumer Price Index
<i>CPI Manual</i>	<i>2004 Consumer Price Index Manual</i>
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
EC	Council Regulations
ECB	European Central Bank
EDP	Excessive Deficit Procedure
ESCB	European System of Central Banks
ESSPROS	European System of Social Protection Statistics
EU	European Union
Eurostat	Statistical Office of the European Communities
FISIM	Financial Intermediation Services Indirectly Measured
f.o.b.	Free on Board
FOI	Households of blue and white collar workers
GDP	Gross Domestic Product
GG	General government
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual 2001</i>
GNI	Gross National Income Committee
GFS	Government Finance Statistics
HBS	Household Budget Survey
HICP	Harmonized Index of Consumer Prices
ICT	Information Communication Technology
ILO	International Labor Organization
IMF	International Monetary Fund
Istat	National Institute of Statistics
KAU	Kind of Activity Units
LFS	Labor Force Survey
MEF	Ministry of Economy and Finance
MFI	Monetary financial institution
MIGs	Main Industrial Groupings

MSO	Municipal Statistical Office
NACE	Statistical Classification of Economic Activities in the European Communities
NAMEA	National accounts matrices with environmental extensions
NSDP	National Summary Data Page
NUTS	Nomenclature of Territorial Units
OECD	Organization for Economic Co-operation and Development
PMI	Survey of Small and Medium Enterprises
PPI	Producer Price Index
PPI Manual	<i>Producer Price Index Manual</i>
PRODCOM	List of Products of the European Communities
RGS	State Accounting Office (Ragioneria Generale dello Stato)
ROSC	Report on the Observance of Standards and Codes
SAMS	Social Accounting Matrices
SBS	Structural Business Statistics
SCI	Survey of Economic and Financial Accounts of large enterprises
SDDS	Special Data Dissemination Standard
SIDI	System for Survey Documentation and Quality Control
SIOPE	Informative System <u>for the government units' operations</u>
SIS	Statistical Information System
SISTAN	National Statistical System
UIC	Italian Foreign Exchange Office (UIC)
UN	United Nations
VAT	Value Added Tax

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, consumer price index, producer price index, and government finance was gathered from publicly available documents and information provided by the Italian officials. This information, which is organized along the lines of the generic DQAF (see Appendix II), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Italy's Report on the Observance of Standards and Codes (ROSC)—Data Module. This assessment updates a ROSC data module completed in October 2002 that, in addition, covered monetary and balance of payments statistics.

Three of the datasets assessed in this report are produced by the National Institute of Statistics (Istat): the national accounts, the consumer price index and the producer price index. Government finance statistics (GFS) are produced by Istat, the Ministry of Economy and Finance (MEF) and the Bank of Italy (BI). In order to avoid repetition, the assessment of two institutional-oriented dimensions of the DQAF—Prerequisites of Quality and Assurance of Integrity—for Istat is grouped in the national accounts section, with references as appropriate, to the consumer and producer price indices. In the same vein, these two dimensions are grouped in the GFS section for the three institutions involved in the GFS.

I. NATIONAL ACCOUNTS

Several important changes have been made to the Italian national accounts since April 2002, when an IMF mission visited Rome to prepare the first data module of the ROSC. These changes were introduced in December 2005 as an overall revision that moved the benchmark year for the accounts from 1992 to 2000. On this occasion, among other things, the following innovations were introduced:

- A revision in the method of calculating financial intermediation services indirectly measured (FISIM) and their allocation to users;
- The adoption of chain volume and price measures, replacing the calculation of measures based on the structure of a fixed base year;
- The move towards the compilation of supply-and-use tables instead of input-output tables based on homogeneous industries;
- The incorporation of the results of the censuses conducted during 2000 and 2001 and the adoption of the activity classification ATECO 2002;
- Improved editing of the sources on enterprises and refined methods to adjust for underreporting;
- The results of research in specific areas, such as the intermediate consumption of enterprises active in agriculture and fishing, the construction activity, gratuities paid to hotels and restaurants staff, the composition of the housing stock, the activities of nonprofit institutions, capital formation, depreciation of government assets, and the labor force.

The annual data have been revised back to 1970, the quarterly accounts back till 1980.

0. Prerequisites of quality

0.1 Legal and institutional environment

0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified

Legislative Decree 322/1989 places the National Institute of Statistics (Istat) at the center of the National Statistical System (SISTAN), which covers the statistics offices of all levels of government and the chambers of commerce, industry, crafts industries, and agriculture.

Moreover, the Committee for Directing and Coordinating Statistical Information (COMSTAT), over which Istat presides, defines and issues binding directives for implementing the SISTAN. Each year the National Statistical Program, which was established under the Law on the National Statistical Program of December 1994, details Istat's responsibility for the compilation of national accounts, price statistics, and the accounts of the public administration (see section IV, Government Finance Statistics), among other datasets. Istat is also the agency responsible for reporting national accounts data to the European Commission for monitoring the Maastricht criteria. The Premier approves the National Statistical Program by decree.

The Guarantee of Statistical Information Commission, an independent body set up in the Office of the Premier, has the task of ensuring the impartiality and completeness of the information produced, the quality of the statistical methodologies and information technology systems used, the surveys' compliance with the directives of European Community bodies, and the protection of the confidentiality of personal data. The Commission is equipped with the informational and operational instruments required to perform its role effectively. In the budget of 2007, a new bill was introduced for the Commission to report to the Office of the Premier (initial proposal was to the Parliament) and to be given increased resources (21 staff and funding of 1.2 million euros).

For the production of the national Consumer Price Index (CPI), Laws No 222/1927 and 621/1975 specify the responsibilities and tasks of the contributing agencies that is, Istat and district statistical offices. Moreover, there are many EU Council Regulations on the harmonized European CPIs, among which Regulations No 2494/95, 1749/96, and 2214/96 are the base legal acts (see www.europa.eu.int/eur-lex).

Two laws (n. 2421/1927 and 621/1975) establish the local districts in which prices to compute the CPI must be collected. They state that the price collection must be carried out in the chief towns of the provinces (103 municipalities) and cities with more than 30,000 inhabitants (127 municipalities) that have an operational Municipal Statistical Offices (MSOs). Because of the lack of adequate MSOs, in 2006 only 86 chief towns of the Italian provinces are participating in the price survey and in the computation of the CPIs on a monthly basis (they represent about the 90 percent of the population of chief towns).

0.1.2 Data sharing and coordination among data-producing agencies are adequate

Data sharing and coordination among data-producing agencies are adequate. The law creating SISTAN contains provisions on data sharing and coordination within the system. Directives issued by COMSTAT have further strengthened these provisions. In addition, Istat has developed statistical information systems utilized throughout SISTAN for sharing data. Istat also cooperates closely with agencies that do not belong to SISTAN, such as the BI and the MEF, to establish data-sharing protocols and agreements.

As the national agency responsible for the Italian consumer price survey, Istat promotes the CPI in all the Italian districts, makes methodological decisions, coordinates and controls the survey, centrally conducts the collection of prices for a range of products, and officially produces the CPI as legally required. The MSOs collect local prices according to Istat instructions.

Istat is part of the European Statistical System¹ and accordingly coordinates and shares data with Eurostat.

¹ The European Statistical System comprises Eurostat and the statistical offices, ministries, agencies, and central banks that collect official statistics in the countries of the European Economic Area. These presently comprise the European Union Member States, Iceland, Norway, and Liechtenstein. The System concentrates mainly on European Union policy areas but, with the extension of common policies, harmonization has been extended to nearly all statistical fields.

The System finds its legal basis in three major acts, all adopted in 1997. The constitutional basis derives from the Article 285 of the Treaty of Amsterdam, which stipulates that the Council of the European Union "...shall adopt measures for the production of statistics where necessary for the performance of the activities of the Community." In February 1997, the Council adopted a Regulation defining the division of responsibilities between national and Community statistical authorities. This Regulation also laid down the basic conditions, procedures, and general provisions governing official statistics at European Union level. A Commission Decision of 1997 clarified the role of Eurostat. It also reaffirmed that Community statistics should be scientifically independent, transparent, impartial, reliable, pertinent, and cost-effective.

At the heart of the System is the Statistical Program Committee. This Committee, made up of Eurostat and the heads of the Member States' national statistical offices, agrees a five-year program to be implemented by the national authorities and monitored by Eurostat. The Statistical Program Committee coordinates the

- Development of common classifications, methodology, and definitions;
- Implementation of common statistical surveys based on harmonized methods;
- Collection, analysis, and dissemination of statistical data for the European Union.

A main advisory body closely linked to the European Statistical System is the Committee on Monetary, Financial, and Balance of Payments Statistics. This Committee mainly deals with statistics that are necessary for the European Monetary Union.

0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only

Comprehensive confidentiality rules covering all statistical activities have been put in place. Legislative Decree 322/1989 specifies that dissemination may occur only in an aggregate form and in a manner by which it is not possible to identify data for any individual person or entity. In addition, the Law on the National Statistical Program of December 1994 establishes strict confidentiality rules for data included under the National Statistical Program. In accordance with the Legislative Decree n. 196 of 30 June 2003, the Personal Data Protection Code, all statistical surveys inform respondents in writing of their rights and obligations with regard to the provision of information, and they are assured that the information they provide will be used for statistical purposes only.

Special aggregation rules have been developed to ensure that indirect disclosure of individual data does not occur when aggregations of data are presented. For instance, access to individual data is restricted to staff who require the information in the performance of their duties. Provisions are in place to supervise analysts that require access to disaggregate data.

Approval is required in advance for staff to work outside normal working hours in the building where the National Accounts Directorate is located. In addition, there is always an (armed) guard in the office if any staff member is working there. No guards are present in the building when no staff are working, but they are posted in the immediate vicinity.

All workstations are password protected. Comprehensive confidentiality rules covering all statistical activities have been put in place.

Detailed data from basic statistics are provided by the compiling services at the request of the National Accounts Directorate. Part of the basic statistics are on a database system providing secure access to the National Accounts Directorate at the organization level. However, the system does not restrict access to specific database components to the compilation and management staff within the Directorate responsible for those components, making comprehensive records on individual reporters accessible to an unnecessarily large number of people. Some basic statistics use a second database system that provides the requisite level of security. Istat plans to migrate all of its basic statistics to the second, more secure system.

All the enterprises, involved in the producer price survey, are informed in writing of their rights and obligations with regard to the provision of information and they are assured that the information they provide will be use for statistical purposes only.

0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response

Legislative Decree 322/1989 requires all government agencies, bodies, and administration offices to supply any data and information for surveys that are part of the National Statistical Program and sets the administrative sanctions. Separate legal provisions acknowledge Istat's

power to access administrative files of public administration offices, government agencies, and companies controlled by such administration offices.

The decrees approving the National Statistical Program specify which statistical surveys carry the mandatory requirement of private individuals and entities to supply all data and information that is requested of them. Also most surveys carry measures to encourage voluntary response.

0.2 Resources

0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs

Istat's overall budget for 2005 was 177.6 million Euros, of which 166.4 million Euros in government appropriations, 8.8 million Euros in grants from other national or international agencies, and 1.3 million Euros revenues from other sources.

Istat's employment has decreased since the 2002 data module of the ROSC was prepared. It should be noted that Istat conducted major censuses and surveys during 2000 and 2001, partially as a result of European Union (EU) requirements.

Staff	End-2001	May 2006
Total	2,613	2,420
Permanent	2,240	2,155
Temporary	373	265

At the time the ROSC update mission visited Istat, the National Accounts Directorate had a staff of 115 of which 90 permanent staff and 25 temporary employees with fixed-term (typically two- to three-year) contracts. This compares to 117 staff of which 94 were permanent staff when the 2002 ROSC data module was prepared. The total number of staff in the quarterly national accounts division is 11, of which nine are permanent.

The number of staff may be considered too small in comparison with the current workload. Among the causes of the workload should be mentioned (1) the development of quarterly institutional accounts that are scheduled to be published in 2007; (2) the work on regional accounts at the request of the MEF; (3) the analytical work regarding total factor productivity measurements and the preparation of annual and quarterly estimates on hours worked; (4) the development of sectoral balance sheet information on nonfinancial assets; (5) the development of methods for simultaneously balancing the current price data and data in previous year prices in the supply-and-use table format; (6) feasibility studies for flash employment estimates with a timeliness of 45 days after the reference period at the request of Eurostat, (7) the development of simplified supply-and-use tables for the quarterly accounts; and (8) the preparation of an inventory of quarterly accounts compilation methods.

Computing resources are sufficient in the National Accounts Directorate. For instance, every employee has access to a workstation.

Istat's CPI unit has 32 staff: four managers, two research officers, and 26 employees.

The extension of the use of hand-held computers, and provision of personal computers in every territorial office, has been identified as a key factor for improving the CPI and was a recommendation in the 2002 ROSC data module. In this regard, Istat has been actively working on a program to increase the penetration of computing equipment in the territories.

There has been a sharp rise in the number of municipalities in which data collection is carried out with the use of hand-held computers, amounting in October 2006 to 48 out of a total of 86 participating municipalities. In each municipality, the MSO provides specific training courses to its staff in order to optimize the use of computers and to make them familiar with the software developed and supplied by Istat.

By 2007, the number of municipalities equipped with hand-held computers is expected increase further. Eighteen additional MSOs have already initiated the purchase of computers for price collection and during 2007 Istat will directly purchase the necessary equipment for the remaining MSOs.

The PPI unit has 13 staff: one manager, one research officer, and 11 employees working on the PPI (domestic market), five of which are also involved with the PPI (non-domestic market).

The requirements of the EU in relation to additional PPI statistics, for instance, for exports and services puts a strain on the Price Statistics Division's resources.

0.2.2 Measures to ensure efficient use of resources are implemented

Istat makes use of a wide range of efficacy, efficiency, structural, economic, and financial indicators to provide management with a mechanism to monitor institutional performance from both a quantitative and qualitative perspective. These indicators are published in the Istat's *Annual Report*.

Istat's Governing Board has the task of optimizing available financial resources for the statistical programs, as well as the evaluation of costs against the activities to be carried out.

0.3 Relevance

0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored

Istat strategies focus on user needs by collecting and processing different aspects of the demand for statistical information, contributing to setting priorities (i.e., the National Statistical Program, corporate programming, integrated output—products and services, tailor-made requests), and seeking feedback through undertaking user satisfaction surveys.

Collegiate bodies of SISTAN help to ensure that the statistical series address issues of concern to users. The Guarantee of Statistical Information Commission and the Committee for Directing and Coordinating Statistical Information (COMSTAT) are central in this respect. The latter focuses on SISTAN's rolling statistical program.

The Quality Circles established by Istat serve as point of contact between producers and users of statistical information and provide inputs in the definition of sectoral programs. The one on the national accounts meets about three times a year. The National Accounts Directorate participates in all quality circles.

Istat does not collect information on data users' needs and views by means of specific surveys, although customers accessing Istat's central and regional data shops, subscribers to hardcopy publications, and website visitors are surveyed at least annually, and specific users' views are collected within the "Circoli di qualità." However, main users (such as the BI, the Institute for Economic Studies and Analysis, the MEF, and the Center for Economic Forecasts) are frequently met in working groups where they can voice their concerns. The well-visited seminars that Istat organizes on new themes, such as the further development of quarterly accounts and the revision of the benchmark year, are an occasion to receive feedback from other users. In addition, the bi-annual Conference on Statistics, which includes a session on the national accounts, also plays a role.

Istat participates in many international statistical meetings and seminars, in particular, in the working groups of Eurostat, the OECD, and the Conference of European Statisticians.

In the area of price statistics, users' needs are periodically monitored by the Guarantee of Statistical Information Commission in connection with the annual review of the three-year National Statistical Program for Italy. The Program then becomes law. Istat also arranges regular meetings of the SISTAN Quality Circles, which have oversight functions on progress of the National Statistical Program. Meetings are also held at least once a year with representatives of the Association of Industry. High priority is given to addressing the concerns of regional and international users.

Even at the municipal level, users' views are sought and they are reflected in the recommendations of local statistical commissions. Istat staff regularly participate in the Prices Monitoring Group, which also includes representatives of trade unions, retailers, and wholesalers. Istat price statistics staff regularly participate in meetings and seminars organized by Eurostat, the UN, the ILO, the OECD, and the IMF and Istat contributes to the development of best practices in EU price compilations.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

Istat has put many measures in place to maintain and improve quality. For instance, Istat's Methodological Studies Office focuses on methods and techniques for survey quality control.

On a broader level, COMSTAT issues binding directives relating to SISTAN agencies on methodological and qualitative aspects of the National Statistical Program.

The focus on quality is also apparent from the Legend of Quality Measures published in the *2001 Italian Statistical Yearbook* and from Istat's leading role in the Eurostat expert group on quality aimed at providing guidance to the national statistical offices of EU member states.

0.4.2 Processes are in place to monitor the quality of the statistical program

By law, the overall monitoring of the quality of statistics is attributed to the Guarantee of Statistical Information Commission. (Proposed legislation would modify the role of the Commission and substantially increase its resources and its governance structure (see 0.1.1)). Quality is also monitored by the SISTAN Quality Circles that were mentioned in section 0.3.1.

An example of the processes that Istat has put in place to monitor the collection of statistics is the Information System for Survey Documentation and Quality Control (SIDI). This system manages both qualitative information and quality indicators related to each phase of the conduct of statistical surveys.

The quality of the national accounts statistics is also subject to scrutiny from the EU. A special role in this respect is played by the Gross National Income Committee (better known as the GNI Committee), which is made up of statistics experts of all member states, formulates opinions on the quality of the national accounts estimates reported by the national authorities, and may also give recommendations. The member states, including Italy, have each prepared an extensive inventory of the methods used for compiling the annual accounts. Furthermore, in view of the importance of the GDP estimates for the financing of the EU, in 1995 the European Court of Auditors gathered the opinions of national accounts experts about the comparability and reliability of the member states' national accounts. This investigation led to a research project of which the final results were presented to the GNI Committee in June 1998. Eurostat regularly visits the statistical offices of the member states to review the quality of the national accounts statistics.

0.4.3 Processes are in place to deal with quality considerations in planning the statistical program

Quality considerations were a major reason for Istat's institutional reorganization in 2003, which reflected the philosophy that more emphasis should be placed on pertinence, promptness, and ease of use of the statistical information. In accordance with this philosophy, many changes have been introduced or are planned in the near future. These measures refer in particular to reducing the delay with which statistics are released and improving their accessibility, whether in hard copy or electronic format.

One of the most relevant Istat commitments is to strengthen the quality level of statistical information focusing on each aspect: relevance; accuracy; timeliness and punctuality; accessibility and clarity; comparability; coherence. Quality is not conceived any longer as a by-product element of statistical processes, products, and/or services but rather as one of the

factors that structurally contribute to the decisional process and form the current statistical outline. The whole strategic planning policy is intrinsically linked to the quality policy. Accordingly, Istat has introduced many innovations: the intensive introduction of ICT in processes; the development of generalised tools in order to harmonise processes and elaboration tools (management of sampling, data collection, editing and imputation, data confidentiality) and related training; the massive investment on the field to prevent errors and to monitor process phases; the great care in training and involvement of local and central operators.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Under legal provisions, Istat is autonomous with respect to the Executive and its independence is assured.

The Guarantee of Statistical Information Commission is charged with ensuring the impartiality and completeness of the information produced by Istat and other SISTAN agencies. The commission views impartiality as being composed of two elements: first, data should be a truthful description of reality; second, data should be simultaneously disseminated to all users.

Impartiality was also one of the cornerstones of Istat's reorganization of 2003 according to the following official text: "Independence, impartiality, reliability, pertinence of the statistical information, reduction of the burden on respondents, and protection of statistical secrecy and privacy are the fundamental criteria inspiring the documents setting down the rules for implementing the organization decree."

1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations

There is no evidence that Istat is subject to outside pressure in its choice of sources and statistical techniques.

1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics

Istat investigates on a daily basis any erroneous interpretation, particularly in the press, of its statistics and takes appropriate action (e.g., by requesting the publication of a response).

Istat's policy is to avoid any misunderstandings by providing ample information with the releases. The Press Office has instituted a call-in service whereby journalists may obtain explanation of the information disseminated. Senior researchers are present at most press conferences to explain the data, particularly in cases when methodological changes have been

introduced. Istat's President may also indirectly comment on erroneous interpretations by giving an interview to the major newspapers.

Although Istat's independence and the functions of Istat's President in SISTAN guarantee the right to comment in cases of erroneous interpretation or misuse, such is rarely done in practice with respect to the CPI.

1.2 Transparency

1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public

The complete set of documents that articulate the terms and conditions under which Istat executes the statistical program is available to the public on the SISTAN website (<http://www.sistan.it>). Furthermore, the *Carta dei Servizi Esterni della Diffusione* (Charter of Dissemination Services) is available to the public on the Internet.

1.2.2 Internal governmental access to statistics prior to their release is publicly identified

National government access is not given prior to release, and data releases are not signed off by any outside authority.

Eurostat has access to the preliminary quarterly national accounts (those published 45 days after the reference quarter) in greater detail than is made available to the general public. Whereas only the GDP total at previous year prices and seasonally adjusted is published, Eurostat also receives information on final consumption, gross fixed capital formation, exports, imports, and inventories. It also receives an estimation of hours worked. In addition, Eurostat and the European Central Bank (ECB) receive quarterly institutional accounts data with a 95 day timeliness in the framework of the development of such accounts for the Monetary Union and the EU. Apart from the quarterly general government institutional accounts, the data Italy provides are neither published by Istat nor the supranational organizations. However, this should not be seen as prior government access because, as was already noted under item 0.1.2, Eurostat and Istat can be regarded as belonging to the same overall statistical system. It is important to note that Eurostat is prohibited from disseminating the nonpublished information to any users, including the other services of the European Commission.

Although there is no advance government access or, for that matter, an infringement on the principle that statistics should be made available to all users at the same time, it would nevertheless be useful for Istat to make more widely known what kind of nonpublished information it provides to Eurostat and the ECB.

1.2.3 Products of statistical agencies/units are clearly identified as such

All Istat publications are identified as being produced by Istat.

1.2.4 *Advanced notice is given of major changes in methodology, source data, and statistical techniques*

Advance notification of methodological changes is provided through seminars and papers disseminated throughout the academic community. Changes under consideration are also indicated—in advance—in the text of the *Three Year National Statistical Plan*, in such publications as *Information Notes*, and *Information Series*.

Generally, major changes in methodology, sources, and statistical techniques are announced in advance of ad hoc publications. With regard to the annual accounts this is done, e.g., in articles in Istat's bulletin, press briefings, or news releases. The Istat website provided extensive information with regard to the introduction of the 2000 benchmark revision and the change to chain volume and price measures on its website. Important methodological changes to the quarterly accounts are normally introduced through work groups open to academics and other experts. The research papers produced by these work groups are circulated among statisticians and national accountants. Advance notification of methodological changes is provided through seminars. Important changes are also mentioned in Istat's "*Piano Triennale*" and in the press release *Conti Economici Trimestrali* that is published before the introduction of methodological changes. Sometimes, advance notices are sent, via e-mail, to institutional users and/or published on the Istat website.

1.3 *Ethical standards*

1.3.1 *Guidelines for staff behavior are in place and are well known to the staff*

All public servants take an oath about conduct expected of them before they enter the public service. In addition, by signing the employment contract any new Istat staff member undertakes not to disclose individual data. New employees follow a training program of one week, in which staff ethics is one of the themes.

Guidelines for staff behavior are laid down in an Ministerial Decree of November 28, 2000 pertaining to all officials, Legislative Decree n. 322 of September 1989 article 8 dealing with the secrecy duties for statistical office employees, and the code of conduct annexed to the Legislative Decree n. 196 of June 30, 2003. Istat is also bound to the 15 principles laid down in the Code of Conduct for statistical agencies endorsed by the EU.

2. **Methodological soundness**

2.1 *Concepts and definitions*

2.1.1 *The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

Since April 1999, the general framework for compiling the Italian national accounts statistics has been the *ESA 95*. Annual accounts data according to *ESA 95* are available from 1970

onward, with reduced detail for the period 1970-1991. Quarterly data adhering to the *ESA 95* rules are available from the first quarter of 1980.

2.2 *Scope*

2.2.1 *The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

The national accounts statistics cover all tables and accounts that the Inter-Secretariat Working Group on National Accounts has defined as a minimum requirement for implementation of the *1993 SNA*, as well as those whose compilation the Working Group has recommended.

The minimum set refers to the following:

- Annual value added and GDP at current and constant (or previous year) prices by activity.
- Annual expenditures of GDP at current and constant (or previous year) prices.
- Annual value-added components at current prices by activity.
- Sequence of accounts for the total economy (up to financial accounts) with an annual frequency.
- Annual rest-of-world accounts (until net lending).

The recommended set refers to the following:

- Quarterly value added and GDP at current and constant (or previous year) prices by activity.
- Quarterly expenditures of GDP at current and constant (or previous year) prices.

Beyond these core tables and accounts, Italy compiles several extensions, in particular the following:

- Simplified subregional accounts on an annual basis.²
- Annual satellite accounts for agriculture.
- Annual social protection accounts.
- Annual national accounts matrices with environmental extensions (NAMEA).
- Seasonally adjusted and calendar day adjusted quarterly accounts.³

² Regional accounts involve three levels: regions and autonomous provinces (21 areas according to the second-digit level of the EU Nomenclature of Territorial Units, NUTS), provinces (103 NUTS-3 areas), and 686 clusters of municipalities. For the NUTS-2 areas, goods and services as well as employment data are published by 25 branches; 10 government functions; 12 private consumption functions, and three durability categories. For these areas also household accounts are compiled.

³ The calendar year adjustment was introduced in June 2003. It involves adjusting the monthly data for working/trading days, as well as the Easter and leap year effects. The operations are performed by the usage of the Tramo-Seats program, which is also used for making seasonal adjustments to the quarterly data.

The Italian system of accounts has also made progress in further widening its scope by developing Social Accounting Matrices (SAMs)⁴ and satellite accounts for nonprofit institutions and tourism.⁵ For the future, satellite accounts are considered for culture.

The scope of the national accounts published by Istat covers the current transactions and the capital account. The BI compiles financial accounts for institutional sectors, with Istat providing estimates for other accounts payable and receivable. No complete balance sheets or other changes in asset accounts are being compiled. However, the balance sheet information for financial assets and liabilities is already available and Istat is working on the development of estimates for the stocks of nonfinancial assets.

The last input-output table dates back to 2000 and, in accordance with EU requirements, a new one will be produced for 2005. Traditionally, the annual accounts use the supply-and-use table framework during the compilation process. Following the introduction of the new benchmark year 2000, Istat produces annual supply-and-use tables at current prices for the final years (t + 3). A complete set of supply-and-use tables is available from 1995 onward.

The Italian national accounts define residence in accordance with the *1993 SNA* and the fifth edition of the *Balance of Payments Manual (BPM5)*. The economic territory is defined as in the pertaining Decision of the European Commission of July 1991. Included are the following in particular:

- Territorial enclaves such as Italian embassies in the rest of the world.
- Bonded warehouses and free-zone activities.
- Workers who work only part of the year in another country.

The Vatican State and San Marino are not included.

The production boundary is in accordance with the *1993 SNA*. Thus, the scope of output measurement includes, among other things, the following items:

- Research and development on own-account.
- Output of goods for own-account fixed capital formation.
- Mineral exploration.
- Production of entertainment, literary or artistic originals.
- Production of computer software, including when produced on own account.

Estimates of illegal output sold to willing buyers are not included, but estimates are made and published for hidden activities.⁶ In 2004, a working group was established chaired by Istat to

⁴ An experimental SAM was produced for 1996.

⁵ Experimental satellite accounts are available for 1999 and 2002 respectively.

⁶ Hidden activities are thereby understood as economic activities that as such are not forbidden, but are deliberately concealed from public authorities, for instance to avoid the payment of taxes or social security contributions.

develop estimates for illegal activities. The availability of such estimates will be required by the EU in the near future.

Although the *1993 SNA* includes own-account production of all goods for own final consumption and the production of all goods for own-account fixed capital formation in productive activities, the Italian national accounts follow the convention of the *ESA 95* paragraph 3.08 b, which says that the estimates for own-account production of households should be limited to the production, storage, and processing of agricultural products and to the construction of dwellings.

The asset boundary is defined in accordance with the *1993 SNA*, implying that the following items are in scope for determining the assets boundary:⁷

Among tangible assets:

- Defense-related assets that could be used for civilian purposes.
- Valuables.
- Historical monuments if they would be sold.

Among intangible assets:

- Mineral exploration (whether successful or not).
- Systems and standard applications computer software and data bases (purchased or built in-house).
- Entertainment, literary or artistic originals.
- Patented entities.
- Leases and other transferable contracts.

At variance with *1993 SNA* recommendations, agricultural work-in-progress is not recorded. However, this cannot be held against the Italian accounts, as these recommendations have remained rather controversial among national accounts experts. Istat keeps this deviation under close review.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices

The classification and sectorization used in the compilation of the Italian national accounts are in broad conformity with internationally recommended systems.

The *1993 SNA* is followed to classify institutional units and transactions. Activities are classified according to the national classification ATECO 2002, for which the first four digits

⁷ Irrespective of the coverage that is actually achieved.

coincide with the NACE Rev.1.1. Producing units are further broken down by size and by category, such as private market, government market, and government nonmarket. Goods and services are classified by the EU Classification of Products by Activity (CPA). Capital formation is shown in six categories according to the Pi6 level defined in the *ESA 95*. Foreign trade data are classified in the basic statistics according to the Combined Nomenclature. Household expenditure is published by COICOP expanded for national purposes. COFOG is used to classify functions of government, and COPNI for expenditures of nonprofit institutions serving households.

The publication level of the final annual accounts shows a breakdown of 60 activities and products (A60 and P60), and one-digit breakdown by COICOP, COFOG, and COPNI. For two most recent years, a slightly more aggregate classification is adopted. The quarterly accounts distinguish 17 activities in supply. Household final consumption expenditure is broken down by 12 functions as well as four types of goods with respect of their durability. The breakdown of capital formation is by Pi6.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The valuation rules used for recording flows are in accordance with the *1993 SNA*. Market output is valued at both basic and producer prices and output for own-use at equivalent market prices. The valuation of intermediate consumption is at purchasers' values, that is, including sales, excise taxes, and nondeductible value added taxes. The deductible part of the value added taxes is excluded from the valuation of final uses.

GDP components are published at current prices, previous year's prices, and chain-linked volumes. With regard of some of Istat's price and volume series, the move to a chain-weighted basis is still ongoing.

Information on insurance and freight for merchandise imports is available from the Italian Foreign Exchange Office (UIC), so that both total imports and exports are valued on an f.o.b. basis. Transactions in foreign currency are converted using the mid-point exchange rate prevailing in the market at the moment they take place.

In accordance with EU regulations, financial intermediation services indirectly measured (FISIM) are calculated only on those loans and deposits of which the interest rates can be influenced by financial institutions. The calculations concern both domestic production and imports. The central bank is supposed not to produce FISIM, its output is instead estimated on the basis of costs. FISIM is attributed to users with the help of reference interest rates that are representative of the "pure" rates.

2.4.2 Recording is done on an accrual basis

All flows are in principle recorded on an accrual basis, with a few exceptions in government.

2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices

The grossing/netting procedures are in accordance with international recommendations. For instance, transactions between establishments within the same enterprise are recorded on a gross basis.

3. Accuracy and reliability

3.1 Source data

3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions

General

Istat uses the Statistical Register of Active Enterprises (ASIA) as the common sample frame for its enterprise surveys (except for agriculture, forestry, and fishing, which are planned to be added in the future). This register is fed from large administrative registers and surveys carried out by Istat. The information collected using ASIA, together with information from administrative sources, will be used to build up a Statistical Information System (SIS) that will integrate a wide range of statistics on enterprises, including government units.

Previously, the business register was fed only from the 10-yearly economic censuses, and even then it excluded enterprises with 10 or fewer persons employed. In 1994, work started to improve the exhaustiveness and methodology. The present ASIA is built up from the Enterprise Census and the registers kept for tax purposes, the chambers of commerce, and the social security institute, as well as other sources such as the register of the Electric Power Board. The combination of these registers is strongly facilitated by the existence of unique fiscal numbers that all legal persons need to have (natural persons also have a unique number). New enterprises request their fiscal numbers via the chambers of commerce at the time of inscription. These numbers are needed at nearly all occasions; for instance, they appear on invoices and are required for obtaining essential services such as electricity. ASIA is annually updated with information from the indicated registers, while from 2004 the information on local units has been updated through special surveys.

The units in ASIA are enterprises and their local units; in 2001, the National Accounts Directorate added information on local kind of activity units on the basis of information gathered from the 2001 General Census of Industry and Services. ASIA contains identifiers such as name and address, legal status, activity according to NACE, employment (number of employees and other workers), and turnover. Turnover data are available 16 months after the reference year; for instance, at the end of April 2006, the turnover data for 2004 appear in ASIA. This is two months faster than required by EU regulation.

ASIA should contain only active productive units. Eurostat has defined “active” as either having turnover in a period of one year (Italy measures this via the tax administration) or

employing at least one employee/other dependant (measured in Italy by way of the social security registration).

Istat conducted a full program of censuses during 2000/2001. This included the General Census of Industry and Services, the General Population and Housing Census, and the Agricultural Census. The latter is updated annually by means of the Farm Structure and Production Survey (with a sample size of 87,000 farms).

Sources for the annual accounts

Two main annual business surveys conducted by Istat are the Survey of Economic and Financial Accounts (SCI) for enterprises with 100 or more persons employed and the Survey of Small and Medium Enterprises (PMI) for those with up to 100 persons employed. These two structural business statistics (SBS) surveys are the main base of information for the economic activities in manufacturing and private services.

- The SCI is an exhaustive survey covering, since 1998, close to 10,000 enterprises. It collects data concerning profit and loss accounts, balance sheets, and employment. The results are available 18 months after the reference year. Although these surveys are compulsory, the response rate is quite low, covering around 54-56 percent.
- The PMI is a stratified simple random sample survey stratified by four-digit ATECO, region, and size class. The sample is about 108,000 enterprises or 2.8 percent of the target population. Grossing up is done on the basis of number of workers and number of enterprises. The main variables collected are the same as for the SCI. The survey is also compulsory and has a response rate of about 52 percent, which is less than ideal even though the margin of error remains within limits set by Eurostat. The final results are available 18 months after the reference year.

In addition, the industrial sector survey PRODCOM should be mentioned. The PRODCOM survey is conducted as a result of a EU regulation dating from 1993 and is directed at units belonging to the extractive and manufacturing industries. Included are all local units of enterprises of 20 workers and over, and a sample of the enterprises with three to 19 workers. The two-page questionnaire collects information by type of product on output and energy consumption in volume terms and, where appropriate, in values. Provisional data are available after six months, final data are available 18 months after the reference year. About 63 percent of the enterprises respond on this questionnaire.

To improve the availability of more timely and comprehensive information on the production process, the National Accounts Directorate exploits the business accounts (in Italy often referred to as “balances”) that Chambers of Commerce annually receive from 650,000 corporations. This administrative source provides several economic variables with an activity breakdown by five-digit NACE. The preliminary results are available 10 months after the reference year. This source is particularly useful for filling the nonresponse gaps in the SBS surveys in so far it concerns entities with a corporate status. However, the product detail is very limited.

The table below summarizes for each NACE section the main basic sources for the annual accounts estimates and an assessment of their coverage. In constructing this table, the results of all current exhaustive and sample surveys that directly measure the activity have been considered as positive contributions to coverage. Estimates using indirect methods to improve exhaustivity have been considered as “soft” information, even though these estimates are often based on good-quality sources on employment such as the Social Security Institute and the labor force survey.

Main Sources for the Annual Accounts

Production Approach		
NACE Rev 1. Section	Main Sources	Assessment of Coverage
Agriculture, hunting, and forestry	<ul style="list-style-type: none"> - Area and output data from Regional Agricultural Depts. - Agricultural prices - Livestock sample survey, slaughter statistics - Data on agricultural inputs 	Good
Fishing	<ul style="list-style-type: none"> - Fishermen’s cooperatives - Fish markets - Harbor offices - Administrative records from municipalities 	Good
Mining and quarrying	<ul style="list-style-type: none"> - SBS by Istat and the Ministry of Industry 	Good
Manufacturing	<ul style="list-style-type: none"> - SBS 	Good
Electricity, gas, and water supply	<ul style="list-style-type: none"> - Detailed data from the Electric Power Board - SBS by Istat and the Ministry of Industry 	Good (Poor for water supply)
Construction	<ul style="list-style-type: none"> - Building permits - Survey of building activity - SBS - Government budget data - Production index - Surveys on business cost 	Good
Wholesale and retail trade, repair of motor vehicles, and personal and household goods	<ul style="list-style-type: none"> - SBS 	Satisfactory (Poor for repair)
Hotels and restaurants	<ul style="list-style-type: none"> - SBS - Overnight stays in hotels 	Satisfactory
Transport, storage, and communication	<ul style="list-style-type: none"> - Italian State Railways - Volume data from Ministry of Transport and Navigation - Major air transport providers - SBS for road transport and telecommunication - Postal service 	Satisfactory
Financial intermediation	<ul style="list-style-type: none"> - Data from supervisory bodies, in particular the BI 	Good
Real estate, renting, and business activities	<ul style="list-style-type: none"> - SBS 	Good
Public administration and defense; compulsory social security	<ul style="list-style-type: none"> - Exhaustive budget data from central, state, and local authorities, as well as from other government bodies - SBS 	Good
Education/ Health and social work	<ul style="list-style-type: none"> - Budget data (government) - Social Security Funds and budget data of local health units - SBS 	Good
Other community, social, and personal service activities	<ul style="list-style-type: none"> - See above - Domestic service monitoring unit of the National Institute for Social Insurance - Multipurpose household survey 	Satisfactory (Less than satisfactory for domestic services)
Net taxes less subsidies on products	<ul style="list-style-type: none"> - MEF - Treasury records for EU 	Good

Expenditure Approach		
Expenditure Category	Main Sources	Assessment of Coverage
Household final consumption expenditure	- Household budget survey (HBS) - Commodity flow (SCI and PRODCOM survey) - Multipurpose household survey - Administrative sources, incl. new car registrations	Satisfactory
Final consumption expenditure of nonprofit institutions serving households	- 1999 Survey of nonprofit entities - Surveys on voluntary organizations and social cooperatives - Administrative sources (Social Security and VAT) - HBS	Satisfactory
Government final consumption expenditure	- MEF data - SBS	Good
Acquisitions less disposals of tangible fixed assets	- Commodity flow - SBS - New car registrations	Satisfactory
Acquisitions less disposals of intangible fixed assets	- SBS - Italian Society for Authors and Editors	Good
Additions to the value of non-produced non-financial assets	- Budget records - Loans for land improvements	Good
Changes in inventories	- SBS and business accounts of corporations - Energy balances from the Ministry of Industry	Satisfactory
Acquisitions less disposals of valuables	- Commodity flow approach	Poor
Exports and imports of goods	- Foreign trade statistics	Good
Exports and imports of services	- Balance of payments	Good

The above sources are supplemented with a complete range of agricultural price indices, industrial producer price indices, a construction cost index, the consumer price indices, and unit values for foreign merchandise trade. A source that is extensively used in Italy to assure full coverage of the estimates on production is the continuous Labor Force Survey. This survey targets legal residents and collects data on persons employed in first and secondary jobs.

Whenever sampling takes place, scientific random sampling techniques are used. Istat uses standard imputation methods to handle nonresponse (such as using donors from the same sector of economic activity, size class, and region of the missing firm), and grossing up factors are derived scientifically (often by using a combination of number of workers and type of enterprise).

The surveys, in particular the structural business surveys, provide sufficient information on turnover and other receipts, inventories, personnel costs, employment, and balance sheet information. Sources on government budgets provide sufficient revenue and expenditure items, classified by economic and functional categories. However, the normal structural business surveys do not provide enough information on intermediate inputs to successfully construct supply-and-use tables and separate cost structure surveys are needed. Two such surveys were carried out for 1996 and 2001, just in time to satisfy the EU regulation that required supply-and-use tables for 1995-1999 by the end of 2002 and the supply-and-use tables for 2000 by the end of 2003. The cost structure survey planned for 2005 was not conducted for budgetary reasons and because the EU did not require such survey; thus leaving a weak spot in the sources available for compiling use tables.

Both the quarterly Household budget survey (HBS) and the annual Multipurpose household survey are comprehensive (each sampling about 24,000 to 28,000 households) and represent all regions and most socio-economic groups. Still, the national accounts make some adjustments in respect of the reference population (such as for persons living in institutions) and the definitions (e.g., meal vouchers and other income in kind, betting wins, expenditure on major improvements of the dwelling, and the treatment of insurance transactions). Both household surveys use scientific random sampling techniques. Standard imputation methods are used to handle nonresponse, which is around 20 percent, and grossing-up factors are derived scientifically. The HBS collects data on expenditure on nondurable and durable consumption items, housing, and valuables, as well as the value of goods produced on own-account. The Multipurpose household survey generates qualitative information on, among other things, medical services, leisure, entertainment, and holidays. It also provides some information on the frequency of activities. However, it does not ask for value information and is therefore less useful for national accounts purposes than the HBS.

The General Accounts Department of the MEF provides on an annual basis revenue and expenditure data by chapter for central government (including defense but excluding social security funds). These data are available both on a cash basis and on an approximate accrual basis. Data for lower level government are partially received from administrative sources like the Ministry of the Interior, the Ministry of Health, or the units themselves. Data for all remaining government units are collected by Istat through its structural statistics or dedicated surveys. Most data for lower level government are available both at cash and approximate accrual bases.

Generally, these sources require reclassifications and other adjustments (particularly so in expenditure) to bring them in line with the needs of the national accounts.

In line with EU decisions, Italy records taxes and social security only in so far as they are likely to be collected. This is not the recording preferred by the *1993 SNA*, but the EU practice comes within the flexibility allowed by the system.

Sources for the quarterly accounts

The following table summarizes for each NACE section the main basic sources that Istat uses for making the quarterly accounts estimates, as well as an assessment of their adequacy.

Main Sources for the Quarterly Accounts

Production Approach		
NACE Rev 1. Sections	Main Sources	Adequacy for Quarterly Estimates
Agriculture, hunting, and forestry	- Fixed calendar of production and harvest	Reasonable
Fishing	- Surveys/administrative data on quantities landed	Adequate
Mining and quarrying	- Industrial production index - Input statistics from the coke and refinery industry	Adequate
Manufacturing	- Industrial production index for 15 activities	Adequate
Electricity, gas, and water supply	- Production index	Adequate
Construction	- Production index	Adequate
Wholesale and retail trade, repair of motor vehicles, and personal and household goods	- Fixed trade margins for the different categories	Adequate
Hotels and restaurants	- HBS and other quarterly sources on household consumption	Adequate
Transport, storage, and communication	- Revenues of air and sea transport enterprises - Goods and passenger rail traffic data - Motorway traffic data - Revenues of communication enterprises	Adequate
Financial intermediation	- Information from BI	Adequate
Real estate, renting, and business services	- Fixed input coefficients - Employment statistics	Adequate
Public administration, Education/Health and social work	- MEF data - Employment statistics	Adequate
Other community, social, and personal service activities	- HBS and other quarterly sources on household consumption - Employment data from LFS and social security	Reasonable
Net taxes less subsidies on products	- MEF data on adjusted cash basis	Adequate
Expenditure Approach		
Expenditure Category	Main Sources	Adequacy for Quarterly Estimates
Household final consumption expenditure	- HBS (for 19 of the 29 functions distinguished) - Commodity flow approach - Retail sales - New car registrations	Adequate
Final consumption expenditure by government and nonprofit institutions serving households	- Administrative data	Adequate
Gross fixed capital formation	- Commodity flow approach - Construction index - Car and truck registrations	Adequate
Changes in inventories	- None	Not adequate
Acquisitions less disposables of valuables	- Commodity flow	
Exports and imports	- Foreign trade statistics - Balance of payments	Adequate

Regarding prices, extensive use is made from industrial producer price indices, the consumer price indices, and unit values of foreign merchandise trade. Other price information includes sale prices of agricultural products, price indices of purchases by agricultural enterprises, the construction price index for building motorways, and the construction price index for residential buildings.

The industrial production index is available 40-45 days after the reference month. Monthly retail sales data are available with a time lag of 55 days, which might be considered for improvement. On the whole, the available source information is adequate for compiling the quarterly accounts; an exception is the category changes in inventories, for which a reliable short-term source is lacking.

The calendar effects and seasonal adjustments are performed with the TRAMO-SEATS program, which is one of the programs recommended in Eurostat's *Handbook on Quarterly National Accounts*.

3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required

Generally, the source statistics provide data that are consistent with the definitions, scope, and classifications of national accounts estimates. This is also true for the time of recording, reference periods, and valuation.

3.1.3 Source data are timely

In several cases, the data collection system does not provide data in time for making national accounts estimates. It should be mentioned that the estimates are published shortly after the end of the reference period: the annual national accounts are published on March 1; the preliminary quarterly national accounts 45 days after the reference quarter; and the first regular quarterly estimate 70 days after the reference quarter. The quarterly accounts have benefited from significant improvements in the speed at which in various short-term indices—in particular those on prices, retail sales, foreign trade, as well as information on turnover and labor—become available. An important source of guidance has been the Action Plan developed by Eurostat (in close collaboration with the ECB) in 2000 to improve the quality, including promptness, of short-term economic statistics.

For the first estimates of the annual accounts, Istat relies largely on information from its short-term economic indices. One year later, partial results of the structural business surveys are available. Normally, for the purposes of the third estimates, the complete data from the structural business surveys can be used.

Regarding the quarterly accounts, a distinction should be made between the preliminary estimates and the first regular estimates. Of course, the first mentioned are based on less complete data than the latter. For the preliminary estimates (those published 45 days after the reference quarter), about 70 percent of the weighted indicators for production and 50 percent of the indicators for demand are available. Those that are usually missing are the following:

- One month of foreign trade data.
- Two months of foreign trade unit values.
- One month for the construction index.
- One month for the rail transportation indicator.
- About half of the indicators for financial services.

- The HBS completely.
- About half of the indicators for nonmarket activities and collective consumption.
- The LFS completely.

For the first regular estimates the situation is much better, but part of the indicators may still be missing—for instance, many of those for financial services.

The paucity of source data for the preliminary estimates could make the estimates subject to substantial revisions when more information gradually becomes available. The importance of lacking short-term indicators depends largely on the character of the variable to be measured. For instance, value added in nonmarket services shows a very gradual change. Istat estimates any missing data using ARIMA models or other time series techniques, sometimes introducing additional explanatory variables such as qualitative surveys asking for opinions.

It would appear that Istat is usually successful in filling the gaps, as the revisions in GDP quarter-to-quarter growth rates, if they occur at all, are mostly limited to one-tenth of a percentage point. However, an occasional big change of half a percentage point may occur, warranting further investigation. In the past, Istat has made a comparative study of revision of GDP quarterly growth rates in the United States and other countries that shows, according to the authorities, that the reliability of Italy's quarterly accounts estimates compares favorably.

3.2 Assessment of source data

3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes

Information is available about sampling errors for all surveys, which are regularly reviewed. Information is available about nonsampling errors. However, the specialists in the National Accounts Directorate keep archives for internal purposes on problems met on misclassifications, measurement problems, etc., to avoid similar problems in the future. Information is available about imputation methods for nonresponse in the basic statistics as well as imputations made, if any. Outliers in basic statistics occur in the provisional figures, but they are mostly removed from the final results. Unexpected values in the responses are confirmed with respondents. Surveys/censuses that require direct contact with the respondents, mostly household surveys, are audited⁸ to verify the accuracy of the individual survey data. Such procedures are not normally followed for surveys conducted by post.

Accuracy of budgetary data, international trade, price statistics, and other secondary sources used to compile national accounts statistics is routinely assessed by the national accounts specialists. These specialists analyze the source data to correct underreporting and misreporting, to check for temporal consistency, and to review consistency with other data sources. In addition, the source data are checked with respect to definitions, valuation,

⁸ For example, in accompanying filed collections/random post-enumeration checks.

reference periods, and classifications. If the sampling errors become large, the Directorate takes action to ensure that the sample selection is adjusted. Revisions in the sources receive special attention.

To review the incoming flow of data, the unit for quality analysis, validation, and implementation of data sources for the national accounts has been created in the Supply of Goods and Services Division. This unit introduced several improvements in the filters used to identify anomalous and erroneous source data. The unit also validated the data for 6,100 enterprises received via the 2004 PMI against the corresponding data in the corporate business accounts deposited at the chambers of commerce. In addition, the unit is instrumental in improving grossing up the information from basic sources by refining the calculation of value added per worker.

3.3 *Statistical techniques*

3.3.1 Data compilation employs sound statistical techniques to deal with data sources

Although some elements of the income approach are worked out, the annual accounts are mainly compiled according to the production and the expenditure approaches. The largely independent estimates of the two approaches are balanced in a final integration process. Discrepancies between the approaches are mitigated because relatively few estimates are level estimates exclusively based on current sources (examples of such direct level estimates are foreign trade, taxes, and general government transactions). For the most part, estimates start out from the balanced accounts of the benchmark year (2000), on which the rate of change is applied by comparing current year and previous year data in the source statistics. An example is the section of household final consumption expenditure based on the HBS.

The estimates are adjusted to cover their target populations. Corrections for the activity of enterprises that escape the enterprise statistics are for a large part based on comparison with employment data gathered from households (see further subsection 3.3.2). Adjustments for underreported income of small enterprises (less than 20 persons employed) are based on making comparisons between the reported mixed income of the enterprises' owners and the typical compensation received by the employees. Also the information from different sources is compared. Sometimes this is done at the very detailed level, and always at the more aggregate level of units or transactions.

The techniques to estimate quarterly accounts are varied. They include elements of the annual compilation techniques and quarterly disaggregation methods. The choice of the techniques depends on available information. When the same information is available for annual and quarterly data, the quarterly estimates mimic the annual ones. When the sources used for the annual accounts are not available on a quarterly basis, an indicator is used to determine a quarterly pattern in the given annual data and to make quarterly estimates for the year for which annual estimates do not yet exist. Annually, statistical tests are carried out to assess the indicator model and dummies may be introduced in case the model does not yield accurate forecasts. Istat uses a version of the Chow-Lin method. In addition, other benchmarking techniques are used where appropriate, such as the ones proposed by Fernandez and by Denton.

Production approach procedures

The output estimates are made in sufficient detail. The estimations for the annual accounts are made for 101 categories of economic activity, which represents an intermediate level between the two- and three-digit levels of NACE Rev.1. The publication level of the final annual accounts shows a breakdown of sixty activities (A60). The quarterly accounts are compiled for 32 categories of economic activity and published for 17 categories.

Intermediate consumption estimates are compiled at the same level of detail as output, that is, between the two- and three-digit levels of CPA. This detail is not particularly fine, as usually the three- or four-digit level is considered good practice. Improvements in this respect would require the availability of more current source data on the breakdown of intermediate consumption, such as frequent cost structure surveys among enterprises.

The published supply-and-use tables also show 60 activities and 60 types of products. For analytical reasons, the authorities may wish to consider expanding the detail of the product breakdown in these tables, even though the current level of breakdown meets EU requirements.

As indicated above, the national accounts are benchmarked on 2000, and so the estimates for several variables are influenced by the levels and ratios used for that particular year. However, the authorities do not view the estimates of the later years as being based on any fixed ratios because, in the process of balancing the data for each year, adaptations in the ratios may be introduced. As the estimation process of each new year starts out from the balanced data for the previous year, a chaining effect is introduced that causes ratios (as far as they are used) to change gradually over time.

The output of owner-occupied dwellings is valued as the estimated rentals that tenants would pay for similar accommodation. Since 1994, the more refined methodology laid down in a Eurostat decision is followed. Census data made it possible to define categories of houses defined by clusters of quality characteristics. By means of the HBS, actual prices that tenants pay for these categories are collected and applied to the stock of dwellings in the different categories. With the change of the benchmark year, an improved stratification of dwellings was introduced.

The Italian national accounts treat work-in-progress only partially in conformity with international guidelines. Crops, maturing trees, livestock reared for purposes of food (except calves), and fish are not recorded as output when they grow, but rather when harvested or sold.

In accordance with the international guidelines, progress in large construction projects is only recorded as work-in-progress if the producer and not the eventual user is the owner of the output produced. In Italy, this rule is approximated by recording fixed capital formation in proportion to the payments received by the producer or, if the construction project takes place on own account and for own use, as the work progresses. Continuing work on large equipment, such as ships, is recorded in the Italian national accounts as work-in-progress followed by a transformation into gross fixed capital formation on finalization of the equipment. This is not in

accordance with *1993 SNA* paragraph 10.10 that recommends the same treatment as for structures. However, it is in accordance with the *ESA 95* paragraph 3.119 (4).

Inventory data are used in the estimates of output in the annual accounts, but according to the authorities no valuation adjustments are needed. In the period up until 1995, when inflation was considerable, the questionnaires requested respondents to value opening and closing stocks of inventories at average prices of the year. If the respondents indeed reported according to these instructions, holding gains or losses on inventories would not enter the valuation of value added. After 1995, revaluations have been presumed to be negligible in view of the low inflation rate, and the questionnaires no longer request the valuation of inventories at average period prices. In spite of these considerations, the authorities could give more attention to possible distortions of recorded value added as a result of the inclusion of holding gains and losses.

The estimates of consumption of fixed capital are based on the perpetual inventory method.

The deflators/price indices used for compiling volume measures of GDP are compiled at a detailed level and mostly they are appropriate for use on the categories of flow on which they are applied in terms of price concept, coverage, and reference period. Output prices have been constructed by weighting the PPI and export unit values, input prices by combining the PPI with import unit values. Prices for internationally traded services are calculated on the price change in the major partner countries, corrected for changes in the exchange rates.

The reference year for the chained volume and price data is 2000. The annual accounts use the double deflator method. However, as the double deflation method can generate unacceptable results, limits of usually between 1 and 2 percent have been set on the extent to which the ratio value added/output may change from year to year.

For health and education, volume measures are constructed by output methods, which are the leading Eurostat *Handbook on Price and Volume Measures in the National Accounts* considers the preferred method for other nonmarket output. Collective services are deflated on the basis of their costs components. The data are adjusted for quality change by considering the wage change for different categories of worker. The volume measures of taxes/subsidies on products are estimated by applying the previous year tax rates to the volume of transactions subject to a specific tax/subsidy. Trade data have been deflated by applying the previous year margins on the volume of traded goods.

A simplified balancing exercise takes place at the end of the calculations in prices of the previous year, whereby the constructed prices for intermediate consumption and the changes in inventories are among the categories where adaptations are considered acceptable. The implicit prices for changes in inventories may show erratic movements as a result, but this is preferable over making adjustments in the other categories.

Expenditure approach procedures

In the annual accounts, no expenditure components are simply derived as a residual, even though the commodity flow method is extensively used for estimating gross fixed capital formation and parts of household final consumption expenditure. Currently, there are no sources for changes in inventories on a short-term basis and thus their value has to be estimated residually in the quarterly national accounts. Istat considers the qualitative data on inventories compiled by the Institute for Economic Studies and Analysis as less adequate for the purposes of the quarterly national accounts. The only solution would therefore be that Istat collects itself the necessary data from major holders of inventories. Such information would not only serve the quarterly national accounts, but also be a very useful indicator of the business cycle in its own right.

The classification detail in GDP by expenditure is reasonably adequate. In the annual accounts, the publication breakdown of household final consumption expenditure is into three-digit functional categories of COICOP (expanded to 56 items for national purposes) and, for the year $t+3$, 60 products. In the quarterly accounts, the breakdown is into 17 categories. Government final consumption expenditure is published in the annual tables at the one-digit COFOG level. In the annual accounts, published capital formation distinguishes Eurostat Pi6 categories of assets (Pi4 if crossclassified with the activities) and by 31 groups of owning industries. The quarterly accounts have a breakdown of fixed capital formation according to the Pi6 level. The annual publications contain information about changes in inventories by the type (industry of origin) of goods in the same detail as output; no information is published about the owning industries.⁹

The reliance on fixed ratios derived from benchmarks is very limited if one takes into account that the benchmark ratios are gradually adjusted as a result of the balancing exercise. In addition, for the major category, household final consumption expenditure, direct level estimates are made without reliance on ratios derived from earlier periods.

Istat uses proper techniques to address specific issues of GDP compilation, such as the following:

- Government final expenditure is exclusive of incidental sales.
- Although for national purposes mainly the domestic final expenditure of households is used, the national concept (that is, including expenses of resident households abroad and excluding expenditure by nonresident households on the economic territory) is also calculated.
- Expenditures on items that are considered stores of wealth (such as jewelry, works of art) are included in the estimates of valuables.

Dedicated price indices/deflators are used to deflate GDP components at the appropriate level of detail. The household consumption implicit deflator is consistent with the CPI. Government final consumption expenditure is derived by deflating cost components of output for final use in

⁹ Eurostat receives on a confidential basis information on changes in inventories by type of goods.

so far as it concerns collective services. However, the volume measures of individual services, in particular health and education, are deflated using output methods. The prices to deflate fixed capital formation are a weighted average of import unit values and elements of the PPI. Changes in inventories, which are expressed in average prices of the period in the basic statistics, are correctly deflated.

Specific quarterly compilation techniques

The preliminary estimate of quarterly GDP, which is published 45 days after the end of the reference quarter, uses the same methodology as the regular quarterly national accounts, but more extensive use is made of forecasting. The forecasts are generally made using autoregressive distributed lag regressions with explanatory variables, Arima models, or the Tramo-Seats program with or without intervention variables.

Current calculations are made from the production side, the expenditure side, and the income side. Data are available calendar effect adjusted, seasonally adjusted, and not seasonally adjusted at current and previous year prices from the first quarter of 1980 onward. The preliminary estimates are exclusively available in seasonally adjusted format and in chained volume measures expressed in monetary terms with reference year 2000.

The calculations are carried out for 32 industries, 29 categories of consumption, and 14 capital formation items. Quarterly output is derived on the basis of specific indicators (see Main Sources for the Quarterly accounts Table in 3.1.1), and value added at previous year prices is obtained using output at previous year prices as an indicator (Istat advised that the analysis of the historical series showed that the change in the ratio value added/output at previous year prices shows a very smooth path). Intermediate consumption at previous year prices is derived as the difference between the output and value-added estimates. Output prices are a combination of appropriate producer and export prices. Similarly, input prices are constructed by weighing relevant producer and import prices; the weights are derived from the data for the previous year. Apart from construction, capital formation is mainly estimated using the commodity-flow method. Inventories are obtained as a balance between the estimates from the supply and expenditure approaches.

3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques

Istat uses a large number of procedures to adjust data sources to improve the coverage, definitions, classifications, and valuation in conformity to international guidelines.

Istat works to ensure the exhaustiveness of the GDP estimates. In order that all components of the hidden economy are included, use is made, in particular, of information on employment from different sources. In addition, corrections are made for underreporting that may influence the estimates of value added per person employed.

The longstanding method used by Istat to improve the exhaustiveness of the production estimates is to expand the per capita values derived from enterprise surveys to the universe by means of labor data. Almost 70 percent of Italian GDP is subject to this method, which was

introduced on occasion of the 1982 benchmark and further refined during the preparations of the 2000 benchmark. The labor input estimates are made by comparing, at a very detailed level, labor demand from enterprises and labor supply by households.¹⁰

For reasons of the late availability of census data, some of the estimates of labor are still based on the carried-forward 1991 benchmark. The benchmark integrates the independent information on demand and supply of labor, after due adjustment for the correct reference period, territory, definitions, and classifications.

For *labor demand*, the estimation used all information on employment by enterprises. The main sources were the Manufacturing and Services Census and the Agricultural Census. The results of the Manufacturing and Services Census are compared and completed with information from the Social Security Institute (for employees and quasi-subordinate workers¹¹) and Istat surveys.

For *labor supply*, sources included the Labor Force Survey (LFS) and the carried-forward results of the population October 1991 Population Census, duly adjusted for reference period, territory, definitions, and classifications.¹² Again, correction proved necessary, for instance, for errors in the classification by economic activity. A comparison between the two sources on supply was made, detailed by five-digit ATECO, region, and category of worker (employee, self-employed or unpaid family worker). Both sources gathered information on persons employed, but only the information on first jobs was considered reliable in the LFS.

The next step involved the comparison of the adjusted labor demand and supply data. Further adjustments were made for employment categories that could not be directly observed in the above information sources. Estimates were added regarding nonregistered and nonresident workers, nonregistered multiple jobs, unemployment fraud, persons employed by private households, and informal jobs in agriculture and construction.

The method described yields the number of labor units actually employed, which, multiplied by the value added per labor unit for each category of enterprise (one recalls that enterprises are classified both by activity and by size), provides an estimate of overall value added.

However, particularly for small enterprises, value added may also be understated due to underreporting of sales or overreporting of costs. Istat computes coefficients of possible understated value added when, analyzing micro data from enterprise surveys, the per hour compensation that reportedly remains for the owner of a small enterprise (operating surplus/mixed income minus compensation of employees and other costs) is lower than the typical per hour compensation of an employee in the same type of enterprise.

¹⁰ In the original sources, labor demand from enterprises refers to registered jobs, and labor supply by households refers to persons employed.

¹¹ Quasi-subordinate workers are self-employed persons that have continued links with enterprises and in many respects act no differently than employees. However, legally and also in the national accounts, these workers are included in the self-employed category.

¹² Unfortunately, the required data were not yet available from the more recent 2001 Population Census.

The total influence on GDP of the two methods described above was to raise it in 2000 by about 12 to 14 percent. As the sectors agriculture and general government are estimated using different methods, the influence of the additions made to the value added estimates for manufacturing and nonpublic services are much higher than the percentages mentioned here for GDP as a whole.

The estimates according to the production and the expenditure approaches are balanced in a square supply-and-use framework at current prices. It is advisable that the analysis be expanded by also taking the (implicit) prices and previous year price data into account (see further item 4.2.1.).

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The data compiled from the main sources used to compile national accounts statistics are checked with other primary/secondary sources.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Systematic procedures exist to assess routinely the potential discrepancies in intermediate data, leading to adjustments to remove them.

3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

The National Accounts Directorate investigates any statistical discrepancies and other potential indicators of problems. Regarding the final estimates, such investigations are done in the framework of supply-and-use tables.

These tables show 101 industries and 101 types of products. Efforts are undertaken to reconcile any discrepancies in cases (except for the smallest activities) where the difference is more than 1-2 percent. Developments from year to year are among the types of analysis followed, but the analysis is limited to values at current prices. Istat agrees that concurrent analysis of the (implicit) prices and volume data could enrich the balancing procedure and plans to implement this in the future. Remaining small discrepancies are removed by applying a method based on the so-called RAS algorithm.¹³ A degree of reliability of the different basic data are thereby defined, causing basic data such as foreign merchandise trade and taxes not to be changed, but allowing relative large changes to be made in the original data for valuables, as well as the transport and trade margins by product.

¹³ Stone, R. , D. G. Champerowne and J. E. Meade, The Precision of National Income Estimates, *Review of Economic Studies*, IX, pp. 111-125, 1942.

Istat does not undertake an evaluation of data against unofficial estimates (e.g., from government units, universities, nongovernmental organizations, or international organizations) that employ plausible assumptions and methods. Istat considers it inappropriate to be possibly influenced by the results of outside agencies.

3.5 Revision studies

3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)

The direction and magnitude of revisions between preliminary and final data are investigated, including the explanations for the sources of errors, omissions, and fluctuations in the data.

The results of investigations and adjustments made in the statistical processes are taken into account in compiling the data for the subsequent periods to ensure that bias in the GDP estimate is negligible.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The Italian national accounts estimates are disseminated with quarterly periodicity as prescribed under the SDDS.

4.1.2 Timeliness follows dissemination standards

The Italian national accounts estimates are disseminated within the timeliness limit of three months after the reference quarter prescribed under the SDDS. Since the end of 2000, Istat has published preliminary quarterly GDP figures after 45 days at previous year prices, and calendar effects and seasonally adjusted. This first release does not provide further details, except for the contribution of agriculture, manufacturing, and services to the rate of growth. A more extensive publication follows at 70 days after the reference quarter.

The annual national accounts are published on March 1, only two months after the reference year. Further details follow gradually, for instance, the institutional sector accounts 13 months after the reference year (which is not particularly fast), regional accounts 22 months after the reference year, and provincial employment and value added 25 months after the reference year. Starting 2002, the publication delays will be shortened, to 10 months for the institutional sector accounts, and 12 months for the regional accounts.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The national accounts are internally consistent. The estimates for GDP by activity and expenditure components are made consistent in a detailed balancing process. The estimates at current prices are consistent with the matching series at previous year prices and the deflators. The quarterly (not for calendar effects adjusted) GDP estimates add up to the annual estimates except for a period of ten days between publication of the annual accounts and the release of the quarterly accounts that fit the new annual estimates. The annual and quarterly for calendar effects adjusted data are always consistent.

As indicated in 3.4.3, in order to make the estimates according to the production and the expenditure approaches consistent, a detailed comparison is conducted using in a supply-and-use framework.

4.2.2 Statistics are consistent or reconcilable over a reasonable period of time

Consistent annual national accounts series according to the *ESA 95* are available from 1970 onward (with reduced detail for the period 1970-1991), evidence of Istat's efforts to reconstruct historical series as far back as data permit. Consistent quarterly series are available from 1980 onwards. Any breaks in the series are explained to users of statistics. The release of national accounts data is always accompanied by explanatory texts, including on any unusual changes in economic trends.

4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks

The national accounts statistics are reconcilable with data on general government produced by the MEF. The national accounts are also consistent with the balance of payments, apart from a few differences due to varying recommendations in the international manuals. There is a definitional difference between the *ESA 95* and the *BPM5* regarding the treatment of construction activity by residents of one country on the economic territory of another country. If the construction is classified as fixed capital formation, the *ESA 95* prescribes that the producing enterprise should always be a resident of the economy where the construction takes place, whereas *BPM5* sticks to the general definition of residence (the intention to conduct an activity for more than one year). Also, the national accounts, in accordance with European agreements, treat the property income received by mutual investment funds as accruing to the shareholders, who reinvest these earnings in the funds. *BPM5* does not make this imputation.

The change to the benchmark year 2000 removed a large difference that existed between the balance of payments and the national accounts regarding the imports and exports of services.

The balance of payments revises its data in May, just after the publication of the annual national accounts. For this reason, the close consistency between the two macroeconomic statistics is likely to hold only for a few months. A better coordination of the revision policies

of the two institutions, at least for the data of older years, would be highly desirable. It should be noted that the release days of statistics may be subject to regulation by European institutions.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The first, provisional, annual estimates of year t are released on March 1 of the year $t+1$. Italy has a longstanding tradition of such very timely release, as the data are an input in the important *General Report on the Country's Economic Situation* that in early April is presented in Parliament. More recently, early provisional estimates serve, among other things, to calculate the deficit/GDP ratio as required by the Maastricht protocol. The provisional annual estimates may be revised three times, all published on March 1: the provisional estimate in year $t+1$; the semi-final estimates in year $t+2$; and the fourth and final estimates in year $t+3$.

The preliminary estimate of quarterly GDP in chained volume measures and seasonally adjusted is published with a lag of 45 days. The preliminary quarterly estimate is revised 70 days after the reference quarter. In the course of a year, the data of each quarter of the current year as well as those of the two previous years may be revised. In the March release, the revisions in the quarterly accounts can extend back to the year $t-3$ in line with the new annual accounts.

With minor exceptions, the recurrent revisions in both the annual and quarterly national accounts follow a strictly predetermined and constant cycle. On the other hand, there used to be no regularity in the major revisions although the authorities felt that they should take place between every five to 10 years. The timing of the most recent major revision was decreed by EU requirements and it may be expected that future major revisions will take place with a five-yearly periodicity, in accordance with agreements reached between the agencies belonging to the EU statistical system.

Revised data are disseminated with the same or greater level of detail as previously published for the data being revised.

Istat provides extensive documentation on its major revisions in hard copy, on the Internet, in press releases, and in dedicated seminars.

On the whole, major new source data are not incorporated immediately in the accounts to avoid frequent breaks in the series or distortion of the growth rates. Rather, these new sources are introduced on occasion of a major revision.

4.3.2 Preliminary and/or revised data are clearly identified

Istat's publications do not always alert users that the initially published data are preliminary and subject to revision. Neither are the data presented in tables flagged as being revised or subject to later revision (though this is often obvious from the accompanying text). It would be

helpful if the publications of the quarterly accounts would indicate that all data for the recent years remain subject to revision as a result of the estimation methodology applied.

4.3.3 *Studies and analyses of revisions are made public (see also 3.5.1)*

Revisions are assessed and explained in the publication of the statistical series.

5. Accessibility

5.1 Data accessibility

5.1.1 *Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

National Accounts data are published in a clear manner; charts are disseminated with the data to facilitate the analysis.

Datasets are published with various levels of detail. Each publication contains an analysis of current-period developments. The estimates are disseminated at a detailed level and with time series.

5.1.2 *Dissemination media and format are adequate*

Istat has many channels by which it disseminates information. The data are first released via a press release. It also maintains an Internet site (<http://www.istat.it>) that contains a very extensive collection of statistical data, supplemented by explanatory documents, background information, studies, etc. ConIstat, Istat's short-term indicators database, provides interactive and constantly updated data access.

Hard copy is available for most series, including the following:

- *Yearbooks* (Annuari) containing the documentation of an entire year on a domain of statistics—for example, *National accounts* (in Italian): *National economic accounts years 1992-2003*, February 15, 2005. In view of the current work pressures, the publication of these series is subject to delays;
- *Information* (Informazioni) offering rapid information on main economic phenomena—for example, number 23/2005: *Value added on agriculture by regions at basic prices, years 1999-2004*;
- *Topics* (Argomenti), which examine mainly themes of a social nature in depth;
- *Methods and Norms* (Metodi e norme) dealing with methodologies and classifications—for instance, number 21/2004: *Methodology of the national accounts estimations*, December 2, 2004;
- *Essays*, in the English language focusing on comparative studies and research—e.g., number 10/2001: *Evaluation and Analysis of the Quality of the National Accounts Aggregates*, containing the report of a research project financed by Eurostat;

- *Statistical Annals* (Annali di statistica) containing scientific discussions and historic reflections on statistics;
- *Research Papers* (Quaderni di ricerca)¹⁴ for scientific work under the authors' own responsibility—for instance, number 1/1993: *The revision of the historic quarterly national accounts series*.

Not included in the publication calendar, but equally important are the following quick releases:

- *Statistics in short* (Statistiche in breve), allow to disseminate, as soon as they are available, the main results of the surveys which are examined closely in a book, such as *Economic accounts and aggregates for the public sector, years 1980-2005* (in Italian) June 30, 2006;
- *Studies in depth* (Approfondimenti), containing a larger amount of data than the two other quick releases—for instance, *National economic accounts by institutional sector, years 1990-2004* (in Italian), January, 2006.

Publications of a more general nature that contain national accounts information include the *Italian Statistical Yearbook* and the *Monthly Bulletin of Statistics*. Under the offline electronic dissemination outlet, the CD-ROM with ConIstat information is important.

In general, Istat's dissemination media and formats should be considered excellent. In addition, mention should be made that most data, including extensive detailed data, are published free of charge on the Istat website.

5.1.3 *Statistics are released on a preannounced schedule*

In December of each year Istat publishes a release calendar giving the precise release dates for the coming year for all datasets under its supervision, including the national accounts. The same schedule is also available on the IMF's Data Standards Bulletin Board (DSBB) on a quarter-ahead basis.

5.1.4 *Statistics are made available to all users at the same time*

Istat provides data, on an embargo basis, to the media at a press conference held 30 minutes prior to general release. In conformity with the Electronic First dissemination policy adopted in 2000, the data are available about ten minutes later on the Internet. Users of the statistics may consider this time gap too large, especially for the release of quarterly data.

5.1.5 *Statistics not routinely disseminated are made available upon request*

Unpublished (but nonconfidential data) specialized tabulations are made available at request (as a rule for a fee). The Elementary Data Analysis Laboratory is available for specialized users.

¹⁴ These series have been combined in a periodical under the title *Review of Official Statistics (Rivista di Statistica Ufficiale)*.

It makes many of the elementary data archives maintained by Istat available to scholars and researchers, who can directly apply the statistical aggregations for the analyses of interest. The Laboratory is monitored by Istat's experts, who ensure that the privacy of personal data is protected. These services are publicized.

5.2 Metadata accessibility

5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated

Metadata providing users with information about what the data mean and about the methodology used to collect and process them are, among other things, available from the Istat website. The press releases include a short methodological description and glossary, and quick releases often indicate where a more extensive discussion can be found (“per saperne di più”). The glossaries are also included in the national accounts section of the *Italian Statistical Yearbook*. In the series *Methods and Norms*, the methodologies of the estimates for construction and household consumption have been published; the draft text for a publication on gross fixed capital formation has been finalized. Extensive information is also contained in the published proceedings of the seminar on the introduction of the *ESA 95* that was held in 2000. Finally, the booklet *The accounts about the Italians (I conti degli italiani)* should be mentioned; this publication serves teaching purposes. The availability of these metadata is well publicized.

5.2.2 Levels of detail are adapted to the needs of the intended audience

Documentation (in the form of brochures, booklets, and publications, see above) has been prepared to inform general users about the statistical series. The exhaustive description of the sources and methods of the annual accounts prepared for the Eurostat GNI Committee has been published on the Internet.¹⁵

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

Prompt and knowledgeable service and support is available to users of statistics. All statistical releases make mention of Istat's Communications Office, and many also identify specific individuals in the National Accounts Directorate from whom further information can be obtained. The publications include details on mail, telephone, facsimile, or website addresses.

Within the National Accounts Directorate, a separate service exists that is involved with preparation of publications, press releases, website updates, response to questionnaires from international organizations, etc.

¹⁵ See http://forum.europa.eu.int/Public/irc/dsis/pnb/library?l=/national_product/inventoriespublic/italy&vm=detailed&sb=Title

In the National Accounts Directorate, the assistance to users is not monitored through periodic surveys of users. The Dissemination Directorate keeps track of telephone calls and the number of visitors at Istat's website and surveys customers accessing Istat's central and regional data-shops, subscribers to hardcopy publications, and website visitors at least annually.

5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available

A catalog of publications, documents, and other services to users is available and updated each year. The publications catalog and a presentation of Istat's products and services—with particular reference to data dissemination—can also be accessed on its Internet site.

The catalog clearly indicates the prices charged. Assistance in placing orders is available through the Istat's data shops located in Rome and Milan, as well as through the statistical information centers located in each of Istat's regional offices.

Table 1. Italy: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts
(Compiling Agency: Istat)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X	X			
0.2 Resources				X		• Number of staff is not commensurate with strongly expanded tasks.
0.3 Quality awareness		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data					X	
3.2 Assessment of source data		X				• Low response rates in major source statistics. No regular information on enterprise cost structure. No short-term data on changes inventories.
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Recommendations¹⁶

- Increase the number of permanent staff in Istat's National Accounts Directorate in view of the strongly expanded compilation program (0.2.1, short term).
- Give priority to completing the process of bringing all Istat price and volume series to a chain-weighted basis (2.4.1, short term).
- Continue to investigate and implement ways to improve the response rates of Istat's mandatory enterprise surveys, in particular the SCI (3.1.1, short term).
- Strictly adhere to the scheduled calendar of the cost structure surveys, which are essential for the accuracy of the supply-and-use tables. This would also allow, in due time, to increase the number of product groups distinguished in these tables (3.1.1, medium term).
- Develop short-term statistics on changes in inventories (3.1.1, short term).
- Investigate possible distortions of recorded value added as a result of holding gains and losses on inventories (3.3.1, medium term).
- Implement existing plans to balance the supply-and-uses tables simultaneously at current and constant prices (3.3.2, short term).
- Flag the status of data (provisional, revised) in published tables (4.3.2, short term).
- Investigate whether the revision policies of Istat and the BI can be better coordinated (4.2.3, short term).
- Reduce, to the extent possible, the time lag between the official release of quarterly data and their publication on the Internet (5.1.4, short term).

¹⁶ Recommendations are listed in the order of the DQAF.

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

For assessments of the Prerequisites of quality (0) and Assurance of Integrity (1) dimensions, see Sections 0. and 1. in the National Accounts (I.)

2. Methodological soundness

The methodological soundness dimension is assessed against the *1993 SNA*, the *ESA 95*, and the *2004 Consumer Price Index Manual (CPI Manual)*. Note that the *CPI Manual* was not available at the time of the 2002 ROSC assessment.

The CPI was thoroughly revised in 1999 to comply with EU standards and recommendations. Geometric means were introduced to calculate the elementary series and, since then, the aggregates are computed using the chain version of the Laspeyres formula (with annual links on each December), which involves updating the market basket, and the index weights, at the beginning of each year.

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices

The concepts and definitions of the national CPI are generally in line with specifications recommended in the *ESA 95* and EU regulations. EU regulations are also followed regarding the definition and specification used for the individual goods and services to be priced each month. Regular meetings are held at Eurostat to review the implementation of concepts and definitions.

2.2 Scope

Istat compiles the national CPI (and its sub-index the CPI for the households of blue and white collar workers (FOI)), and the Harmonized Index of Consumer Prices (HICP) produced for Eurostat. The two indices are derived from the same source data, which have been compiled according to EU standards. The national CPI and the HICP are mainly used for economic analysis, while the main purpose for the FOI is to provide an instrument for pension, rent, and other contract indexation. In addition, 14 regional capitals (out of 20) and 19 other main towns compile and disseminate their own CPIs, which are released around the end of the reference month. The CPI described below is Istat's national CPI.

2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices

The CPI covers the expenditures of all resident households, including net expenditures by tourists. The CPI refers to market purchases of consumer goods and services (the final consumption expenditure of the *ESA 95*) by resident households.

Excluded are own-account production of goods and services for own final consumption and illegally sold goods and services, as accepted in the *CPI Manual*. Life insurance services and gambling are included.

The index coverage is final private consumption of families on the whole Italian economic territory.

Both the national CPI and the HICP currently exclude the services of owner-occupied dwellings. Istat is participating in a Eurostat task force investigating the development of stand-alone measures for these services. The task force has recommended the use of an acquisitions basis to estimate the value of the services of owner-occupied dwellings and is currently undertaking a pilot study to develop measures of new house prices (but not prices of the net acquisitions of existing houses). The aim is to have the new measures available by mid-2007. Views within Europe vary as to which approach should be used for national CPIs.

Istat's ultimate aim is for the national CPI and the HICP to converge into the same index. Istat's participation in the Eurostat task force could contribute towards the achievement of that goal.

The CPI covers 1,041 items, which are grouped into 562 elementary references, 205 categories, 106 classes (COICOP four-digit level), 38 groups (COICOP three-digit level) and 12 divisions (COICOP two-digit level).

The geographic coverage is the full Italian economic territory.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices

The *ESA 95* is used to classify institutional units and transactions. COICOP is followed in the classification of household expenditure on individual products.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Goods and services are valued at market prices, including VAT. Sales prices (seasonal price reductions) are excluded from the national CPI. However, since the beginning of 2001, sales prices are recorded for use in the compilation of the HICP in compliance with EU standards. In addition, as far as HICP is concerned, prices for medicines are net of any subsidy element, while this element is included in the CPI. Where required, product specifications are provided in detail for the basket items and their varieties so that all price-determining characteristics for transactions are identified.

2.4.2 *Recording is done on an accrual basis*

Prices are recorded by price collectors. From October 2006 onward, the price collection is undertaken over the first three weeks of the reference month (see 3.1.1 for a description of the shift in the collection period). Fresh food and energy items are collected twice during this period. Prices for some durable and semi-durable goods and for rent are collected on a quarterly basis. Services that are usually paid in advance (such as theater subscriptions) are recorded when actually consumed.

2.4.3 *Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Not applicable.

3. **Accuracy and reliability**

3.1 **Source data**

3.1.1 *Source data are obtained from comprehensive data collection programs that take into account country-specific conditions*

Comprehensive population and business registers are available for sampling frames. The population register is maintained by the municipalities and updated continuously. Every 10 years, it is revised on the basis of population census results. This register provides the sampling base for the HBS.

The outlet samples for the CPI are selected within the territories by MSO staff on a judgmental basis, using guidelines provided by Istat and local knowledge.

The CPI consumer basket and weights are derived each year from the national accounts and HBS data. The HBS became a continuous survey beginning in 1997. Each year, the two-stage stratified random sample covers about 467 municipalities (out of 8,101) and 28,296 households (out of 23,267,709). Annual expenditure data from the national accounts and the HBS are provided by region broken down by about 270 goods and services. Details are missing for a few groups such as vegetables and cheese products. The data become available in June of the following year. For example, for the CPI rebase at the beginning of 2006, national accounts expenditure data based on the HBS for the year 2004 were used to update the expenditure weights (requiring an adjustment for price change through to December 2005).

Data for 107 large municipalities (major urban centers) are collected each month, while the smaller municipalities (360) are included every three months. Each month about 1/12 of the households report their daily expenditures in a diary. At the beginning of the following month the diaries are collected by Istat staff, which also interviews the households on their purchases of durable goods and other major items. Each household is surveyed for one week a year. The response rate is relatively high, about 85.2 percent of the original sample. The population

estimates derived from the sample are corrected for the nonresponse. The sample error for monthly expenditures is on average 0.6 percent.

The collection of prices is undertaken by either municipal collectors in 86 main towns or by Istat. The weight of the elementary references for which price observations are taken by municipal collectors and then transmitted to Istat by e-mail is 80 percent. The remaining elementary references data are collected directly by Istat.

The following groups of products are collected centrally:

- Products for which prices do not have any geographical variability (tobacco, magazines and other periodicals, mostly pharmaceutical products, national tariffs);
- Products that show frequent technological changes (among others, computers, mobile phones, cars); and
- Selected services such as campsites, bathing establishments, and ski lifts.

Some of the advantages of the centralized collections include opportunities to treat product substitutions and quality changes uniformly, and to directly monitor consumer market dynamics. Over recent years, Istat has obtained substantial coverage, quality, and accuracy improvements in these collections.

In compliance with the European regulation, the coverage of the index is defined as those goods and services included in household monetary consumption expenditure accounting for more than 0.001 percent of the total household expenditure. The outlet types included are department stores, supermarkets, discount stores, large supermarkets (ipermercati), specialized stores, and service establishments. Judgmental sampling techniques are used for items, varieties, and outlets. The selection criteria used by the staff of the MSOs is to include the outlets that record the largest turnover and at least seven varieties for food items and five varieties for other items.

Analyses by Istat suggest that many offices tend to select too high a proportion of specialized stores, especially with a trend towards department stores attracting an increasing proportion of market share. However, Istat has been analyzing and monitoring information on the proportion of elementary quotations obtained from different outlet types and the proportion obtained from specialized stores has been steadily declining. For instance, this proportion was 65.4 percent in 2004 and 62.5 percent in 2006.

Istat will continue to monitor this pattern, which varies greatly among regions (particularly between large and small centers, reflecting the different patterns of trading). During the annual Territorial Officers Conferences, which are held prior to each rebase, Istat takes the opportunity to emphasize the need to ensure an appropriate balance between different outlet types. This issue will again be discussed at the November 2006 Conference, and the territories will review the outlet samples, as well as the product samples, as part of the 2007 rebase.

Prices are collected each month from 40,000 outlets and nearly 10,000 households. As a result, 400,000 price quotations are obtained each month. This is an unusually high number of prices,

which is largely necessitated by the legal requirements to collect and compile data for exceptionally small areas (see 0.1.1).

In order to fully address the issues of the number of price quotations collected and the distribution of the outlet sample identified in the 2002 ROSC data module. Istat started a project in 2003 to evaluate the possibility of moving toward a probabilistic design of the outlet and products samples. As a result, a first proposal was made for a general sampling strategy for the production of the Italian CPI applying some recent developments in the theory of sampling from finite populations (see L. Biggeri and P.D. Falorsi “*A probability sample strategy for improving the quality of the Consumer Price Index Survey using the information of the Business Register*,” working paper presented at the Eighth Meeting of the Conference of European Statisticians, Geneva, May 10-12, 2006).

In 2006, Istat set up a working group to implement the proposed random sampling methodology for the selection of samples of outlets and products. Specifically, the implementation will be carried out in two steps: first, the sample of outlets will be selected from the *business archive* referred to the local units of the distribution channels, and secondly a product sample will be selected.

The data collected for the items and their varieties to be priced are sufficiently detailed to ensure consistent pricing from month to month. Istat provides the software used by the municipal offices to record the price data for outlets, items and varieties, and for the processing of the data.

Istat is moving towards full automation of the data collection through the use of hand-held computers for data capture and direct loading to a secure Istat website, in order to streamline the collection processes, eliminate bottlenecks, improve data management, and optimize resource usage.

Until October 2006, the price collection period for month M (reference period) took place from the 16th of month $M-1$ to the 15th of month M . It is worth noting that this rule applied for about 84 percent of the products in the basket (corresponding to 75 percent in terms of households final consumption expenditure), while for the remaining 16 percent of the products (25 percent in terms of expenditure), the price collection took place within the reference month.

In October 2006, however, the price collection period was shifted forward (and shortened) so to have the prices of all the products in the basket collected within the reference month of the index, as recommended in the 2002 ROSC data module. Specifically, according to the new practice, the price collection period for month M takes place from the 1st to the 21st of the same month.

Even though the implementation of this shift in a single month of the year does not introduce any source of bias in the estimation of indices, it implies that, for at least one year, year on year rates of change are calculated on indices that are different regarding the price collection period. Concerning month on month rates of change, for October 2006 prices were collected both

according to the old and the new collection periods, allowing an analysis of the impact of change to the new methodology.

Istat conducts special experiments to enhance the capture of data. For example, in an increasing number of municipalities, price data from large outlets are being collected using hand-held computers; price files have also been extracted using bar codes. Also, together with Eurostat, Istat continually monitors markets for new products and services that need to be included in the market basket. At the municipal level, statistical commissions continuously monitor CPI compilations and advise on the selection of outlets and varieties.

3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required

The Istat national accounts, HBS, and CPI data are closely coordinated so that definitions, scope, and classifications are the same. This also applies to the time of recording, reference periods, and the valuation of CPI estimates. For a few expenditure items (e.g., vegetables), special procedures have been developed to adjust data to conform to CPI requirements. For fish and fruit, agricultural statistics are used as a source, and for telecommunication items, details are obtained from the respective producers. The quality of the price data obtained from municipalities varies; Istat closely monitors data quality and is in frequent contact with the MSOs.

3.1.3 Source data are timely

The expenditure estimates derived from the HBS and national accounts data are available with a lag of one year and need to be updated to provide the new weights for each coming year. This timeframe is acceptable. About 85 percent of the price data are received on time for the publication of a provisional CPI (flash estimate) by the end of the reference month. More detailed final data are released about two weeks later. However, as there are practically no differences between the movements in the provisional and final CPI (see 3.5.1), most users tend to rely on the provisional CPI for headline data and the final release for the geographic and product detail.

3.2 Assessment of source data

3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes

For the HBS, nonresponse is not an issue as substitute households are used. Sampling errors for the survey are acceptable and made available. Problems of misclassification and undercoverage are identified and solved internally. Post-enumeration surveys help to eliminate reporting errors. For the price survey, sampling errors are not available due to the judgmental nature of the selection of outlets and products. Administrative prices received from government agencies are crosschecked in the markets. Other price data are thoroughly checked and edited by

computer programs and by supervisors at municipal offices and at headquarters. Price collectors are instructed to report any unusual change to their supervisors, and there are automatic checks after all the micro data are loaded. In general, source data tend to be analyzed frequently as part of the process of updating the CPI basket and weights at the beginning of each year.

3.3 *Statistical techniques*

3.3.1 Data compilation employs sound statistical techniques to deal with data sources

HBS expenditure data are provided in detail, including items, subgroups, and major groups according to COICOP (two-, three- and four-digit level). In 2006, the CPI provides monthly data for 107 expenditure categories and 205 subcategories. For major users, such as the BI, the MEF and the Institute for Economic Studies and Analysis, a special dataset of 562 indices is provided; these data are available on request to any user. The *ESA 95* is used to define household final consumption expenditure from which the index weights are established. Goods and services purchased are valued at actual prices paid by households regardless of the method of payment. Interest on purchases on credit is not included. Non-market goods and services are not included in the weights, this particularly applies to owner-occupied dwellings (see 2.2.1 above) and goods and services produced for own final consumption.

Since 1999, geometric means have been used to calculate the elementary series for the CPI. The item indices are then aggregated to subgroup, group, and all-item indices applying the Laspeyres chain formula with annual links. All of these processes are covered by the software provided to the municipalities. For the calculation of the overall CPI for Italy, a weight matrix is used listing both item and regional/urban center weights. The indices for all the municipalities of the sample are provided separately. Both the weight and the price reference period refer to the month of December of the preceding year, which, as mentioned before, requires an updating of the weights. Each year, the new December-based index is then linked to the old 1995=100 index. This base year will be moved when Eurostat decides to move the HICP base year.

For items collected by the territories, temporarily missing prices are carried forward for no more than two months. If the product continues to be missing, a substitute with similar characteristics is introduced using the overlap pricing method. For items collected centrally, prices of missing items are imputed using movements in related products or a higher level index.

For seasonal items, particularly fruit and vegetables, the products included each month must be available in at least 50 percent of the sample outlets and only the prices for the first 75th percentile are considered in order to avoid recording extreme price quotations at the beginning or the end of the season. If a product is out of season, the price is imputed using the movement in prices of related products. For clothing, a basket representing the prices of summer and winter products is used all year. For all other items, out-of-season prices are imputed using higher level index movements, or the prices carried forward, depending upon the particular circumstances.

A case-by-case approach is adopted for quality changes, especially for centrally collected items. Where possible, an explicit estimate of the value of the quality change is made; where this is not possible, and depending on the particular circumstances, either a direct comparison of the old and new products is made, or the price change is attributed to quality change.

New products are introduced into the index at the time of each annual rebase.

3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques

Detailed CPI components are provided to the National Accounts Directorate of Istat for deflation of consumer expenditures. As the CPI covers over 90 percent of the resident households' expenditures, there is no need to resort to micro-surveys of activities that are not covered by the regular CPI compilation. However, adjustments are needed to account for the exclusion of owner-occupied housing and illegal transactions from the CPI.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

For analytical and checking purposes, the CPI data are regularly compared with comparable series from the PPI and the import price index. Processing is verified by means of automatic checks.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Unusual movements in certain items and regions are thoroughly investigated.

3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

The overall CPI for Italy is calculated product by product from municipal and regional indices, so there are no inconsistencies in this aggregation procedure.

3.5 Revision studies

3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)

Regarding the provisional and final monthly CPI, studies have not been undertaken as these two datasets basically agree at the national level. In the last 45 months before the mission's visit, there have only been three instances where there have been any differences between the two sets of estimates and these were very small. In any case, these kind of differences are monitored.

4. Serviceability

4.1 *Periodicity and timeliness*

4.1.1 Periodicity follows dissemination standards

The CPI is published monthly and, as such, conforms to the SDDS.

4.1.2 Timeliness follows dissemination standards

The provisional CPI is published at the end of the reference month. Final and more detailed data become available around the 15th of each month. The CPI therefore exceeds one month SDDS requirement.

4.2 *Consistency*

4.2.1 Statistics are consistent within the dataset

The all-items CPI and the aggregate of the regional CPIs are the same.

4.2.2 Statistics are consistent or reconcilable over a reasonable period of time

A set of tables containing series, regularly updated since 1996, are available on the Istat web site (<http://petra1.istat.it/daticon/>). The tables present data relating to:

- The national CPI for different aggregations from 205 product categories to 12 divisions;
- The CPI for white and blue collar workers (FOI) for 12 divisions and cross-classified by municipality; and
- The harmonized CPI (HICP) by 12 divisions and by European countries.

4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks

Following the *ESA 95* and other EU regulations, CPI data are broadly in line with national accounts deflators of household consumption. At times, differences in the movements between the consumption deflator of the national accounts and the CPI can be observed due to the exclusion of owner-occupied housing from the CPI.

4.3 *Revision policy and practice*

4.3.1 Revisions follow a regular and transparent schedule

The Istat advance release calendar provides the dates for the release of both the preliminary estimates and the final estimates, and there is minimal difference between the two series (see 3.5.1. above). Users are well aware of the cycle.

4.3.2 *Preliminary and/or revised data are clearly identified*

The preliminary CPI data provided at the end of each month are clearly identified as provisional data in the title of the release paper. However, preliminary data are published with less detail than final data, but with detailed analyses.

4.3.3 *Studies and analyses of revisions are made public (see also 3.5.1)*

As the revision of the final CPI data is negligible, it has not been necessary to analyze and publicize any differences, although they are monitored internally.

5. **Accessibility**

5.1 **Data accessibility**

5.1.1 *Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

Provisional indices

Provisional national CPIs are released through a monthly press release providing data for the 12 COICOP divisions, with overall indices including and excluding tobacco. The press release includes both index numbers and percentage changes.

In addition, 33 major municipalities (among those participating to the estimate of the national provisional CPI) are authorized by Istat to release their local CPIs broken down by 12 COICOP divisions, the general index and more disaggregates indices (up to 205 categories) at the same time.

Final indices

The final national CPIs are also released via a monthly press release with a breakdown by 12 COICOP divisions, with the overall indices showing data including and excluding tobacco. The press release also covers the overall indices and 12 division indices of the 20 regional capitals.

Together with the press release, Istat provides a detailed analytical report on inflation that is also published on the its website.

Final estimates of the overall index and 12 COICOP division indices for the 86 municipalities participating in the CPI surveys are released through Istat's website.

5.1.2 *Dissemination media and format are adequate*

The CPI is first released in the shape of a press release and simultaneously posted on the Istat website. The data are later published in Istat's *Monthly Bulletin of Statistics* of and, in more detail, in an annual publication. The formats of these publications are clear.

5.1.3 *Statistics are released on a preannounced schedule*

In December of each year, Istat publishes a release calendar giving the precise release dates for the coming year. The calendar is distributed to the press and is available free of charge to interested parties. The calendar is also disseminated on Istat's website (<http://www.istat.it/salastampa/appuntamenti/calendario.htm>).

During the first part of the year, the required one-quarter-ahead approximate release dates are disseminated on the Internet on the IMF's Dissemination Standards Bulletin Board, and the public is informed of this through a regular notice published in the Istat press release *Comunicato Stampa*.

5.1.4 *Statistics are made available to all users at the same time*

The data are released simultaneously to all interested parties by issuing the press release *Comunicato Stampa - Indici dei Prezzi al consumo* that is provided, on an embargo basis, to the media at a press conference held 30 minutes prior to the general release.

5.1.5 *Statistics not routinely disseminated are made available upon request*

For a fee, tabulations of more detailed data than normally published can be obtained by users. Users are advised of this service in the press release.

5.2 **Metadata accessibility**

5.2.1 *Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

A very comprehensive description of the methodology used to produce CPI, FOI, and HICP is posted on Istat website (<http://www.istat.it/prezzi/precon/>).

In connection with the annual CPI rebases, Istat publishes comprehensive papers on the new methods and techniques introduced. The SDDS summary methodologies are updated quarterly, as necessary.

5.2.2 *Levels of detail are adapted to the needs of the intended audience*

Both summary and very detailed metadata can be found on the Istat website. On the home page, special attention is given to providing ready access to the CPI data and metadata. Comprehensive methodological information is provided for analysts in the series *Note Rapide*, while less comprehensive descriptions and glossaries are available to general users in the *Monthly Bulletin of Statistics* and the annual publication on price statistics.

After each annual rebase, a very detailed technical bulletin is released containing descriptions of the new weights and basket, methodological changes, and so forth.

5.3 *Assistance to users*

5.3.1 Contact points for each subject field are publicized

The CPI press release and the website list the name of a contact person, and a telephone number, to whom users can direct queries and requests.

5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available

A catalog of publications is available and updated each year. In addition, each Istat publication lists the most recent publications issued and discloses information on the prices of statistical publications. Assistance in placing orders also is provided.

Table 2. Italy: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Consumer Price Index)
(*Compiling Agency: National Statistical Institute*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X	X			Owner-occupied housing is not included in the national CPI.
2.2 Scope						
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data						
3.2 Assessment of source data		X				
3.3 Statistical techniques						
3.4 Assessment and validation of source data		X				
3.5 Assessment and validation of intermediate data and statistical outputs		X				
3.6 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Recommendation

- Continue to contribute to the development of a measure of the services of owner-occupied dwellings and to the debate on the preferred approach for inclusion in national CPIs with a view to incorporating this important activity within the scope of the Italian national CPI. See Chapter 10 of the *CPI Manual* (2.2.1, short term).

III. PRICE STATISTICS (PRODUCER PRICE INDEX)

For assessments of the Prerequisites of quality (0) and Assurance of Integrity (1) dimensions, see Sections 0. and 1. in the National Accounts (I.)

2. Methodological soundness

The methodological soundness dimension is assessed against the *1993 SNA*, the *ESA 95*, and the *2004 PPI Manual*. Note that the *PPI Manual* was not available at the time of the 2002 ROSC assessment of Italy's PPI.

The 1995 based PPI, which was assessed during the 2002 ROSC, has been rebased to year 2000; with the rebased indices released in March 2003. Migration to base year 2005 has commenced and is scheduled for release by the beginning of 2009. Eurostat has allowed member countries an extended timeframe for this rebase because of the extra workload associated with the introduction of the new 2007 classification NACE Rev.2.

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices

The PPI (2000 = 100) was developed using the *ESA 95* concepts for the recording and valuation of product prices and weights. PRODCOM concepts and definition are followed for individual products, whose prices are collected monthly.

The current PPI refers to output prices, and indices are published under both industrial and end-use classifications. Input price indices are not calculated.

The producer price survey and the compilation of the index are conducted according to harmonized concepts and definitions established by the EU Council Regulation n. 1165/1998 concerning short-term statistics and other regulations. The concepts and definitions are also described in the Eurostat methodological manual *Methodology of Short-term Business Statistics, Interpretation and Guidelines* that is revised at regular intervals.

EU Regulations establish requirements for each short-term statistic (variable) regarding its coverage, form (working-day or seasonally adjusted form, absolute figures or index), reference period, level of detail according the NACE classification, deadlines for data transmission, and periodicity of revision of the weighting system and reference base year. Regulations also establish the definition of the variables as well as their objectives, characteristics as well as the method of calculation of the relevant indices and the definition of Main Industrial Groupings (aggregations of NACE headings, intermediate goods, capital goods, consumer durables, consumer non-durables, and energy) for which the PPI has to be compiled.

2.2 *Scope*

2.2.1 *The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

The current PPI on the domestic market covers the mining, manufacturing, and energy sectors. The following groups are excluded:

- 10.1 - Mining and agglomeration of hard coal
- 10.2 - Mining of agglomeration of lignite
- 10.3 - Extraction and agglomeration of peat
- 11.2 - Service activities to oil and gas extraction, excluding surveying
- 12.0 - Mining of uranium
- 13.1 - Mining of iron ore
- 13.2 - Mining of non ferrous metal ores
- 17.3 - Finishing of textile
- 22.3 - Reproduction of sound and video recording and computer media
- 23.3 - Nuclear fuel
- 35.1 - Shipbuilding
- 35.2 - Railway and tramway locomotives and rolling stock
- 35.3 - Aircraft and spacecraft.

Most of the exclusions are related to particular pricing difficulties (or the group being of minor importance) and are allowed by EU regulations. Pricing difficulties occur, for instance, in activities such as the building of ships and aircraft that have long production cycles, and industrial services where it is difficult to define a product of which the price can be observed consistently over time. However, the indices at the three-digit and four-digit levels represent more than 90 percent of the total value added of Section D, manufacturing, of NACE Rev. 1.1 in the base year 2000, which conforms to the Eurostat coverage requirement.

Following the *ESA 95*, all resident market enterprises are in the scope of the PPI. The geographic coverage is the full Italian national territory. Excluded from the index are changes in inventories of final products, own-account production of goods for own final consumption and capital formation, services, and illegal sales to willing buyers, as allowed by the EU.

A PPI for the non-domestic market (exports) and a Total PPI (the domestic market plus the export market) will be released by the end of 2006.

Separate indices are produced for both the inputs and outputs of the agricultural sector. Also, construction cost indices are compiled that cover labor, materials, and transport costs incurred in constructing residential buildings, industrial warehouses, and roads.

In addition, output indices for selected business services, namely national post services, and telecommunication services, have been produced. The compilation of indices for the following service industries are being investigated: freight transport by road, courier services other than

national post services, sea and costal water transportation services, and scheduled air transportation services.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices

The *ESA 95* is followed in the classification of institutional units and transactions. The ATECO 2002 (the Italian version of the European NACE Rev. 1.1, which includes an additional, fifth, digit for domestic purposes) is used for the classification of economic activities. PRODCOM, derived from CPA 2002 and with the nine-digit level (including the fifth digit of the ATECO 2002), is used for classification of products. The Main Industrial Grouping classification (EU Regulation n. 586/2001) is used for the classification of goods by end use.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The output data used for weights in the PPI is valued at billed sales prices (ex-factory selling prices) for own products, excluding VAT and other specific taxes and transportation costs.

2.4.2 Recording is done on an accrual basis

The output data for product using for weighting are recorded in the period in which they are sold or ordered.

Consistent with the *Eurostat Methodological Manual STS 2002*, price data for products refer to the time of the sale contract (or order booked during the month), not when they are produced.

2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices

Transactions between establishments of the same enterprise are not recorded, for pragmatic reasons; this practice is documented. Istat does not produce a stage of processing index, so net weights are not required.

3. Accuracy and reliability

3.1 Source data

3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions

The enterprises surveyed, which are used as weighting source data for the PPI, are selected from the Istat Business Register (ASIA—Archivio Statistico delle Imprese Attive), which is

used as the frame for various surveys. ASIA is based on information derived from several administrative sources such as the chambers of commerce, the tax records of the MEF, the National Institute of Social Security, and the SEAT Business telephone directory; it is updated every year.

The main source for the PPI product weights is the value of sales as emerged from the PRODCOM Survey System for the year 2000. Other external sources (professional associations and administrative sources) have been used for selected groups of products not covered by the PRODCOM surveys.

The PRODCOM system is made up of four surveys: the quarterly survey of production of textiles and textile products; the quarterly survey of chemicals, chemical products and man-made fibres; the monthly survey of basic metals; and the annual survey of the remaining industrial sectors.

The surveys cover a total of about 60,000 industrial establishments (out of about 250,000) and about 6,000 products. This sample includes all establishments with 20 employees or more (about 50,000) and a random sample of around 10,000 establishments with three to 19 employees. The survey coverage is 90 percent of each NACE class (four-digit level), as required by Eurostat.

For each of the reference years 2000 to 2003, the response rate has been around 60 percent. It should be noted though, that the response rate is somewhat skewed between small and larger enterprises. In 2003, the overall response rate was 61.0 percent, split as follows:

Industrial companies	Survey Population	Sample	Respondents	Response Rate
Three to 19 employees	216,446	10,013	4,918	49 percent
20 or more employees	47,445	47,445	30,118	63 percent

These poor response rates prevail even though the survey is compulsory, and Istat takes extensive follow-up action. The questionnaires are sent out at the beginning of each year and three reminders are sent to nonresponding enterprises, including one by telephone.

The main approaches adopted for dealing with the missing PRODCOM data are based on sample weights adjustment, or on the use of imputation techniques based on using previous year's data (in cases where a nonrespondent in the current year reported in the previous year) indexed using detailed industrial production indices.

In recent years, various initiatives have been taken aimed at improving the timeliness, accuracy, and completeness of the Italian PRODCOM statistics and to decrease the burden on industrial enterprises. As a result, the response rate and the quality of PRODCOM data are expected to increase. The main initiatives are as follows:

- Specific monitoring of larger enterprises with 200 or more employees to help ensure their cooperation;

- A decrease in the number of products surveyed from about 6,000 to 4,500, following the simplification of the harmonized list of industrial products of the European Community (PRODCOM list);
- From the reference year 2004, the use of electronic questionnaires available on the Istat website which should increase the timeliness, the accuracy, and the completeness of the data supplied by enterprises;
- From the reference year 2005, a change in the periodicity of the quarterly collections (textiles, chemicals, and man-made fibres) to annual;
- From the reference year 2005, the use of a more extensive and up-to-date local unit register (drawn from the ASIA Business Register) and updated with an annual survey of local units of larger enterprises with 100 or more employees;
- Improving the editing and imputation methods; and
- A redefinition of the main variables surveyed (this is the goal of a specific Eurostat task force which includes Istat).

Notwithstanding these creditable initiatives to improve the response rates, as was recommended in the 2002 ROSC data module, the quality of the detailed PRODCOM weighting source data from the 2000 survey, as used in the current PPI, must be questionable.

As PRODCOM surveys do not distinguish between the domestic and non-domestic market (the output sold value include the output value sold on foreign markets), in order to improve the weighting methodology, Istat is considering the use of Foreign Trade data (export value of products by industrial enterprises) in conjunction with PRODCOM data to estimate product weights for the index of the next base year 2005.

The source for the PPI activity weights was domestic sales from the Structural Business Statistics (SBS) surveys for the year 2000. Eurostat recommends the use of SBS data, rather than national accounts data, for short-term statistics, including the PPI and the production index, in order to achieve a coherent aggregation scheme for the compilation of EU short-term indicators.

The Survey of Economic and Financial Accounts of large enterprise (SCI) and the Survey of Small and Medium Enterprises (PMI) are the two annual SBS surveys.

The SCI is a completely enumerated survey of larger enterprises with 100 or more employees (about 8,500 enterprises for the reference year 2000). It collects data concerning profit and loss accounts and balance sheets. Moreover, information regarding employment, investment, personnel costs, and certain regional items is also collected. Data about Kind of Activity Units (KAU) are required for larger enterprises with 200 or more employees.

The PMI is a sample survey covering enterprises with less than 100 employees (a random sample of 120,000 enterprises for the reference year 2000). The aim of the PMI survey is to collect data from the profit and loss accounts of small enterprises. The random sample of enterprises is drawn from ASIA and is stratified by three variables—economic activity, size class based on employment, and geographic area. A complete programme of follow up three times a year is made, with a view to improving the response rate.

Both surveys have been the subject of innovative processes aimed at countering low response rates. In 2000, response rates improved as a result of an increased effort put into follow-up with enterprises and a closer collaboration with professional associations. In addition, the sample size of the PMI was increased in 2000 and the use of an administrative source—chamber of commerce data—was introduced for the SCI survey.

The chamber of commerce register contains the balance sheets and profit and loss statements of 650,000 corporations. The use of these administrative data in conjunction with SCI survey data effectively increased coverage to nearly 90 percent; data on the remaining enterprises was mathematically imputed.

Sales data from the augmented SCI survey fed into the weight revision process for 2000.

Other improvements for both the SCI and PMI surveys were subsequently adopted. The use of chamber of commerce data was extended to all enterprises with more than 50 employees for the reference year 2001, and to all enterprises with more than 20 employees from the reference year 2002.

The SCI response rate has gradually increased from 48 percent in 1998 to 54 percent in 2004 (it was 53.5 percent in 2000, the PPI base year). For the PMI survey, the response rate increased from 43 percent in 1998 to 52 percent in 2004.

These initiatives to improve the SBS survey response rates are commendable and should be very beneficial for the 2005 PPI rebase. However, although the SCI data were augmented with chambers of commerce data in 2000, the low response to the PMI Survey—which accounts for nearly 60 percent of turnover, compared with 40 percent from the SCI—is of concern in relation to the quality of the weights in the current PPI. Efforts should continue, as recommended in the 2002 ROSC data module, to improve the SBS response rates.

In relation to the selection of nine-digit PRODCOM products, and enterprises, for the monthly PPI price collection, a judgmental process was applied based mainly on cut-off sampling. Firstly, five-digit product groups were selected so that they covered at least 90 percent of total value added. Then, nine-digit products were selected from each of these five-digit product groups so that they accounted for at least 70 percent of total sales in each selected five-digit category. The main source for the product selection was the PRODCOM survey sales data for the year 2000. For some groups of products not covered by PRODCOM surveys, other sources outside ISTAT were used, e.g., MEF data were used for the selection of tobacco products, and Unione Petrolifera (the Italian petrochemical and refiners association) data were used for the selection of refined petroleum products.

For each product, enterprises were ranked according to their value of sales of that product. Subsequently, the highest ranked enterprises were drawn until 70 percent of the value of total sales of the product was reached. Where, in very few cases, this percentage was not reached (e.g., where industry concentration was extremely low), the selection was made such that a minimum coverage of 40 percent of the total sales value was achieved, consistent with EU

recommendations. A total of 3,667 enterprises were selected, of which about 1,000 enterprises were new to the survey, and about 1,000 dropped out from the 1995-based survey.

These enterprises were contacted in 2000 for the selection of the major product varieties produced, and monthly price data for the selected varieties for the year 2000 in order to derive base-year prices. The representative varieties of the elementary products were selected by the enterprises, with assistance by Istat staff, according the following rules:

- The varieties selected should be the most representative of the enterprise's domestic sales of the nine-digit product;
- They should reflect changes over time in the average prices of the elementary product;
- They should be produced and sold on a regular basis;
- They should be fully identified and described in terms of the quality and transaction characteristics; and
- As far as possible, their quality and transaction characteristics should be unchanged over time in order to ensure comparability of the prices.

For the regular monthly PPI, 12,604 prices for 1,102 products are collected directly from more than 3,600 enterprises.

Data are submitted each month by the enterprises on a form sent by fax or e-mail. The use of electronic questionnaires, to be completed via the Internet, is currently being investigated. A survey indicated that 45 percent of the PPI respondents would prefer to supply data via the Internet.

3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required

The source data used for the weights and prices meet the definition, scope, classification, valuation, and timing requirements of the PPI.

3.1.3 Source data are timely

Source weight data for 2000, classified according to the NACE Rev. 1.1 classification, were available at the time of the index rebasing. Regarding the monthly price collection, questionnaires are sent to enterprises at the beginning of the year, to be returned each month. Enterprises are required to submit data by the 15th day after the end of the reference month. On the 20th of the month, reminders are sent to nonrespondents, by an external company that provides postal services, via faxes sent to listed addresses. If prices are still not submitted, Istat staff contact nonrespondents by telephone. The responses are closely monitored.

The producer price index is available within the month following the reference month, consistent with SDDS and EU standards.

3.2 *Assessment of source data*

3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes

In relation to the data used as sources for the PPI weights, information on sampling errors is available for the PMI survey and it is routinely monitored.

Regarding the price survey, the data reported by the enterprises each month are analyzed in detail. In particular, two types of checks are undertaken:

- Have the price determining characteristics of the products changed? If so, measures to adjust the prices to compensate for any quality change need to be undertaken (enterprises generally indicate on the form if there are any quality or transaction characteristic changes), and
- Have the prices changed more than expected for the particular activity or the market in question? In such cases, the enterprises are contacted by telephone to query the price change.

Also, at this stage, other information provided by enterprises is checked with the aim of identifying changes such as enterprises ceasing to be active, changing their address, or no longer being within the scope of the survey (for instance because they changed their activity or shifted their sales to exports).

During the recording process, the data-entry program applies a check that flags any price changes outside a fixed range (-5 percent, +10 percent). This check is often useful to help identify changes in the price determining characteristics of the products, which an enterprise has not reported. In some cases, Istat staff do not need confirmation by respondent as they have other information sources that permit them to check and confirm the prices surveyed.

Each PPI staff member is responsible for one or more sectors of economic activity (at the two-digit level of NACE) and collects, checks, and records data taking in account the characteristics of that industry. They are experts on the industries for which they are responsible.

Indicators about the accuracy of the data, such as unit response rates, are calculated and used to monitor the production process.

3.3 *Statistical techniques*

3.3.1 Data compilation employs sound statistical techniques to deal with data sources

Prices for temporarily missing product varieties are currently handled by carrying forward the last reported price for a maximum of three months. Different procedures for imputation for nonresponse are being examined with a view to adopting them during the forthcoming rebase.

Istat is considering the use of period-on-period movements for responding enterprises at a nine-digit product level—or, if necessary, the use of indices at a higher level of aggregation—to impute missing prices by applying these movements to the previous period prices.

In cases where a price variation occurs due to a change in price determining factors (physical quality or transaction characteristics), a correction factor is applied based on prices surveyed for the new and the old varieties in a month of overlap. The overlap pricing method assumes that the value of the quality change from an old to a new product variety is equal to the difference in price between the two models in a period when both product varieties are available. The use of explicit methods to estimate the effect of quality changes on price is under examination.

The *Eurostat Manual on Short-term Statistics*, and the *PPI Manual*, encourage the use of hedonic methods to estimate the effect of quality changes on prices for products whose technological development is very rapid, such as computer hardware.

New statistical methods for imputing missing prices and handling quality change are planned to be adopted for the index during the 2005 rebase, with results scheduled for release in early 2009. This is an area where the statistical techniques used could be considerably improved and it is recommended that more refined methods be introduced as soon as practicable, rather than waiting for the rebase scheduled for release in early 2009.

A product variety is replaced when it becomes permanently unavailable because the enterprise does not produce it any more, or when the variety is no longer representative of the enterprise's production. In these cases, the reporting enterprise proposes a new variety, which should have similar characteristics as the old variety and be representative.

Enterprises that cease to be active or are no longer within the scope of the survey are replaced as soon as possible by similar units, in term of size, which produce the same or similar product varieties.

3.3.2 *Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

The PPI is compiled in the following stages:

- For each product variety (specification), a price relative is calculated as the ratio between the price for the current month and the corresponding annual average price in the base year 2000.
- For each nine-digit product, a price index is calculated using an unweighted arithmetic mean of price relatives (known as elementary product price indices).
- The Laspeyres formula is used for aggregating the elementary product price indices from the lowest level (five, four, three, two-digits, two and one letter ATECO 2002) up to the total index.

The new PPI for exports and the total output price index will be released by the end of 2006. Like the current PPI for the domestic market, both new indices will be compiled using the fixed base version of the Laspeyres formula.

For the current PPI for the domestic market, the weight reference period and the base price reference period are the same, that is, year 2000.

The base of the PPI and its weighting system are updated every five years and the rebased series are available within three years after the end of the new base year.

When the PPI (2000 = 100) was introduced in 2003, the previous indices (base 1990 and base 1995) were linked to it after making reclassifications for the adoption of the new economic activity classification ATECO 2002.

3.4 *Assessment and validation of intermediate data and statistical outputs*

3.4.1 *Intermediate results are validated against other information where applicable*

The staff of the Price Statistics Division regularly compare PPI data with other information. Specifically,

- For each elementary (nine-digit) product, percentage changes from the previous month for each variety are compared to identify any discrepancies. In the case of major discrepancies, enterprises are contacted by telephone for confirmation;
- PPIs for similar groups of products are compared;
- PPIs for groups of products that are closely related in terms of price determining processes are compared e.g., basic metals and manufactured metal products, refined petroleum products, and basic chemicals;
- PPIs for products at a higher level aggregation are compared with other Istat price indicators that relate to different stages of production and distribution, such as the CPI and PPI for agricultural products, particularly for food items;
- PPIs by product, or higher levels of aggregation, are compared with other price index sources such as the raw material price indices on the international markets compiled by Confindustria (the most important professional association in Italy); and
- To validate data on refined petroleum products, information released from the Italian daily petroleum magazine *Staffetta Quotidiana* is used.

In addition, PPI data are compared with export and import price indices (unit value indices from foreign trade statistics).

3.4.2 *Statistical discrepancies in intermediate data are assessed and investigated*

Unusual movements in the index arising from large movements in particular sectors are investigated and explained during the press conferences when data are first released to the media. Each month, a descriptive note on annual and monthly index movements is prepared to support the press briefing.

3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

The economic activity indices are derived directly from product indices, so there are no discrepancies between components and aggregates.

3.5 Revision studies

3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)

The discrepancies between preliminary and final PPI data are small. The response for enterprises which have a critical impact on the PPI (for instance, oil companies) are subject to an intensive follow-up program.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The PPI is published monthly according to the SDDS monthly periodicity requirement.

4.1.2 Timeliness follows dissemination standards

The provisional PPI is published at the end of the month following the reference month, and therefore complies with the SDDS one month timeliness requirement. The final PPI is disseminated within about 45 days after the end of the reference month.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

Aggregate and component PPIs are consistent. The aggregate PPI is invariant to the two topologies of aggregation—industry and product.

4.2.2 Statistics are consistent or reconcilable over a reasonable period of time

As a result of linking the new PPI time series to previous versions, consistent time series are available for more than five years.

Consistent time series are available for more than five years. With the last change in reference base year (from 1995 to 2000), and the adoption of the new economic activity classifications NACE Rev. 1.1 and the Italian version ATECO 2002, historical series were reconstructed back to January 1991. The reconstruction method used is explained in detail in the publication

“Numeri indici dei prezzi alla produzione dei prodotti industriali venduti sul mercato interno. Base 2000 = 100” *Metodi e Norme*, n. 22, 2004.

4.2.3 *Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

Following the *ESA 95* and other EU regulations, PPI data are broadly in line with national accounts deflators of industrial production.

4.3 **Revision policy and practice**

4.3.1 *Revisions follow a regular and transparent schedule*

The Istat advance release calendar provides the dates for the release of the provisional index. Data are provisional at the time of the press release in which are reported and are subject to revision. The final data are released 15 days after the release of provisional data and are made available directly on the Istat website.

4.3.2 *Preliminary and/or revised data are clearly identified*

When data are disseminated, users are informed as to whether the data are preliminary, and whenever data are revised.

4.3.3 *Studies and analyses of revisions are made public (see also 3.5.1)*

The final PPI is compared with the provisional PPI in order to analyze any revisions in the aggregates.

5. **Accessibility**

5.1 **Data accessibility**

5.1.1 *Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

Current data are presented in the monthly press release *Indice dei prezzi alla produzione dei prodotti industriali*. It provides the total PPI, indices for MIGs, and indices for three sections and 16 subsections of ATECO 2002. A technical explanatory note about the data and a file of historical time series are attached to the monthly press release.

Current-period developments are explained during the press conference when data are first released to the media. Each month, a note with an analysis of current-period developments of producer prices is prepared to support the press briefing.

Time series at more detailed level are available in the ConIstat data base (<http://con.istat.it>), on the Istat website (http://www.istat.it/prezzi/dati_congiunturali), and in the Istat publication *Bollettino Mensile di Statistica*.

An analysis of inflation, in which the various indices produced by Istat are compared, is included in the Istat President's reports at the annual Parliamentary hearings on the budget law (these reports are available on Istat website <http://www.istat.it/istat/audizioni/>) and in the Istat *Annual Report* which represents the data source for analysis of economic, demographic and social aspects of Italy (available on the Istat website http://www.istat.it/dati/catalogo/20060524_00/).

The MEF *General Report on the Country's Economic Situation* includes an analysis of inflation in which the various price indices produced by Istat are compared.

5.1.2 *Dissemination media and format are adequate*

The PPI data are first disseminated as a press release and posted on the Istat website a few minutes after the embargo has been lifted. Shortly after, detailed data are available from the ConIstat database (<http://www.con.istat.it>). Final data are also published in detail on the Istat website (http://www.istat.it/prezzi/dati_congiunturali) and in the monthly publication *Bollettino Mensile di Statistica*.

Provisional and final data are also disseminated by e-mail to government institutions and research institutes. The formats in which the data are disseminated are clear.

5.1.3 *Statistics are released on a preannounced schedule*

In December of each year Istat publishes a release calendar giving the precise release dates for the coming year. The calendar is distributed to the press and is available free of charge to interested parties. The calendar is also disseminated on Istat's Internet website (<http://www.istat.it/salastampa/appuntamenti/calendario.html>).

During the first part of the year, the required one-quarter-ahead approximate release dates are disseminated on the Internet on the IMF's DSBB, and the public is informed of this through a regular notice published in the ISTAT press release *Comunicato Stampa*.

5.1.4 *Statistics are made available to all users at the same time*

The data are released simultaneously to all interested parties by issuing the press release *Indice dei prezzi alla produzione dei prodotti industriali*, which is provided, on an embargo basis, to the media at a press conference held 30 minutes prior to general release.

5.1.5 *Statistics not routinely disseminated are made available upon request*

For a fee, tabulations of more detailed data than normally published can be obtained by users. Users are advised of this service on the Internet.

5.2 *Metadata accessibility*

5.2.1 *Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

A short description of the methodology, and features of the survey, is presented in the technical explanatory note attached to the monthly press release.

Changes in methodology are generally described in the Istat publication *Note Informativa*. Information on the last updating of the base year, and other changes to the methodology, were provided in the March 12, 2003 edition of *Note Informativa*.

A full description of concepts, definitions, classifications, data sources, compilation methods, and other methodological aspects are contained in the publication *Numeri indici dei prezzi alla produzione dei prodotti industriali venduti sul mercato interno. Base 2000 = 100, "Metodi e Norme, n. 22, 2004.*

Currently no information on data accuracy is released, but recently an Istat working group was formed to identify a minimum set of quality indicators for different surveys to include in each dissemination medium. The aim is to increase the transparency of Istat to users, and to assist them in the best use of statistical data.

The SDDS metadata, summary methodology, and other descriptions are updated quarterly as required. The latest revision was made in September 2006.

5.2.2 *Levels of detail are adapted to the needs of the intended audience*

Istat publishes documentation at various levels of detail according to users' needs.

Comprehensive methodologies are provided for analysts in the series *Note Informativa, Metodi e Norme* and the section Metadata of ConIstat database; while summary descriptions and glossaries are available to general users in the *Monthly Bulletin of Statistics*, in the explanatory note attached to the monthly press release, and in the annual publication on price statistics.

5.3 *Assistance to users*

5.3.1 *Contact points for each subject field are publicized*

The PPI press release and the website list the name of a contact person, and a telephone number, to whom users can direct queries and requests.

5.3.2 *Catalogs of publications, documents, and other services, including information on any charges, are widely available*

A catalog of publications is available and updated each year. In addition, each Istat publication lists the most recent publications issued and provides information on the prices of statistical publications. Assistance in placing orders is provided.

Table 3. Italy: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Producer Price Index)
(Compiling Agency: Istat)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data			X			Surveys providing the weighting scheme were subject to large nonresponse.
3.2 Assessment of source data		X				Imputation and quality adjustment techniques need improvement.
3.3 Statistical techniques			X			
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

Recommendations¹⁷

- Continue to work on the improvement in the response rates for the PRODCOM and SBS surveys including the initiative to augment missing respondent data with data from the chamber of commerce register, especially the sales data required for PPI weights (3.1.1, short term).
- Bring forward plans to introduce more sophisticated imputation and quality adjustment techniques within the PPI as soon as practicable (3.3.1, short term).

¹⁷ Recommendations are listed in the order of the DQAF.

IV. GOVERNMENT FINANCE STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

Each of Istat, the BI and the MEF is responsible for producing its GFS own dataset.

Legislative arrangements that govern the production of GFS data are the following:

- The Legislative Decree 322/1989 places the National Institute of Statistics (Istat) at the center of the National Statistical System (SISTAN), which covers the statistics offices of all levels of government and the chambers of commerce, industry, crafts industries, and agriculture. Istat also cooperates closely with agencies that do not belong to SISTAN, such as the BI, to establish data-sharing protocols and agreements, notably in regards to government finance statistics (GFS).
- Legislative Decree 322/1989 Article 15 gives Istat the authority to collect data required for compiling macroeconomic statistics. This includes the national accounts and, in this regard, Istat is responsible for compiling the general government deficit (net borrowing) required for reporting on Italy's compliance with the Stability and Growth Pact.
- Since July 2005, Istat publishes by the end of July in the official journal of the Italian Republic as prescribed by the Financial Act, Law 311/2004, the list of all units that belong to the general government sector according to the rules of the *ESA 95*. This list is compulsory, enumerating exhaustively all ministries and other entities that compile or monitor general government data. The list is regularly updated and published annually.
- For budget management purposes, Legislative Decree 468/1978 Article 30, as modified by Legislative Decree 208/1999, gives the MEF responsibility for the compilation and dissemination of the revenue and expenditure data for general government on a cash basis. According to this law, the MEF must present the *Economic and Financial Planning Document*, containing the budget (and three-year forecasts), to Parliament not later than June 30 each year. In addition, it must present cumulative quarterly reports on the execution of the budget on a cash basis. The MEF also compiles central government financing and debt data on the basis of Legislative Decree 468/1978 and Presidential Decree 38/1998.
- With the State Budget Reform Act (94/97), transactions in the state budget reporting were reclassified and became much closer to economic criteria of national accounts. The new classification introduced also counterpart sectors. It was first used in the 2000 budget.

- The Ministerial Decree no. 389/2003 requires local authorities to communicate to the MEF their intention to issue new bonds and to report quarterly all their new liabilities contracted. Also, their use of derivatives is monitored.
- The 1993 Banking Law (Legislative Decree 385/1993) provides the BI with the authority to collect information directly from Italian banks and other financial institutions. In this regard, the BI is responsible for compiling financing and debt data for the general government sector.

Istat publishes annual and quarterly accrual for the nonfinancial operations of the general government sector following the presentation of national accounts. The MEF publishes monthly cash-based data on revenue, expenditure, financial asset transactions, and the cash borrowing requirement for the budgetary central government. It also publishes the same details on a quarterly and annual basis for the general government sector. The BI publishes monthly, quarterly, and annual data on financing, debt and financial accounts for the general government sector with breakdowns by subsector, financial instrument, and holder.

These arrangements allow making valuable cross-checks among these various datasets. However, the fragmentation of responsibilities could also lead to discrepancies, as was evidenced in 1999 and 2000 when major disparities among the various agencies' data surfaced. A high-level Commission under the responsibility of the Prime Minister and chaired by the President of Istat was established to analyze these disparities. The Commission managed to reduce the gaps between the cash-based working balances of government accounts (*fabbisogno del settore pubblico*) published by the MEF and the corresponding cash balance calculated by the BI (*fabbisogno delle amministrazioni pubbliche*), which has a slightly different coverage. A final report was made available to the members of an interagency working group and, on request, to international organizations. After the Commission was dissolved, the reconciliation work has been taken over by an interagency working group, established and chaired by Istat, comprising Istat, the MEF, and the BI. This working group worked among other things at reducing the unexplained differences between the government's borrowing requirement and net borrowing, a project that had already been initiated by the high-level Commission. The revision work has also taken into account Eurostat decisions and opinions on specific transactions. Additional smaller interagency working groups composed of the same three institutions have dealt with specific issues, which led to revisions in the published aggregates and enhanced consistency of recording among different statistics while reducing overall discrepancies (for instance, on the recognition of financial assets, recording of capital injections, treatment of EU funds, assessment of accrued but not paid interest on debt securities, swaps, and so forth).

Compared to 2002 when the first ROSC data module was prepared, it is now clear that Istat, as the center of SISTAN, has the primary responsibility for dissemination of the general government statistics. This is consistent with Istat (i) having established, and chairing, the formal working group that coordinates and integrates the partial GFS produced by Istat, the MEF, and the BI; and (ii) transmitting the official Italian GFS data for the general government sector to Eurostat.

However, the responsibility for compiling and disseminating a comprehensive and integrated set of general government statistics remains to be determined, and in doing so it would be

useful to preserve the valuable data cross-checking undertaken by the three agencies, a trademark of the Italian GFS statistics, by maintaining each agency's responsibilities for the separate components.

0.1.2 Data sharing and coordination among data-producing agencies are adequate

Istat, the MEF, and the BI have established a number of specific agreements for the exchange of data. Each agency indicates that these agreements give them the data they need. For example, there is a Protocol and a legal convention from 2003 that governs the provision of data by the state accounting office (Ragioneria Generale dello Stato—RGS) to Istat for the purpose of compiling the national accounts; the convention provides the framework of the data transmission. The MEF also has a less formal agreement by which data (for instance central government interest expenses on an accrual basis) are provided to Istat and the BI on a quarterly basis to calculate aggregates for transmission to Eurostat and the ECB. The MEF maintains for this purpose a data bank containing the main characteristics of all state securities. For the transmission of Excessive Deficit Procedure (EDP) data to Eurostat, the BI provides Istat with data for financial accounts (excluding other accounts payable and receivable) and debt, and the MEF provides budgetary data on government (fabbisogno del settore statale) and government balance of public accounts, together with financial transactions in the working balances.

In addition, there are agreements with the Ministry of Health dating from 2001 for the collection of information on local health units; the Ministry of Interior on provinces and municipalities; and the Ministry of Defense on the nature of military goods. The latter information allows making a better split between intermediate consumption and gross fixed capital formation by the Ministry of Defense. Istat collects directly GFS data on an exhaustive basis from the regions and the two autonomous provinces.

0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only

Confidentiality of individual responses is not generally an issue. However, Istat treats its collection and processing of government statistics in the same manner as other source data—i.e., the comprehensive confidentiality provisions of Istat's legislation are considered to apply. Legislative Decree 322/1989 specifies that dissemination may occur only in an aggregate form and in a manner by which it is not possible to identify data for any individual person. In addition, the Law on the National Statistical Program of December 1994 establishes strict confidentiality rules for data included under the National Statistical Program. In accordance with the Legislative Decree n. 196 of June 30, 2003, the Personal Data Protection Code, all statistical surveys inform respondents in writing of their rights and obligations with regard to the provision of information, and they are assured that the information they provide will be used for statistical purposes only.

The oath of office of the MEF employees provides broad guidelines applicable to confidentiality. The BI statistics do not disclose the data of individual institutions or transactions. The 1993 Banking Law includes a secrecy clause (Article 7), which ensures the

confidentiality of individual data and requires that data be disseminated in a manner that prevents identification of individual persons or entities. Council Regulation (EC) 2533/1998, which governs the collection of statistical information for the fulfillment of European System of Central Banks (ESCB) tasks and includes a requirement for confidentiality (Article 8).

0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response

Legislative Decree 322/1989 requires all government agencies, bodies, and administration offices to supply any data and information for surveys that are part of the National Statistical Program and sets the administrative sanctions. Separate legal provisions acknowledge Istat's power to access administrative files of public administration offices, government agencies, and companies controlled by such administration offices.

The decrees approving the National Statistical Program specify which statistical surveys carry the mandatory requirement of private individuals and entities to supply all data and other information that are requested of them.

There is an analogous specific legal provision ensuring that all central government units report cash-based data to the MEF on the activities of central government units. The MEF views the provisions of Legislative Decree 468/1978, as amended by Legislative Decree 208/1999, as an obligation on other government units to report as well. It notes that in fact all units do report, except for about 5 percent of local government units and the small mountain communities. It is expected that the reporting will further improve with the full implementation of the recently developed system SIOPE (Informative system for the government units' operations). This system, currently still in its test phase, foresees that all Italian governmental institutions report their data on expenditures and revenues according to standardized classifications. SIOPE is a common project of the BI, MEF, and Istat, under the management of BI, and is expected to improve the reliability, consistency, and timeliness of cash data.

Statistical reporting to the BI in support of its supervisory and surveillance functions with respect to Italian monetary financial institutions (MFIs) is governed by various regulations of the ECB and by provisions in the 1993 Banking Law.

0.2 Resources

0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs

Existing staff resources at the National Accounts Directorate of Istat are under pressure to meet the statistical requirements. While the staff is well qualified and highly motivated, human resources management is somewhat constrained by existing regulations at a time of increased statistical requirements, notably in GFS. More requests coming from the institutions of the European Union, e.g., for compilation of infra-annual data, a breakdown of expenditures according to the more detailed COFOG classifications, data on social protection according to the European System of Social Protection Statistics (ESSPROS), and extensions of reporting

for the EDP have to be met with practically the same number of staff. In addition, the maintenance of the official list of entities belonging to the general government sector seems to be resource consuming. It is partly in response to those additional demands that a unit, dedicated to GFS, is being set up in the National Accounts Directorate.

The MEF has improved its statistical capacity by reorganizing its statistical work. Two former units in charge of statistical work have been put together within the Department of Personnel. In addition, a new inspectorate in the RGS, to be in place by December 2006, will supervise and coordinate all statistical work. This unit should complement the work of Istat by improving the MEF data for *ESA 95* and IMF reporting. Moreover, Istat trains regularly staff of the MEF for statistical work on national accounts and government finance statistics. The resources at the BI (Public Finance Directorate) seem to be sufficient to carry out their current responsibilities regarding GFS.

0.2.2 Measures to ensure efficient use of resources are implemented

Istat's Governing Board has the task of optimizing available financial resources for the statistical programs, as well as the evaluation of costs against the activities to be carried out. Istat makes use of a wide range of efficacy, efficiency, structural, economic, and financial indicators to provide management with a mechanism to monitor institutional performance from both a quantitative and qualitative perspective. These indicators are published in Istat's *Annual Report*.

The BI has implemented programs for monitoring the utilization of staff, computing, and financial resources.

Istat and MEF management report that there is little flexibility for reallocating scarce resources during periods of critical need.

0.3 Relevance

0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored

Istat strategies focus on user needs by collecting and processing different aspects of the demand for statistical information, contributing to setting priorities (i.e., the National Statistical Program, corporate programming, integrated output—products and services, tailor-made requests), and seeking feedback through undertaking user satisfaction surveys.

Istat does not collect information on data users' needs and views by means of specific surveys, although customers accessing Istat's central and regional data shops, subscribers to hardcopy publications, and website visitors are surveyed at least annually, and specific users' views are collected within the "Circoli di qualità." However, main users (such as the BI, the Institute for Economic Studies and Analysis, the MEF, and the Center for Economic Forecasts) frequently meet in working groups where they can voice their concerns. The well-visited seminars that Istat organizes on new themes, such as the further development of quarterly accounts, the

revision of the benchmark year and the sectoral accounts, are an occasion to receive feedback from users. In addition, the bi-annual Conference on Statistics, which includes a session on the national accounts, also plays a role.

However, given the variety of GFS components produced by a number of agencies, users have indicated a need to clarify the differences among the datasets. Istat publishes data in the *ESA 95* format, with an emphasis on the net lending/borrowing of the general government sector that is required by the EU. The MEF uses cumulative year-to-date monthly budgetary central government data for tracking the execution of the budget and monitoring fiscal policy. The MEF cumulative quarterly general government data in the national format emphasize the government's borrowing requirement. The BI compiles and publishes information on public finances in its monthly *Supplements to the Statistical Bulletin*, as well as in its biannual *Economic Bulletin* and its *Annual Report*. These statistics emphasize the financing of the government's borrowing requirement and, in accordance with EU requirements, general government gross debt at face value. Finally, Eurostat also publishes general government statistics on Italy.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The focus on quality is apparent from the Legend of Quality Measures published in the *2001 Italian Statistical Yearbook* and from Istat's leading role in the Eurostat expert group on quality aimed at providing guidance to the national statistical offices of EU member states.

Istat, as the central agency of SISTAN, has recognized the importance of quality and has put in place management tools for evaluating the quality of the information produced. Istat has recently created the post of the quality manager of the institution who, together with a relevant team, would do the quality audit. However, this new position is still to produce tangible results.

The MEF focuses on the application of accounting rules that by themselves serve as internal control. In addition, informal processes relying on the professional judgment of the staff working with the central government operations data are employed. The MEF debt data are subjected to checks on the underlying databases, imputation techniques, and a review of the related documentation. Cross-checks are also carried out against data contained in the budget. In calculating yields on securities, the Debt Management Department of the MEF relies on "internal professionalism and market based conventions." The BI has in place processes to enhance the quality of the statistics (see 0.4.2).

0.4.2 Processes are in place to monitor the quality of the statistical program

Extensive involvement in interagency working groups is directed toward enhancing the accuracy and adequate treatment of the statistics used by Istat in compiling GFS. Istat (National Accounts Directorate and the Directorate that has the responsibility for conducting surveys) regularly checks the quality of data (coverage, classification, missing or erroneous recordings

or answers to surveys, etc.), their internal consistency and the consistency among data coming from alternative or linked data sources (Istat, the MEF, the BI, and other agencies). See 0.1.1.

The quality of GFS statistics is also subject to scrutiny from the EU. A special role in this respect is played by Eurostat units on government finance, which examine the quality of GFS statistics and submit requests for opinions to the Committee on Monetary, Financial, and Balance of Payments Statistics (CMFB). The member states, including Italy, have prepared extensive inventories of the methods used for compiling the EDP data. These inventories will be published by the member states and Eurostat, once they have been approved by Eurostat. Moreover, Eurostat regularly visits the statistical offices of the member states to review the quality of the GFS statistics. In principle, every member state should be visited bi-annually.

The MEF data for the budgetary central government and local government are audited by the Court of Auditors. However, only the data from the budgetary central government are subject to a ruling (Decisione sul Rendiconto dello Stato).

The BI (Public Finance Directorate) employs consistency checks between financing flows and debt stocks. Also, the BI advised that information obtained from large datasets is cross-checked with information obtained directly from the institutional units involved in a transaction through agent reporting requirements. Consistency with data produced by other agencies (Istat and the MEF) is also monitored, as well as new developments in general. For instance, the BI inquired about the rescheduling of arrears of local health units to suppliers that were classified as trade credits and, as such, would not be part of the debt in the definition of the Maastricht Treaty. As a result of this intervention, Eurostat confirmed that, to the extent that the restructuring of these credits changes the underlying financial instruments, such arrears should be classified as loans (and therefore as debt under the Maastricht definition).

0.4.3 Processes are in place to deal with quality considerations in planning the statistical program

Although Istat has many processes in place to deal with quality considerations, the trade-off among such considerations (such as between timeliness and accuracy) do not always appear to be major factors when setting statistical priorities. New data requirements appear to be frequently added to the work program.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Under legal provisions, Istat is autonomous with respect to the Executive and its independence is assured.

The Guarantee of Statistical Information Commission is charged with ensuring the impartiality and completeness of the information produced by Istat and other SISTAN agencies. The

Commission views impartiality as being composed of two elements: first, data should be a truthful description of reality; second, data should be simultaneously disseminated to all users. There is currently a legal proposal that may modify the mandate, governance and composition of the Commission.

Impartiality was also one of the cornerstones of Istat's reorganization of 2003 according to the following official text: "Independence, impartiality, reliability, pertinence of the statistical information, reduction of the burden on respondents, and protection of statistical secrecy and privacy are the fundamental criteria inspiring the documents setting down the rules for implementing the organization decree."

Legislative Decree 468/1978 provides for the impartiality of data compiled by the MEF.

The statutory provisions under which the BI compiles statistics are adequate to support its independence in conducting these functions. In this regard, provisions in both the Community Legislation and the 1993 Banking Law complement the BI's long tradition of institutional independence and professionalism.

The professionalism of staff in the three agencies is supported by recruitment and selection procedures that evaluate exclusively the merit and the potential of candidates and current employees. Staff at various levels participate in international organizations' committees in order to maintain close and frequent contacts with representatives from other countries. Staff are also engaged in the working groups of national bodies engaging in economic research and analysis. The staff are actively involved in academic debate through the publication of discussion papers, articles, books, and participating in conferences and seminars. The results of such participation is evidenced by the methodological papers produced.

1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations

Staff in Istat, the MEF, or the BI appear to be free from political or other influence in choosing the most appropriate sources and methods for compiling their respective data on government finances.

1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics

Istat investigates on a daily basis any erroneous interpretation, particularly in the press, of its statistics and takes appropriate action (e.g., by requesting the publication of a response). Istat's policy is to avoid any misunderstandings by providing ample information with the releases. The Press Office has instituted a call-in service whereby journalists may obtain explanation of the information disseminated. Senior researchers are present at most press conferences to explain the data, particularly in cases when methodological changes have been introduced. Istat's President may also indirectly comment on erroneous interpretations by giving an interview to the major newspapers.

The three agencies are available to provide expert advice on technical aspects of the data. Explanatory material to aid in the interpretation of the data is provided routinely, although more could possibly be done to inform users of the differences among items that have a similar name. In this field, Istat and the BI release methodological notes where, among other things, differences in concepts and content of different items are explained.

1.2 Transparency

1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public

The terms and conditions for the compilation and dissemination of statistics by Istat are available through the SISTAN website. Furthermore, the *Carta dei Servizi Esterni della Diffusione* (Charter of Dissemination Services) is available to the public on the Istat website.

Legislative Decree 468/1978 as amended by Legislative Decree 208/1999, which governs the collection of data by the MEF, is also publicly available. The Banking Law and other national level normative texts are available on the BI website.

1.2.2 Internal governmental access to statistics prior to their release is publicly identified

Access by Eurostat to quarterly general government data is laid down in EU Regulation 1221/2002. This regulation stipulates that data are examined and disseminated only after the adoption of a quality report on these data. However, member states are free to give access to their own government agencies and to publish these data on their initiative without waiting for this quality report. Istat publishes these quarterly nonfinancial accounts. The first press release of the quarterly nonfinancial accounts of general government for the second quarter of 2003 took place in October 2003.

1.2.3 Products of statistical agencies/units are clearly identified as such

GFS components are disseminated in agency-specific publications and websites. Statistics compiled by another agency that are included in the publication normally identify the source agency in a footnote to the tables.

1.2.4 Advanced notice is given of major changes in methodology, source data, and statistical techniques

Advance notification of methodological changes is provided through seminars and papers disseminated throughout the academic community. Changes under consideration are also indicated—in advance—in the text of the *Three Year National Statistical Plan*, in such publications as *Quick Notes*, and *Information Series*.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are in place and are well known to the staff

Staff in Istat and the MEF are bound by the rules applying to all public service staff, as set out in the Code of Conduct adopted by the Italian Guarantee of Statistical Information Commission regarding the obligations applying to all civil servants as to “loyalty, impartiality, diligence, and commitment to work.” All public servants take an oath about conduct expected of them before they enter the public service.

In addition, by signing the employment contract any new Istat staff member undertakes not to disclose individual data. New employees follow a training program of one week, in which staff ethics is one of the themes.

Guidelines for staff behavior are laid down in an Ministerial Decree of November 28, 2000 pertaining to all officials, Legislative Decree n. 322 of September 1989, Article 8, dealing with the secrecy duties for statistical office employees, and the Code of Conduct annexed to the Legislative Decree n. 196 of June 30, 2003. Istat is also bound to the 15 principles laid down in the Code of Conduct for statistical agencies endorsed by the EU.

Concerning the BI, guidelines for staff behavior are clear and are published in the document *Bank of Italy Staff Rules*, which includes references on professional secrecy and staff conduct. Every new BI employee participates in an extensive orientation and training program that is aimed at explaining the fundamental duties and powers of the BI and its employees. The organizational structure of the Research Department, and the established modalities for interaction with national and supranational users, are also designed to foster ethical behavior.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices

No comprehensive and integrated presentation of government finance statistics is published in a single location. However, initiatives are underway to accelerate the compilation of statistics according to the framework of the *Government Finance Statistics Manual 2001 (GFSM 2001)*, such as the participation of Istat in the IMF/Eurostat data exchange agreement in which the data are bridged into the *GFSM* framework. (A first run of these data has been elaborated by the middle of 2006 and is being validated by Istat.) Furthermore, the BI’s *Annual Report* and bi-annual *Economic Bulletin* publish statistics produced by both Istat (general government accounts) and the BI (general government financing and debt data), and the methodological section of the *Annual Report* includes some information on how the different indicators are conceptually related.

Concepts and definitions of Istat general government statistics are produced in the context of national accounts based on the *ESA 95* and, as such, conform to international guidelines. These

data cover nonfinancial transactions only, which are complementary to the financial accounts compiled by the BI. In addition to their use in the broader national accounts context, they are used to compile the net lending/borrowing balance required under the Stability and Growth Pact. Cash-based public sector accounting data, which are published by the MEF, use a national presentation that identifies the government's cash borrowing requirement. Istat currently publishes the reconciliation between the cash borrowing requirement of the general government (the MEF balance) and the accrual measure of net lending/borrowing, and compiles the "other accounts receivable and payable" for the general government financial accounts. All other financial transactions of the general government sector according to *ESA 95* are compiled by the BI and transmitted to Istat, which sends them to Eurostat. The MEF produces data corresponding to the Central Government debt.

The BI also produces financing data corresponding to the cash borrowing requirement of the general government sector. The BI statistical database further includes information on the stock of general government debt, valued in domestic currency at face value.

2.2 Scope

2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices

The scope of the *ESA 95* general government statistics compiled by Istat is in line with international guidelines, covering budgetary and extra budgetary central government, social security funds, and local government (regions, provinces, municipalities and mountain communities, local health units, and so on).

The MEF public accounting data (quarterly and annual) have a coverage that is slightly different from Istat's general government. Consolidated data are published for the MEF's version of the general government sector as well as its component subsectors in *Relazione generale della situazione economica del paese* (general report on the economic situation of the country).

The scope of the financing and debt statistics on the general government sector and component subsectors compiled by the BI is in line with the *ESA 95* and Istat's statistics. The BI publishes the financial accounts (balance sheets and flows) of the general government sector for the subsectors central government, local government and social security funds in its supplements to the statistical bulletin.

The MEF publishes also Central Government debt statistics and, within the Debt Management Directorate, a project is in progress to produce an exhaustive database on outstanding debt of local government agencies (*see also 0.1.1*). The results of this project will allow making cross checks with data collected by the other institutions. The reporting obligations imposed by ministerial Decree no. 389/2033 on local authorities have resulted in a database that, by end 2006, had around 90 percent coverage. The scope of the central government debt statistics is in line with the equivalent BI statistics (however, liabilities are exclusively recorded at face value).

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices

The general government institutional sector and subsectors is defined by Istat in accordance with the *ESA 95* and is consistent with the *1993 SNA* and the *GFSM 2001*, utilizing the allowable option of showing the social security funds as a separate subsector. Istat compiles and publishes the nonfinancial transactions of general government according to the classifications of the *ESA 95*, identifying the standard items of the accounts for production, primary and secondary income flows, and transactions in nonfinancial assets as well as revenue and expenditure according to *ESA 95*.

The BI uses the same definition of government as Istat. Indeed, a common listing of public entities ensures consistency of coverage of units in both datasets (see 0.1.1). The BI includes a section on public finances in its *Annual Report* that provides consolidated accounts of the general government that identify separately revenue by broad type, current expenditure by economic type, capital expenditure, and the net borrowing. Other tables provide details of the formation of the general government's cash borrowing requirement and its financing by instrument and by sector, as derived from the BI sources. This is supplemented by general government debt by instrument, holding sector, by subsector, local government debt by subsector, instrument, and geographical area. (The latter tables are published monthly in a supplement to the monthly bulletin.)

The MEF uses a national classification to derive the government's cash borrowing requirement, as follows:

The MEF Classification of Government's Cash Borrowing Requirement	
Current revenue	Current Expenditure
Taxes (total, direct, and indirect)	Personnel costs
Social contributions	Intermediate consumption
Sale of goods and services	Current transfers
Property income	Interest
Current transfers	Depreciation (historic cost)
Other current revenue	Other current expenditure
Capital revenue	Capital expenditure
Capital transfers	Gross fixed capital formation
Depreciation (historic cost)	Capital transfers
Other capital revenue	Other capital expenditure
Financial assets	Financial assets
Repayment of loans extended	Acquisition of shares and equity
Change in bank deposits (net reduction)	Extension of loans
Other decrease in financial assets	Change in bank deposits (net increase)
	Other increase in financial assets
Total cash inflows	Total cash outflows
Balance (government cash borrowing) = Total cash inflows less total cash outflows	

Data on bank deposits refer to commercial banks only (changes in deposits held by the Treasury at the BI are considered among the financing items). Sectoral details of the government borrowing are also provided. Instrument details are provided for the central government (settore statale) sector only.

The MEF data are consolidated in accordance with the requirements of *GFSM 2001* and a table is provided that shows each subsector and the consolidation adjustments separately. However, the treatment of some transactions in the public accounting standards differs from that used in macroeconomic statistics.¹⁸ Istat and the MEF cooperate closely to identify such transactions and treat them appropriately.

In addition, Istat prepares general government expenditure estimates classified by COFOG (10 divisions) and by economic classification of the transactions. The MEF prepares COFOG data for expenditure of budgetary central government.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Generally, flows are valued at market prices. In accordance with EU guidelines, debt liabilities are recorded at face value rather than market value. However, the BI also publishes financial stocks at market value.

Foreign currency flows are converted to national currency using the mid-point of the buying and selling market exchange rates on the date of the transaction, while stocks are converted using end of period rates.

2.4.2 Recording is done on an accrual basis

Istat estimates the nonfinancial transactions of government on an accrual basis. The MEF data on nonfinancial transactions and on financial transactions in assets are on a cash basis. The MEF also produces information that allows for time-adjusting the cash data that is provided to Istat. The BI publishes financial flows which include accrual adjustments in the context of flow-of-funds statistics that are compiled in accordance with the *ESA 95*. This work is carried out in close cooperation with Istat.

2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices

All revenue and expenditure transactions are shown on a gross basis. Consistent with international guidelines, Istat records the tax revenue net of any refund. This involves adjusting

¹⁸ An example is the classification of extraordinary dividend paid by a public enterprise to the government. In the MEF data this transaction is recorded as a component of revenue, while it would be treated as a withdrawal of equity from the enterprise in government finance statistics and national accounts.

the MEF data that show taxes and related tax refunds (including refunds arising from the net payment of VAT by producers) on a gross basis.¹⁹

Also, consistent with international guidelines, debt stocks are recorded by the BI (and, for the Central Government sector, also by the MEF) on a gross basis. The BI shows financing transactions net at the detailed level of the classification used, i.e., by instrument, currency, residency, or counterparty.

3. Accuracy and reliability

3.1 Source data

3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions

Istat uses a variety of sources to compile GFS, including MEF data, data it collects itself, and data obtained from the BI.

The MEF administrative sources provide coverage of general government cash-based transactions. The coverage (general government) of the quarterly and annual source data is broader than in many other countries. In addition to data on budgetary central government, which are available monthly, public entities outside the budget—social security funds, extra budgetary funds, regional, provincial, and local government units—are required by law to report to the MEF on a quarterly basis. The extra budgetary funds comprise a number of research funds and development funds as well as the Motorway Guarantee Fund. The information about actual receipts and payments is provided to the MEF by the ministry that actually manages the funds. Some other information is provided on an accrual basis on some expenditure items for interest and for social benefits and by the Cassa Depositi e Prestiti on transactions on interest on an accrual basis. As a result, according to the MEF, data are reported for all units except for about 5 percent of local governments and the small mountain communities. Information is available from the accounting system to enable the consolidation of transfers among different levels of government. The MEF Department of Treasury compiles quarterly central government debt data on the basis of data reported by the Public Debt Management Directorate.

Istat collects from the regions comprehensive information on revenue (assessments and cash receipts), expenditure (commitments and cash payments), and financial transactions. The basic register is compiled and standardized by Istat and made available to the national accountants. Moreover, Istat had been conducting a survey of the budget reporting that the provinces and municipalities are required to submit to the Ministry of Interior. Owing to the long delays experienced with reporting by some municipalities, Istat introduced this rapid reporting system in 2000 to collect information from a stratified random sample of municipalities. The survey provided for electronic reporting and was benchmarked against the latest fully enumerated

¹⁹ The MEF shows the gross VAT as revenue and the deductible VAT as current expenditure, even though the producer is required only to pay the net amount. Similarly, VAT rebates on exports are recorded as current expenditure.

census results. Beginning with the reporting year 2005, the reporting by a sample of municipalities is superseded by online census reporting carried out by the Ministry of Interior.

The Ministry of Health collects direct information on an accrual basis from quarterly and annual accounts compiled by Local Public Health Units and Hospital Agencies. The breakdown in the income and expenditure statement is used for the compilation of the general government consolidated account. However, information on balance sheets of the local health units is not used as there is more work needed to compile consolidated financial balance sheets.

Financing and debt data compiled by the BI are available, among other sources, through the bank reporting system. In particular, in its capacity as supervisor of the banking system, the BI receives data on bank loans classified to the general government sector using the Istat list of general government entities. Post office savings are reported directly to the BI each month, and treasury securities are directly available from the BI department responsible for cooperating with the MEF for the issuance and redemption of treasury securities. Data on treasury securities issued by other bodies are collected directly from the issuing bodies and from financial intermediaries. Information on securities issued by local government are obtained by BI from the “Financial Market” unit of BI Research Department, which receives the data from the Foreign Exchange Office.

3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required

The revenue and expenditure data available from Istat as an intermediate step in the preparation of the national accounts provide a good basis for compiling *GFSM 2001* nonfinancial statistics.

Following the State Reform Act (Legislative decree 94/97)- which aimed at a stricter compliance of the budgetary classification with the *ESA 95* standards—an inter-institutional working group was established to elaborate the economic and functional classifications to be applied to the government budget. Representatives from the MEF, Istat, the BI, and the Italian Court of Auditors participated in this group.

The BI publishes flows and stocks on financial transaction in compliance with the *ESA 95*.

3.1.3 Source data are timely

Source data for budgetary central government are available within 45 days of the end of the reference month, while quarterly and annual data from the MEF are available within one quarter and six months respectively.

Istat’s annual surveys generally provide data that can be used in the preparation of general government sector data for the year $t-1$ (i.e., for 2004 in early 2006) although responses from some municipalities to the census survey (which is conducted by Istat in cooperation with the Ministry of the Interior) are available only with a long lag as noted earlier. This is why Istat had been collecting a sample survey of municipalities, as noted above. The BI financing and debt data are available monthly, between five and nine weeks after the reference month, depending on the sector to which they refer. The central government debt data produced by the MEF on a

quarterly basis are available with a lag of one quarter after the reference period. They are included in the cumulative quarterly reports on the execution of the budget on a cash basis produced by the State Accounting Department.

The European Union has provided regulations for the compilation and reporting of quarterly national accounts based data for the general government sector. The new requirement covers general government revenue and expenditure data classified by the main *ESA 95* economic type categories to be provided on an accrual basis. In connection with the obligations of the regulations, Istat has adopted its procedures for their compilation and dissemination.

3.2 *Assessment of source data*

3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes

There are no material gaps in the coverage of general government units. Istat has extensive procedures for routinely comparing reported data for different subsectors of the general government sector against alternative sources of data. Furthermore, the MEF data are validated through the auditing of the accounts for all agencies. Reported data are reviewed for consistency with the definition of items and plausibility.

The collection of information for the distinction between capital transfers and financial transactions is made on the basis of the profit and loss accounts of public enterprises. Financial statements of the loss-making public enterprises are analyzed in order to determine if they have received payments from general government units. In case of large transactions an ad-hoc evaluation is done, taking into account all individual information (business plan, profitability, past performance of similar undertakings, etc.), in order to decide whether the transaction is to be classified as capital transfer or as financial transaction. For securitization, detailed information is used on the special purpose vehicles (SPVs) in charge of this type of activity.

3.3 *Statistical techniques*

3.3.1 Data compilation employs sound statistical techniques to deal with data sources

The rapid survey of municipalities conducted by Istat is based on internationally accepted sampling techniques. Istat's collections of data from other government units are undertaken using full enumeration rather than sample surveys. The MEF data collections are from administrative accounting systems. As for the income, only information from the State budget is used and the estimate for other central government operations is determined residually as the difference between the State budget information and the total borrowing requirement of central government as computed from the financing side.

3.3.2 *Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

Istat procedures for estimating accrual data are consistent with international practices, and appear to make effective use of the available data. Generally, revenue is estimated by using techniques that time-adjust the cash data. In so doing, Istat is careful to take account of the different timing characteristics of the cash flows for a wide range of revenue items (for instance, different types of taxes). Expenditures are estimated from information on commitments. Reporting of data by local health units provides an exception to these general approaches in that they report to Istat (via the Ministry of Health) directly on an accrual basis. Interest expense is estimated on an accrual basis using the original terms of the contract to adjust for premiums or discounts. The estimation of the consumption of fixed capital follows the recommendations of Eurostat which are based on a shorter (as compared to the previous method) life time of the asset.

Normally, the cumulative accrual and cash estimates for particular items should be virtually identical over time. Istat noted that this is not currently the case for taxes in Italy because in the past the government built up extensive arrears by not paying tax refunds that were owed and has recently been reducing these arrears significantly. In particular, the treatment by Istat of the effects of the fiscal amnesty illustrates the process for reduction of discrepancies. The Law 282/2002 and Law 289/2002 provided a tax amnesty that allows tax payers to declare evaded taxes and to obtain a reduction in taxes due. The self-declared taxes, which are to be recorded as tax revenue according to the accruals principle and which can be paid by tax payers in installments, give rise to the recording of “other accounts receivable” (from the government perspective). This entry would remain until the last payment in cash is made by the tax payer. In addition, the Law decree 335/2004 extended the deadlines for the tax amnesty declarations which had an impact on the estimated amounts in terms of accruals.

When in 2006 the majority of payments had been made, it appeared that the estimates on an accrual basis of tax revenues related to tax amnesties were higher than the amounts cashed, Istat revised the accrual amounts for the year 2003 and 2004 and included in the assessments, which is the basic estimator for the accruals data, only the amounts effectively cashed.

3.4 *Assessment and validation of intermediate data and statistical outputs*

3.4.1 *Intermediate results are validated against other information where applicable*

Istat validates the major nonfinancial aggregates for the general government sector, as well as other sectors, in the context of the national accounts.

For specific transactions that need further attention, additional information is used for validation purposes, even if this information may become available only with considerable time lags. For instance, Istat would be advised by the MEF of instances where data are reported according to public accounting standards turn out to be not in conformity with national accounts requirements (for instance a dividend that includes the proceeds from privatization). On dividends, the financial statements of any single public enterprise are used from the Structural Statistics at Istat. Debt cancellations (for instance foreign debt of developing countries) are covered by the financial statement of SACE (Societa di assicurazione per il

credito alle esportazioni) and the MEF balance sheet. Other cases pertain to the accounting treatment of certain transactions. An example is the securitization of the sale of real estate assets (houses and apartments) that presented complex accounting problems, including the indemnisation of the real estate buyers that will have an impact on the deficit over a number of years. Also, following a court decision, a refund of VAT is to be recorded at the date of the legal decision as a capital transfer with a corresponding receivable. Similarly, after discussion with Eurostat, the guaranteed debt of a company that manages the construction of infrastructure in Italy was reclassified as government debt. Equally, under the ruling of Eurostat, prepayments coming from the private tax collectors were reclassified as financial transactions. More recently, in a complex transaction that involved government and nongovernment units, the prepayment of concession rights was to be recorded as government liability with the revenue to accrue over the life time of the concession. Finally, payments from enterprises to government of social contributions devoted to TFR scheme for future benefits (“trattamento fine rapporto”, payments due to employees when they end their employment contracts) are still in the stage of normative approval. This scheme corresponds to a non-autonomous funded pension scheme managed by employers. In any case, these payments are to be treated as current payments of social contributions.

The BI checks the consistency between stocks and flows of financial assets and liabilities of government. The BI also cross-checks data from different sources when they become available.

The MEF checks its database for central government debt with the BI for central government securities; the BI and the other ministries for loans; and the centralized Treasury for the current accounts deposits held by private sector units.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The behavior of series is cross-checked with related series/indicators. In the case of information about local authorities, cash data coming from the MEF are checked against the quality of the Istat survey.

3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

As noted earlier (see 0.1.1), the discrepancy between nonfinancial data and the corresponding financing data, in particular for years 1999 and 2000, was investigated by a high-level Commission (chaired by the President of Istat), whose work provided the basis for subsequent analysis culminating in significant revisions that reduced the discrepancies for 2001-2004. Commonly, Istat analyses the discrepancies in the raw data between the financial and non financial transactions and, in adjusting for accruals, derives other accounts payable and receivable. This exercise helps reducing some of the discrepancies and improving the coherence of these data. One of the tasks of the work of the working group on discrepancies was to look for information on transactions not covered by the standard sources. This helped to identify, for instance, the loans granted by the social security fund to public employees that helped to reduce considerably the discrepancy. In other cases, the issues are in the accounting treatment of certain transactions.

As regards the deficit, hardly any additional information becomes available between April 1 and October 1—in particular this is true for local government. Finalised budget reports of almost all government units are only available with a one-year time lag. No major revision of EDP figures is therefore possible. In order to provide users with a stable scenario, Istat's revision policy aims at not introducing negligible changes between April and October.

The general government accounts that are released by the first of March jointly with the full set of national accounts data, follow a well-established practice and agreement with the MEF, which uses the data in the “Relazione generale sulla situazione economica del Paese.” These accounts are based on the more extensive use of all the information that is available by the beginning of the year for government units. No use is made of preliminary estimates based on quarterly accounts data and the like.

After early March, gradually more data on public entities become available. This concerns public accounts as well as profit and loss statements, in so far as applicable. The reporting follows an established path that is related to the process of formal approval by government boards, such as the boards of the regions, of the provinces, municipalities, and so on. According to legal provisions, government bodies have to approve their final budgets within six months after the reference period—for instance, the budget for the year 2006 should be approved by the end of June 2007. The Istat Directorate for Structural Statistics should receive the data shortly after their approval if they are to be used in the calculation of the general government net borrowing. That is because the data need to be validated before they can be put at the disposal of the National Accounts Department. However, it happens very often that the deadlines for approval are not respected, implying that the data acquisition and the processing cannot start before the end of the year. It should be recalled that this process involves more than 9,000 government bodies.

The revision policy followed by the BI with regards to the debt data is slightly different, mainly due to the different source of data used. The debt data are not usually revised significantly between April 1 and October 1, but, due to the different revision policy, small revisions in the component time series are made whenever they are deemed necessary. The debt time series are therefore constantly updated and made available to the public through the BI website.

The time between the two EDP transmissions is mainly devoted to reconciling the change in debt and the deficit in an inter-institutional working group in which the BI, Istat, and the MEF participate. Whenever a significant revision (not a routine one) of debt data would occur between April and October, this would lead to a revision in the reconciliation items or, if new information is available, to a revision of the deficit.

3.5 Revision studies

3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)

Revisions are investigated and serve to inform statistical processes. In 2006, annual revisions have been made to the Istat national accounts time series back to 1980 and the factors leading

to revisions, investigated. In addition, a review is made of the transactions and revisions are made in cases where the EU decides on a different treatment from that adopted by Italy with regard to new arrangements (such as securitization) in the national accounts.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of the data meets or exceeds the periodicity standard of the SDDS, that is:

- Central government operations data are published monthly (SDDS monthly).
- Central government debt data compiled by the MEF are published quarterly (SDDS quarterly). In addition, the BI publishes monthly government debt data.
- General government operations data are published quarterly and annually (SDDS annually).

4.1.2 Timeliness follows dissemination standards

With the exception of data on monthly central government operations, Italy's GFS data meet the timeliness standard of the SDDS, as follows:

- Monthly central government operations data are not published until 45 days after the reference month (instead of within one month as per SDDS requirements).
- The quarterly central government debt data compiled by the MEF are published within one quarter (SDDS quarterly). The monthly government debt data compiled by the BI are published within two months after the reference period.
- Annual general government operations data are published within six months of the end of the year.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

General government sector data from the national accounts, from the BI, and the MEF are each internally consistent. Aggregates are consistent with their components, and balances are consistent with the aggregates. The sum of the data for subsectors, after appropriate consolidation, is consistent with the consolidated general government. Annual data are consistent with the sum of the quarterly estimates.

4.2.2 Statistics are consistent or reconcilable over a reasonable period of time

Government finance statistics time series are consistent over time—the MEF, the BI, and Istat are able to explain divergences from the expected trend, and there are no major breaks in the series due to methodological developments. The reclassification of the Cassa Depositi e Prestiti outside the government sector beginning from 2004 constitutes a break in the series, but has been sufficiently well documented. The Istat and the BI databases have been recalculated backwards following the introduction of the *ESA 95* methodology and more recently with the 2006 historical revision. (The revised time series cover data from 1980 to 2005.)

4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks

Most of the items included in Istat's estimates of the general government sector of the national accounts are consistent or reconcilable with the equivalent data sources elsewhere. In particular, external transactions of government are consistent with the balance of payments, net lending/borrowing is reconcilable with the cash borrowing data at the MEF, and data are consistent with other Istat data series.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The publication of general government statistics by each agency follows a regular and well understood pattern whereby initial data are preliminary and are subsequently replaced by revised data. For instance, in the context of the national accounts, Istat's first provisional annual estimates of year t are released on March 1 of the year $t+1$.

Despite the detailed documentation that relates to the revised data, some improvements could be made in terms of providing more details on GFS revisions in tabular form.

4.3.2 Preliminary and/or revised data are clearly identified

Preliminary data are not clearly identified by Istat although the revisions are explained and aggregate tables produced to show the magnitude of the revisions. The status of the MEF data is not identified, nor is there a general comment in their publication on the revision policy used (e.g., unless otherwise indicated, data are preliminary when first released). The MEF data are published showing cumulative current period data and the equivalent data for the previous two years. The BI publishes detailed notes to the statistical tables of the bulletins but could better identify revised data. While revised data are not individually identified in the tables published by the BI, a "Notice to readers" accompanies such tables and discusses changes to individual data points whenever methodological revisions occur. Furthermore, provisional data are always clearly identified in the tables of the statistical publications.

4.3.3 *Studies and analyses of revisions are made public (see also 3.5.1)*

Istat publishes several analyses and descriptions when extraordinary revisions are made (e.g., in 1999 in order to adopt the *ESA 95* system, and in June 2006 for the revision of long-time series from 1980 to 2005).

5. Accessibility

5.1 *Data accessibility*

5.1.1 *Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

Istat presents the GFS data according to the *ESA 95* framework, releasing a range of publications (synthetic and more detailed, presenting time series or methodological aspects, for specialists and researchers). The publications contain an analysis of current period developments. The estimates are disseminated at a detailed level and with time series. As noted in 2.1.1, Istat does not yet publish information on the financial transactions of general government.

Istat plans to disseminate in 2007 the EDP tables in a more user friendly format. Given that the accounts mirrored in the EDP deficit and debt notification are reconciled, as evidenced by the reduced level of discrepancies obtained after the cooperation work mentioned above, Istat is also studying a more user friendly reporting format for publishing GFS statistics.

The MEF data are presented in a standard national format, for each subsector, in both the quarterly and annual bulletins that provide a clear link between the aggregates and the derivation of the borrowing requirement. Extensive commentaries on developments in the data are also provided. However, the use of public accounting standards means that the format is more suited to specialist users.

The MEF also publishes data on the central government debt on a quarterly basis with a breakdown by instrument.

The BI presents data on the financing of the borrowing requirement and on gross debt. All the standard breakdowns are provided (subsector, instrument, and holder). Time-series data are available for the Istat and the BI aggregates.

Disseminating a reporting format based on the *GFSM 2001*—covering government revenue and current and capital expenditures, government deficit/surplus, government financing, and the balance, sheet—would help data users to understand the integrated framework of GFS. It would also help to enhance the effectiveness of the interagency working group in integrating the GFS components published by the various agencies. This is becoming even more relevant as Eurostat recently started to disseminate a similar reporting format for the EU countries, using data that may not always be of the latest vintage for Italy. The management and updating of an integrated set of GFS should be of primary interest to the Italian statistical system.

5.1.2 *Dissemination media and format are adequate*

As noted earlier, there is no single publication devoted to providing complete government finance statistics. As a result, users need to refer to several publications and formats to try to assemble a full picture of developments.

Istat publishes annual time series for general government data in the *ESA 95* format in its national accounts bulletins and in specialized publications on its website and statistics coming from other institutions (e.g., debt data from the BI) and reconciliation between cash borrowing requirement and deficit. In particular, Istat publishes:

- End of June, annual general government accounts online under the series *Statistics in short*. The accounts comprise the main aggregates of the nonfinancial transactions, analysis of taxes, social protection, gross fixed capital formation by the main kind of goods.
- End of December, expenditures according to the functional classification.
- 90 to 95 days after the end of the quarter, quarterly general government nonfinancial accounts.

In addition, Istat publishes general government data in a national accounts publication on gross fixed capital formation in September; in the *National Accounts Yearbook*; and in the *Istat Yearbook*. It also contributes to the *Relazione generale sulla situazione economica del paese* that the MEF publishes in March.

Istat has yet to publish the EDP notification tables at the national level, though it plans to do so in a user-friendly format with the next EDP notification, due before April 1, 2007.

The MEF provides cumulative quarterly public accounting data in its quarterly bulletin *Relazione Trimestrale di Cassa* and consolidated data for local government and local health units in the *Relazione sulla la situazione economica del paese*. In the *Relazione Trimestrale di Cassa*, the MEF publishes Central Government debt with an instrument breakdown. The BI provides details of financing in its monthly *Supplements to the Statistical Bulletin, Monetary and Financial Indicators*. The *Annual Report* of the BI provides annual data in a 10-year time series, including data on the formation of net lending/borrowing compiled by Istat. The BI publishes GFS data in its *Economic Bulletin*, in the *Annual supplement on Local Government debt* and in the *Quarterly Supplement on Flow of Funds Statistics (Conti Finanziari)*. These bulletins are available on the websites of the respective two agencies. The website of the BI also allows for the downloading of monthly time series.

5.1.3 *Statistics are released on a preannounced schedule*

In December of each year, Istat publishes a release calendar giving the precise release dates for the coming year for all datasets under its supervision, including the GFS that are produced with the national accounts. The same schedule is also available on the DSBB on a quarter-ahead basis.

5.1.4 *Statistics are made available to all users at the same time*

- General government revenue and expenditure data are released simultaneously through an Istat press release, followed by its national accounts publication.
- Central government operations data are released through an MEF press release on its website, followed by a hard copy publication.
- Central (and general) government debt data are released by the BI through supplements to its bulletin.

The press releases and publications are also simultaneously posted on the respective agency's website.

5.1.5 *Statistics not routinely disseminated are made available upon request*

Istat provides additional elaborations of general government revenue and expenditure data on request but only after taking account of confidentiality requirements. The MEF releases unpublished data very rarely. The BI regularly publishes a large amount of detail and on demand releases unpublished data for an earlier period than is available electronically.

5.2 *Metadata accessibility*

5.2.1 *Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

Metadata providing users with information about what the data mean and about the methodology used to collect and process them are, among other things, available from the Istat website. In addition, the press releases include a short methodological description. In addition, Eurostat's *Manual on Deficit and Debt* provides the background to Istat's work on compiling the general government sector of the national accounts. In addition, a wide range of research papers and other documents are prepared by Istat staff on many of the specific procedures used.

Very limited documentation is provided by the MEF in its publications, although extensive commentary on fiscal developments is included.

Publications prepared by the BI routinely include summary descriptions of the concepts, sources, and methods used. The *ESA 95* and *1993 SNA* provide the background for the compilation of flow-of-funds statistics, while Eurostat's *Manual on Deficit and Debt* is the reference for debt statistics.

5.2.2 *Levels of detail are adapted to the needs of the intended audience*

As noted, Istat plans in the near future to produce in a user friendly format the very extensive inventory for the EDP estimates.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

For each Istat website publication, contact persons are indicated. Istat's dissemination directorate monitors assistance through a periodic survey of users. Within the National Accounts Directorate, a separate service exists that is involved with preparation of publications, press releases, website updates, response to questionnaires from international organizations, etc.

The BI provides a contact e-mail address in each publication.

The names of contact persons for central government debt are published by the MEF (Debt Management Department) in its quarterly bulletin.

In addition, the contact person for each subject field is publicized on the IMF's Dissemination Standards Bulletin Board.

5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available

Catalogs of publications are widely available on the Internet websites of Istat, the BI, and the MEF. The Istat catalog clearly indicates the prices charged. Assistance in placing orders is available through Istat's data shops located in Rome and Milan, as well as through the statistical information centers located in each of Istat's regional offices.

Table 4. Italy: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(Compiling Agency: Istat in coordination with the MEF and BI)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			<ul style="list-style-type: none"> The responsibility for the compilation and dissemination of a comprehensive and integrated set of general government statistics is not assigned. Number of staff is not commensurate with strongly expanded tasks.
0.2 Resources			X			
0.3 Relevance			X			
0.4 Other quality management			X			
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			<ul style="list-style-type: none"> Statistics are mainly compiled in the context of the national accounts rather than in an integrated framework for fiscal analysis.
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs			X			<ul style="list-style-type: none"> The validation process is constrained by important lags in assessing the economic nature of certain transactions and practices that limit revisions to the data published by Istat.
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness			X			<ul style="list-style-type: none"> Monthly data on central government operations do not meet the SDDS one-month timeliness requirement.
4.2 Consistency		X				
4.3 Revision policy and practice			X			<ul style="list-style-type: none"> Preliminary and revised data are not clearly identified and insufficient details provided in tabular form.
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

Recommendations²⁰

- Establish the responsibility for compiling and dissemination of a comprehensive and integrated set of general government statistics, preserving the valuable interagency cross-checking by maintaining each agency's responsibility for the separate components (0.1.1, short term).
- Increase the number of permanent staff in Istat's National Accounts Directorate in view of the strongly expanded compilation program of the GFS (0.2.1, short term).
- Produce a comprehensive and integrated set of GFS, using the *GFSM 2001* framework, integrating GFS data produced by Istat, the MEF and the BI. The initiative currently underway to convert *ESA 95* data into the *GFSM 2001* format provides a good basis in that direction. (2.1.1, medium term).
- Pursue the work on exploiting sources on the trade credits²¹ financing of local health units (3.1.1, short term).
- In validating data, incorporate, in addition to methodological changes, new statistical information in the aggregate published figures (3.4.3, short term)
- Improve the timeliness of the data on the monthly central government operations in accordance with the SDDS (4.1.1, medium term).
- Istat to flag the status of published data (provisional, revised) and provide more details on GFS revisions in tabular form (4.3.1, short term).

²⁰ Recommendations are listed in the order of the DQAF.

²¹ These categories of financial instruments are not part of the Maastricht debt definition.

Summary of the Special Data Dissemination Standard (SDDS)¹

The SDDS prescribes the following practices under each of the identified dimensions:

Data dimension (coverage, periodicity, and timeliness)

- the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars providing at least one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to:

- post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and
- maintain an Internet website, referred to as the National Summary Data Page (NSDP), which contains the actual data described in the metadata and to which the DSBB is electronically linked.

The IMF staff is monitoring observance of the standard through NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

¹ Source: <http://dsbb.imf.org>

Data Quality Assessment Framework—Generic Framework
(July 2003 Framework)

Quality Dimensions	Elements	Indicators
<p>0. Prerequisites of quality</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>0.4 Other quality management—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</p> <p>0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.</p> <p>0.4.1 Processes are in place to focus on quality.</p> <p>0.4.2 Processes are in place to monitor the quality of the statistical program.</p> <p>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</p>
<p>1. Assurances of integrity</p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are produced on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

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<p>2. Methodological soundness</p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions—<i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization—<i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.4.1 Market prices are used to value flows and stocks.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>
<p>3. Accuracy and reliability</p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality</i></p>	<p>3.1 Source data – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Assessment of source data—<i>Source data are regularly assessed.</i></p> <p>3.3 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.</p> <p>3.3.1 Data compilation employs sound statistical techniques to deal with data sources.</p> <p>3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.4.1 Intermediate results are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).</p>

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<p>4. Serviceability <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p>	<p>4.1 Periodicity and timeliness— <i>Periodicity and timeliness follow internationally accepted dissemination standards.</i></p> <p>4.2 Consistency— <i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.3 Revision policy and practice— <i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 Periodicity follows dissemination standards.</p> <p>4.1.2 Timeliness follows dissemination standards.</p> <p>4.2.1 Statistics are consistent within the dataset.</p> <p>4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.</p> <p>4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>4.3.1 Revisions follow a regular and transparent schedule.</p> <p>4.3.2 Preliminary and/or revised data are clearly identified.</p> <p>4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).</p>
<p>5. Accessibility <i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility— <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility— <i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users— <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).</p> <p>5.1.2 Dissemination media and format are adequate.</p> <p>5.1.3 Statistics are released on a preannounced schedule.</p> <p>5.1.4 Statistics are made available to all users at the same time.</p> <p>5.1.5 Statistics not routinely disseminated are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.</p> <p>5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact points for each subject field are publicized.</p> <p>5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</p>