

**Romania: Report on Observance of Standards and Codes—Data Module**

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ROMANIA

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

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October 25, 2001

**EXECUTIVE SUMMARY**

This report provides an assessment of data dissemination practices in Romania in relation to the IMF's *General Data Dissemination System (GDDS)*. The report is based on the findings of mission that visited Romania during November 7–21, 2000.

Romania's transition to a market economy necessitated dramatic changes in its statistical system. The authorities embarked on a program to implement internationally recognized statistical methodologies and establish a framework for monitoring macroeconomic developments. Substantial improvements have been made in all statistical areas.

With the exception of government finance statistics, the statistics currently produced in Romania generally meet, and in many instances exceed, the recommendations of the GDDS with respect to coverage, periodicity and timeliness of dissemination. The authorities have indicated their intention to subscribe to the IMF's Special Data Dissemination Standard (SDDS) as conditions permit. However, with respect to other aspects of quality, further improvements are needed, especially in government finance statistics and, to a lesser extent, in financial and national accounts and balance of payments statistics.

The staff have recommended that more emphasis be given to strengthening government finance statistics, improving their compliance with internationally recognized methodological standards, and expanding the range of data disseminated to the public. In national accounts, continuing efforts should focus on improving the coverage of the informal sector and small-scale activity, and on reducing the substantial discrepancies related to the reconciliation of quarterly national accounts estimates with annual estimates. In the financial sector, closer adherence is needed to internationally accepted definitions of foreign assets and liabilities and the application of accrual accounting standards. In the external sector, the measurement of foreign direct investment income and related financial flows warrants improvement.

The material contained in this report is based on information obtained during a staff visit to Romania in late 2000. The mission team consisted of Mr. Charles Sisson (Head), Mr. Howard Murad (contractual), Mr. David Hughes (consultant) and Ms. Irina Turea (Resident Office of the World Bank), who was responsible for the preparation of the required socio-demographic information.

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## ACRONYMS

<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
<i>1993 SNA</i>	<i>1993 System of National Accounts</i>
BOP	Balance of payments
<i>BPM5</i>	<i>Balance of Payments Manual, fifth edition</i>
CAEN	Classification of Activity in the National Economy
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
DMFAS	Debt Management and Financial Accounting System
DSBB	Dissemination Standards Bulletin Board
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
<i>GFSM</i>	<i>Government Finance Statistics Manual</i>
<i>ICD 10</i>	<i>International Standard Classification of Diseases 10<sup>th</sup> Revision</i>
HIS	Integrated household survey
IIP	International investment position
ILO	International Labor Organization
IMF	International Monetary Fund
IPI	Industrial production index
ITRS	International transactions reporting system
<i>ISCED 97</i>	<i>International Standard Classification of Education 1997</i>
<i>ISIC</i>	<i>International Standard Industrial Classification</i>
LFS	Labor force survey
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NISES	National Institute of Statistics and Economic Studies
NBR	National Bank of Romania
OECD	Organization for Economic Cooperation and Development
PPI	Producer price index
SDDS	Special Data Dissemination Standard
SUT	Supply and use table

## I. THE STANDARD<sup>1</sup>

1. The principal standard against which Romania's macroeconomic and socio-demographic data are assessed is the IMF's General Data Dissemination System (GDDS).<sup>2</sup> The GDDS emphasizes the development of core statistical frameworks and indicators, supplemented by encouraged extensions to core frameworks and indicators. In addition to the four sectors into which economic data are grouped (real, fiscal, financial, and external), the GDDS includes socio-demographic data.

2. The GDDS places emphasis on following sound practices in four dimensions:

- the data dimension (the coverage, periodicity, and timeliness of the data)
- quality of the disseminated data
- integrity of the disseminated data
- access by the public

3. The primary focus of the GDDS is on presenting a framework for evaluating the need for data improvements, prioritizing such improvements, and providing guidance on data dissemination. The GDDS also focuses on data quality, recognizing the fact that for many countries improvements in data quality are a necessary precursor to enhanced dissemination of data to the public. The GDDS provides clear links to the IMF's Special Data Dissemination Standard (SDDS)—a more demanding standard for data dissemination—enabling a country to use the GDDS as a step towards subscription to the SDDS. Participation in the GDDS is voluntary. It requires a commitment to use the GDDS as a framework for statistical development; designation of a country coordinator; and preparation of metadata, for posting by the IMF on the Dissemination Standards Bulletin Board (DSBB).<sup>3</sup>

4. Romania participates in the GDDS and has made substantial progress in implementing its standards. A GDDS coordinator has been appointed, and metadata, including plans for improvement, have been posted on the DSBB. The authorities have been encouraged to make

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<sup>1</sup> In preparing this report, the staff held discussions with officials in the National Institute of Statistics and Economic Studies, National Bank of Romania, and the Ministry of Finance.

<sup>2</sup> Guides to the IMF's General Data Dissemination System and the Special Data Dissemination Standard (SDDS) can be found on the IMF's Dissemination Standards Bulletin Board on the Internet at <http://dsbb.imf.org>.

<sup>3</sup> Metadata refers to information about the data, such as how data are compiled and disseminated, data coverage, periodicity, timeliness, and plans for improvement.

the metadata available domestically and have indicated their intention to subscribe to the Special Data Dissemination Standard (SDDS) as conditions permit.

## II. SUMMARY OF PRACTICES

5. The coverage, periodicity, and timeliness for macroeconomic data in Romania are summarized and contrasted with GDDS recommendations in Table 1. As regards the quality of data, an experimental framework identifying six key aspects by which to assess the data is presented in Box 1 and is applied in Table 2.<sup>4</sup>

### A. Data Dimension: Coverage, Periodicity, and Timeliness

#### Real sector

6. National accounts are compiled by the National Institute of Statistics and Economic Studies (NISES). These data meet the GDDS recommendations, and are quite close to satisfying the stricter disclosure requirements of the SDDS. GDP data, at current and constant prices, are produced quarterly and published within three months of the end of the reference period. Currently, the quarterly constant price figures are measured at the prices of the same quarter of the previous year. However, a system based on internationally recommended chain-linked indices is being developed. A full set of sector accounts are also produced annually, except for balance sheets, which are planned to be constructed within the next year. The accounts generally conform to the concepts of the *European System of Accounts 1995 (1995 ESA)*, though adjustments are required to bring the data for past years into line. Coverage of informal activities is mainly based on the Labor Force Survey (LFS), which is a conceptually sound approach, and specific adjustments are also made for activities believed not to be covered by the LFS. In common with the vast majority of other countries, estimates are not made for illegal activities, due to the extreme difficulty in establishing reasonable sources and methods for these activities.

7. Substantial quarterly revisions to GDP estimates result from the reconciliation of quarterly with annual data. A major reason for this is that the NISES introduces revisions to quarterly data only once a year at the time of the annual reconciliation even though the nature and extent of some revisions are known ahead of the annual cycle.

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<sup>4</sup> This framework, which draws upon work done in the Fund and in other organizations, especially national statistical offices, focuses on six areas vital to the production and dissemination of statistics. These areas are the statistical infrastructure, including the legal and material basis for data production; the conceptual framework; the nature and characteristics of the source data; the statistical techniques used to compile the data; the serviceability or usefulness of the data compiled; and the accessibility of the data and metadata.

8. The consumer price index (CPI) conforms to the requirements of the GDDS as well as the SDDS in terms of periodicity and timeliness. Though principally based on prices collected in urban areas, national data from peasant markets and utility services are also covered. The weights used in aggregating the index are based on national data collected through the household integrated<sup>5</sup> survey; the weights are updated every year beginning in 1999. The producer price index (PPI) also meets the requirements of the GDDS and SDDS in terms of periodicity and timeliness. Currently, it only measures changes in domestic prices, but exports will be included shortly, covering all periods. A program has been introduced to update the PPI weights every three years.

9. A monthly volume index of industrial production is constructed, covering all production industries. A full range of labor statistics is also produced, in concordance with the requirements of the GDDS and SDDS.

### **Fiscal sector**

10. Fiscal data compiled by the Ministry of Finance (MOF) and disseminated in its publications and on its website ([www.mfinance.ro](http://www.mfinance.ro)) are the most problematic of the four economic sectors in terms of meeting GDDS recommendations on coverage. While the periodicity and timeliness of these data meet GDDS recommendations, the coverage does not. In both the monthly and annual data disseminated to the public, data on government grants are not available, and more importantly, the existence of several significant extrabudgetary accounts on which comprehensive information is not made available to the public, makes it difficult to obtain a comprehensive understanding of government operations. In this context, the failure to disseminate data on the financing of the overall fiscal balance makes it impossible to verify the consistency of data on government financial operations with other sectoral financial data, and clouds the user's ability to ascertain which fiscal activities are covered in the accounts. A well-articulated and time-bound action plan has not yet been developed to improve the quality and public dissemination of fiscal data, but the MOF has begun work on an accrual set of accounts in anticipation of the proposed changes in the IMF's *Government Finance Statistics Manual*.

11. Data on central government and publicly guaranteed debt are compiled by the MOF on a monthly basis and disseminated through MOF publications and its website, usually within a few days of the end of the preceding month in the case of government debt and three weeks for guaranteed debt.

### **Financial sector**

12. Financial sector statistics are compiled by the National Bank of Romania (NBR). The data for the banking system meet GDDS recommendations and almost all series additionally

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<sup>5</sup> Module of the Family Budget.

meet SDDS standards on coverage, periodicity, and timeliness. The only exception in timeliness is for reserve money in the Central Bank aggregates (Analytical Accounts of the Central Bank in the SDDS), which is only delayed by a matter of days. The definitions used by the NBR, with the exceptions noted below, are generally consistent with the IMF's *Monetary and Financial Statistics Manual (MFSM)* and the residency criteria recommended in the IMF's *Balance of Payments Manual, fifth edition (BPM5)*.

13. The NBR adopted accrual accounting as part of the introduction of a new chart of accounts (Chart of Accounts and Methodological Norms of Law number 101/1998, an amendment to the *National Bank of Romania Act*). However, NBR's holdings of treasury bills and government bonds and loans extended by the NBR and the commercial banks continue to be recorded on a cash basis.<sup>6</sup> Furthermore, accrued interest is included in other assets, rather than being recorded with the underlying instrument, as recommended by the *MFSM*.

14. Also, in contrast to *MFSM* and *BPM5* residency recommendations, NBR's foreign assets exclude Romania's membership subscriptions in international organizations, including Romania's IMF quota and subscriptions to the World Bank, European Bank for Reconstruction and Development, Bank for International Settlements, International Financial Corporation, and the Multilateral Investment Guarantee Agency, which are classified as domestic assets. Similarly, deposits of these organizations, including the IMF deposits that correspond to the IMF quota, are classified as domestic liabilities.

### **External sector**

15. Balance of payments data generally meet GDDS recommendations and SDDS standards on periodicity and timeliness, and also meet them for coverage of most components. The NBR does not publish a debt service schedule as recommended in the GDDS, but is taking steps to add a debt service schedule to the list of indicators disseminated.

### **Social and demographic indicators**

20. The NISES compiles and disseminates indicators on *population, education, health, and poverty* that meet GDDS objectives for coverage, periodicity, and timeliness. *Population* data from the census are updated during inter-censal years by using data derived from administrative records on births, deaths, and migration. The next census will be held in 2002.

21. The NISES calculates a broad set of *health* indices based on data received from the County Public Health Directorates, ministries that have their own medical network, the Ministry of Labor and Social Protection, the Ministry of Finance, and the National House of

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<sup>6</sup> It should be noted that the NBR's financial summary balance sheet, prepared once a year, incorporates full accrual accounting principles. The financial statement is published in the NBR's *Annual Report*, but it does not provide sufficient detail for analysis.



Health Insurance. Data on *education* are derived from educational units of all levels, and expenditure figures related to education are available from the Ministry of Finance. The classification system conforms to the International Standard Classification of Education (ISCED).

22. *Poverty* indices are derived from data collected through the Integrated Household Survey (IHS), a permanent multifunctional statistical survey, performed on a sample of 36,000 households, in 501 counties throughout the country. The information collected through this questionnaire covers members of the household (age, sex, education level, and occupational status); household consumption, expenses, and incomes; living conditions and ownership of durable goods.

## **B. Data Quality, Integrity, and Access**

### **Statistical framework**

23. Three agencies are primarily responsible for the production and dissemination of data covered by the GDDS—the NISES, MOF, and the NBR. The dissemination of most data is carried out as a public service. All three agencies currently disseminate data through various publications and the internet.

24. The role and responsibilities of the NISES are covered by an *Ordinance on Statistics*, last updated in September 2000. The president of the NISES is appointed, and reports to, the Prime Minister. Under the provisions of the *Ordinance*, the NISES is responsible for producing and disseminating objective and reliable statistical information, and for providing all users with equal access to these data. The *Ordinance* sets out the rights and obligations of respondents to statistical inquiries. It also guarantees the confidentiality of reported data and provides for administrative sanctions in cases of a breach of these requirements.

25. The MOF is responsible for compiling and disseminating fiscal data, including that for central and local government operations and the social security budget, and central government and government-guaranteed debt. *The Budget Law of Romania* authorizes the MOF to collect the information from local governments and government agencies to prepare statistics on government operations as needed for budgetary purposes. The annual report on the implementation of the central government budget is submitted to Parliament at the end of the fiscal year on the occasion of the presentation of the next year's budget. The *Law* requires the Treasury Department of the MOF to consolidate the reports on the implementation of the local and central government budgets. The MOF provides these consolidated reports to the parliament, government agencies, and other official users, and the IMF *Government Finance Statistics Yearbook*. In addition, annual and monthly aggregated data for the central and local government and the Social Security Fund are disseminated on the MOF website and in NBR and NISES publications.

26. The NBR is responsible for producing and disseminating data on the financial and external sectors. These data are produced and disseminated in accordance with requirements of (a) NBR's charter as outlined in the Banking Act (Law number 58/1998); (b) the National Bank of Romania Act (Law number 101/1998); (c) the Chart of Accounts and the Methodological Norms specifying the use of the NBR's accounts; (d) the Foreign Exchange Regulation Number 3/1997; and, (e) guidelines of the Ministry of Finance on actions for closing the financial year.

27. The provisions in these laws and regulations grant the NBR the legal right to require the submission of information by banks, financial companies, and institutions. They also require that the NBR ensure the confidentiality of all information it gathers. Severe penalties are specified for failure to treat data confidentially. The dissemination of statistical data is mandated by the National Bank of Romania Act. The NBR, as a result, has undertaken an extensive dissemination program. The program includes dissemination of monthly and annual data through publications, press releases, and posting of most recent data on the NBR web site (<http://www.bnro.ro>).

28. The NISES is responsible for the production and dissemination of socio-demographic data. The broad legal authority of the NISES noted in paragraph 20 allows the NISES to develop reliable statistics based on direct collection of data supplemented by data from administrative records.

#### **Source data**

29. According to the *Ordinance on Statistics*, all institutions of the public sector (general government and government enterprises) as well as private enterprises, self-employed persons, households and individuals must report statistical information to the NISES. The *Ordinance* sets out the range and type of official statistics to be compiled. The NISES is charged with the responsibility for developing and ensuring the implementation of the statistical standards, classifications, and methodology for collecting, compiling and disseminating these data. Accordingly, the NISES designs and runs surveys for the collection of statistical data. However, much of these data are compiled from administrative records of the MOF, including that for enterprises.

30. Data on government revenues and expenditures, covering all government levels, are compiled from administrative records of the MOF's Treasury Department, as supplemented by submissions from government ministries and agencies. Data on expenditures on development projects financed through grants and loans from abroad are incomplete but recorded in the treasury accounts as they are provided. Domestic and foreign debt data are provided by the General Department of Public Debt at the MOF.

31. The monetary aggregates published by the NBR are based on actual accounting records of the NBR and the other depository corporations. Separate balance sheet data for the monetary authorities and for other depository corporations are published by the NBR.

32. The NBR relies primarily on reports from commercial banks on their own transactions and customer transactions, direct reporting by official agencies and international organizations for the compilation of the balance of payments.

33. There are several weaknesses in the source data used to compile external sector data. The most significant relates to the measurement of foreign direct investment income and related financial account transactions, which is due to the reliance on the international transactions reporting system (ITRS). The NBR is in the process of introducing a survey of foreign direct investors so that it can produce more accurate data for these transactions.

34. In addition, the NBR will be upgrading the ITRS program by introducing new reporting forms for clients of commercial banks on their nonresident receipts and payments. Under the new system, to be introduced next year, the commercial banks will report to the NBR all transactions between residents and nonresidents on a transaction by transaction basis, improving the accuracy and coverage of BOP data other than foreign direct investments, particularly transfers and other nontrade current account items.

35. The NBR compiles an international investment position (IIP) statement, which is disseminated annually, with selected data items published monthly. The sources of data are the same as those for the relevant portions of the BOP statement. The IIP statement, therefore, has similar deficiencies particularly with respect to the measurement of foreign direct investments, and the planned improvements in the BOP source data will also lead to improvements in the IIP statement.

36. The compilation of socio-demographic data by the NISES is based on the decennial census for population, vital statistics system, the Integrated Household Survey for poverty, surveys on labour force and salaries, etc., reporting from other government units for health, and direct reporting from schools for education.

### **Statistical techniques**

37. Substantial quarterly revisions to GDP estimates result from the reconciliation of quarterly with annual data. A major reason for this is that the NISES introduces revisions to quarterly data only once a year at the time of the annual reconciliation even though the nature and extent of some revisions are known ahead of the annual cycle.

38. These reconciliations relate to eliminating differences in measures of GDP (production, expenditure, and income approaches), differences between quarterly and annual estimates, and differences among institutional sector accounts. No adjustments are made for seasonality, but adjustments have to be applied to the collected data for the national accounts to cover under-reporting. Additions are also made for those producers not covered in the registered statistics. The fact that national accounts data are often subject to massive revisions raises concerns with respect to the accuracy of the data. GDP components in particular for quarterly GDP data, are occasionally not very plausible.

39. The MOF does not make any statistical or seasonal adjustments to the fiscal data it compiles, which are provided both on a monthly and annual format. Receipts and payments in foreign currency are transacted through the NBR at the prevailing market exchange rate on the date the transaction is effected.

40. The NBR does not use any sampling or other estimating techniques for monetary statistics. Statistical and seasonal adjustment are also not used. For the balance of payments, the NBR and the NISES make coverage adjustments to the customs data. Otherwise, the BOP is compiled on the basis of the international transactions reporting system (ITRS), which reflects cash transactions through the commercial banks, supplemented by information from the MOF and the NBR's own records. The BOP data are not adjusted for seasonality. The NBR also produces and disseminates an annual international investment position statement (IIP). The IIP uses the same sources of data as the BOP and therefore has similar limitations.

41. The NISES relies on censuses and surveys in the compilation and dissemination of socio-demographic data. The surveys are conducted in accordance with recommendations for development of sampling frames. Censuses are subject to post-enumeration survey analyses.

### **Serviceability**

42. The NISES publishes brief descriptions of concepts and methods in each issue of the *Monthly Statistical Bulletin* and the *Statistical Yearbook*. A more detailed description was produced a few years ago, with the assistance of the OECD, but this has not yet been updated. Data series are published in sufficient detail to allow users to make rough cross-checks in order to validate the estimates.

43. Government finance data depart significantly from internationally accepted recommendations, particularly with respect to financing data. No comprehensive documentation of the methodology applied is disseminated by the MOF, but footnotes to individual tables provide some guidance to classification standards. Data on the general government operations are disseminated with some classification details which permit limited reasonability checks by the users. However, as no data on the financing of the overall balance are disseminated, it is impossible to cross-check the fiscal and the money and banking data. The MOF has recently begun work to reconcile MOF data on bank financing and the NBR data on the banking sector's net claims on government.

44. With regard to the provision of information that allows users to assess aspects of the *quality of data*, the NBR provides footnotes and methodological notes to the monetary and balance of payments tables published in its *Monthly Bulletin* and *Annual Report*. In addition, the NBR publishes a *Balance of Payments and International Investment Report* that provides a detailed methodology for the external sector. There are no other published methodologies, although the NBR has provided comprehensive notes on balance of payments compilation to the IMF for inclusion in the *Balance of Payments Yearbook*. The data disseminated by the

NBR are presented in sufficient component detail and time series to permit users to assess the reasonableness of data.

45. The monetary survey data produced by the NBR uses balance sheets from its own accounts and from monthly balance sheet reports submitted by the other depository corporations. The BOP relies on the balance sheet data from the monetary survey for some financial account transactions, thus ensuring a degree of similarity of instrument and institutional coverage. The BOP data on reserves are checked for consistency with the foreign asset position of the banking system. The NBR uses the *BPM5* residency criterion for both the monetary survey and the BOP, although in practice the residency rule is not applied uniformly.<sup>7</sup>

46. There are plans to strengthen data compilation at the NBR and at agencies that provide data to it. For its part, the NBR is currently reviewing the compilation of monetary statistics in light of the IMF's *Manual on Monetary and Financial Statistics (MFSM)* and has also embarked on a program to improve the analytical framework for international reserves, exchange rates, and interest rates. In the balance of payments area, the NBR has undertaken a broad program to improve data compilation through the: (a) introduction a foreign direct investment survey that will improve estimates of current and financial transactions of foreign direct investors, and (b) introduction of an expanded program to collect data from the commercial banks on customers' transactions. Finally, the MOF will begin to compile data on grant aid through an upgrade of the DMFAS program that will distinguish between current and capital transfers.

47. Social and demographic data are disseminated in sufficient component detail and time series format to permit users to assess the reasonableness of these data. A post-enumeration survey is conducted to verify coverage of the census. However, discrepancies between administrative and survey data are not reconciled, leading to differences in disseminated data.

### **Accessibility**

48. The NISES does not currently publish an advance release calendar, but is planning to do so within the next 12 months. All data, including socio-demographic data, are released simultaneously to all users through press releases, regular publications and the Internet.

49. The MOF disseminates statistics simultaneously to all users outside the ministry through its own publications and its website ([www.mfinante.ro](http://www.mfinante.ro)). These data include information on central and local government revenues and expenditures, and are supplemented by the operations of several extrabudgetary accounts including the Social Security Fund.

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<sup>7</sup> The major divergence from the internationally accepted residency rule concerns accounts of international organizations, which are treated as domestic assets and liabilities.

While the MOF does not produce an advance release calendar, data are provided on a regular basis.

50. The NBR does not provide a methodology for the compilation of monetary statistics. However, disseminated data broadly conform to the guidelines of the IMF's *MFSSM*, and the NBR provides some methodological notes in its *Annual Report*. Data are published in the *Monthly Bulletin* and the *Annual Report* and are available on the NBR's web site (<http://www.bnro.ro>). A methodology for the compilation of the balance of payments and the international investment position is published and updated annually in the NBR's *Balance of Payments and International Investment Position*.

51. NBR data are released simultaneously to all users. Data are provided to the Ministry of Finance, international organizations and the Parliament ahead of release to the general public. Commentaries and analyses are provided for some data series (the monetary survey and the balance of payments) at the time of the release of the data.

52. Social and demographic data are disseminated in sufficient component detail and time series format to permit users to assess reasonableness of data. Publications containing relevant data contain technical notes explaining the concepts and definitions used. The NISES usually conducts a post enumeration survey for major statistical events.

### III. IMF STAFF COMMENTARY

53. Romania's transition to a market economy necessitated dramatic changes in its statistical system. With extensive external technical assistance, including some from the Fund, as well as under the impetus of economic adjustment programs, the authorities have embarked on a program of implementing new, internationally recognized statistical methodologies and establishing a framework for monitoring macroeconomic developments. The NISES, MOF, and NBR have enhanced their capability to compile and disseminate statistics to meet the needs of both official and private users of statistics. Substantial improvements have been made in all statistical areas.

54. With some exceptions, the statistics currently produced in Romania generally meet, and in most instances exceed, the recommendations of the GDDS with respect to coverage, periodicity and timeliness of dissemination. However, with respect to other aspects of quality, further improvements are needed, especially in national accounts and government finance statistics and, to a lesser extent, in other sectoral statistics.

55. Three characteristics of the fiscal sector accounts particularly hamper the interpretation of central government budgetary operations. First, of particular concern is the practice of not disseminating data on government budgetary financing. In the absence of data on budgetary financing items the normal cross-checks to verify the budgetary deficit levels are not available, reducing confidence in the comprehensiveness of budget data. Second, the

growing practice of moving important policy initiatives off-budget makes the reconciliation of financing flows and debt stocks particularly important. In particular, the agency which purchases nonperforming loans from the banking sector, known by the Romanian acronym of AVAB, was moved off-budget in January 2000, but continues to be funded by government debt as it purchases nonperforming loans from the banking sector at face value. Third, the distinction between government debt and publicly guaranteed debt is not as clear as it is in

most countries, with the government issuing guarantees for energy-related government agency operations that are important elements of public policy. Greater political commitment to fiscal transparency will be required to resolve these issues.

56. Real sector statistics fully conform to the requirements of the GDDS for periodicity and coverage, but not for timeliness. Discrepancies related to the reconciliation between quarterly GDP data and annual GDP data have limited the ability of analysts to use these data with confidence. The problem is particularly acute in respect to the growth rates of quarterly GDP components, some of which are not plausible, and in some cases they are not compatible with the annual data.

57. Many deficiencies in national accounts data can be traced either directly or indirectly to the shortage of skilled staff. Low wage scales are a chronic problem endemic to all government agencies, and in the absence of any other funds to supplement these wages, it is extremely difficult for the NISES and other government data reporting agencies to attract and retain the suitably qualified staff necessary to perform their mission. This not only jeopardizes the planned improvements to statistics, but also risks a deterioration in the quality of the existing systems.

58. Financial and external sector statistics produced and disseminated by the NBR generally conform to GDDS recommendations. Existing areas of concern, such as the misapplication residency standards to certain foreign assets, the lack of adherence to accrual accounting principles, and deficiencies in the measurement of foreign direct investment, and nontrade current account items, particularly transfers, are likely to be eliminated through ongoing programs given the strong commitment to the development of reliable statistics by management and the presence of a devoted and well-trained staff.

59. The NISES has developed accurate measures for socio-demographic data (population, labour market, education, health, and poverty), and remains alert to the need for continued review and improvement. The greatest need is to address issues relating to the harmonization of the compilation of current data with EUROSTAT standards, a process that is currently underway.

60. Romania's participation in the GDDS should provide a new stimulus to the process of transforming its statistical system. As part of their efforts at meeting the recommendations of the GDDS, the authorities have articulated comprehensive plans for improvement in their data compilation and dissemination practices, including prioritization, sequencing, and timing of

implementation. The work program to improve the quality of statistics is detailed and is available on the DSBB at <http://dsbb.imf.org/>. Many of the initiatives run through to the medium term and beyond, and the special emphasis on meeting EUROSTAT standards should encourage a substantial improvement in the quality of data.

61. The program of future improvements undertaken by the authorities represents a credible first step toward their stated objective of subscribing to the SDDS in the medium term. Final achievement of this objective, however, will require the commitment of additional resources, both physical and financial, to the compilation and dissemination of statistical data.

#### **IV. COMMENTS FROM THE AUTHORITIES**

62. The Romanian authorities did not make any substantive comments on the report. A number of technical changes were suggested, all of which have been included in this paper.



**Box 1. An Approach to the Assessment of Data Quality**

Statistical infrastructure	The institutional and legal foundation for the collection, compilation, and dissemination of macroeconomic statistics.
Conceptual framework	The body of features relating to concepts, definitions, coverage, classification, sectorization, and other aspects of macroeconomic statistics that is intended to provide the analytical basis for the compiled statistics.
Source data	The nature of the source data and the manner in which they are processed.
Statistical techniques	The body of statistical estimation, adjustment, and other methods, together with methods of ensuring arithmetic precision, as applied to data collection and processing.
Serviceability	The features relating to requirements of users in terms of general usefulness, consistency, and revisions policy and practices.
Accessibility	The availability of data and metadata to users.

**Table 1. Romania: Data Categories and Indicators: Comparison of the GDDS Recommendations and National Practices**

(\* Indicates SDDS standard is met)

	Coverage		Periodicity		Timeliness <sup>1</sup>	
	GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
<b>1. Real Sector</b>						
Comprehensive framework: <b>National accounts</b>	Producing and disseminating the full range of national accounts aggregates and balancing items in nominal and real terms, yielding Gross Domestic Product, Gross National Income, Gross Disposable Income, Consumption, Savings, Capital Formation and Net lending/borrowing. Producing and disseminating sectoral accounts and national and sectoral balance sheets as relevant.	Same coverage as recommended	Annual	Quarterly*	10-14 months	3 months*
Data categories and indicators	<b>National Accounts Aggregates:</b> GDP (nominal and real)	Same coverage as recommended	Annual	Quarterly*	6-9 months	3 months*
	<i>Encouraged extension: Gross national income, capital formation, saving</i>	<i>Same coverage as recommended</i>	<i>(Quarterly encouraged) Annual</i>	<i>Quarterly</i>	<i>6-9 months</i>	<i>3 months</i>
	<b>Production index/indices:</b> Manufacturing or industrial (IPI)	The monthly IPI is based on the volume of production plus any output for own use. Since January 1999, data have been collected for 2500 products	Monthly	Monthly*	6 weeks-3 months for all indices	1 month*
	Primary commodity, agricultural, or other as relevant	Data are not available.	As relevant	Not applicable	Same as above	Not applicable
	<b>Price indices:</b> Consumer price index	Prices are collected from urban centers, but the weights used cover all households in Romania. Prices are collected from registered outlets and farmers' markets.	Monthly	Monthly*	1 or 2 months	10 days*
<i>Encouraged extension: Producer price index (PPI)</i>	<i>The PPI is a Laspeyers index measuring monthly changes in industrial products' prices.</i>	<i>Monthly</i>	<i>Monthly*</i>	<i>1 or 2 months</i>	<i>1 month*</i>	



**Table 1. Romania: Data Categories and Indicators: Comparison of the GDDS Recommendations and National Practices**

(\* Indicates SDDS standard is met)

	Coverage		Periodicity		Timeliness <sup>1</sup>	
	GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
<b>Central government debt</b>	Producing and disseminating comprehensive data on central government domestic and foreign financing, with breakdowns (debt holder, instrument, currency, etc. as relevant).	Same coverage as recommended	Annual	Monthly	6-9 months	6 weeks after the end of the reference period
Data categories and indicators	<b>Central government budgetary aggregates:</b> Revenue, expenditure, balance, and Financing with breakdowns (debt holder, instrument, currency), as relevant.  <i>Encouraged extension: Interest payments</i>	Same as Central government operations above.  <i>Preliminary monthly (cumulative) data on total interest payments are disseminated.</i>	Quarterly  <i>Quarterly</i>	Monthly (cumulative)  <i>Monthly (cumulative)</i>	1 quarter  <i>1 quarter</i>	3 weeks  <i>3 weeks</i>
	<b>Central government debt:</b> Domestic debt and foreign debt, as relevant, with appropriate breakdowns (currency, maturity, debt holder, instrument), as relevant.  <i>Encouraged extension: Government guaranteed debt.</i>	Same as Central government debt above.  <i>Government guaranteed debt data are disseminated at the time that Central government debt data are disseminated.</i>	Annual <i>(Quarterly encouraged)</i>  <i>Annual</i>	Monthly  <i>Not applicable</i>	1-2 quarters  <i>1-2 quarters</i>	6 weeks  <i>6 weeks</i>
<b>3. Financial Sector</b>						
Comprehensive Framework: <b>Broad money survey</b>	Producing and disseminating comprehensive data emphasizing: (1) coverage of all depository corporations (banking institutions), (2) use of an appropriate analytical framework, and (3) development of classifications of external assets and liabilities, domestic credit by sector, and components of money (liquidity) and nonmonetary liabilities.	Same coverage as recommended.	Monthly	Monthly*	2-3 months	1 month*
Data categories and indicators	<b>Broad money and credit aggregates:</b> Net external position, domestic credit, broad or narrow money	Same coverage as recommended.	Monthly*	Monthly	1-3 month	1 month*
	<b>Central bank aggregates:</b> Reserve money	Same coverage as recommended.	Monthly	Monthly	1-2 months	2 weeks

**Table 1. Romania: Data Categories and Indicators: Comparison of the GDDS Recommendations and National Practices**

(\* Indicates SDDS standard is met)

	Coverage		Periodicity		Timeliness <sup>1</sup>	
	GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
	<p><b>Interest rates:</b> Short- and long-term government security rates, policy variable rate</p> <p><i>Encouraged extension: Money or interbank market rates and a range of deposit and lending rates</i></p>	<p>The NBR publishes partial data on short- and long-term interest rates. The dissemination program is currently under review and the NBR intends to meet recommended interest rate guidelines.</p> <p><i>The NBR disseminates a range of interest rates by maturity for domestic and foreign currency deposits and short term rates for domestic and foreign currency loans.</i></p>	<p>Monthly</p> <p>Monthly</p>	<p>Monthly</p> <p>Monthly</p>	<p><sup>2</sup></p>	<p>2 weeks</p> <p>2 weeks</p>
	<p><b>Stock market:</b> <i>Share price index, as relevant</i></p>	<p><i>Same coverage as recommended.</i></p>	<p>Monthly</p>	<p>Monthly</p>	<p><sup>2</sup></p>	<p>1 month</p>
<b>4. External Sector</b>						
<p>Comprehensive framework: <b>Balance of payments</b></p>	<p>Producing and disseminating comprehensive data on the main aggregates and balancing items of the balance of payments, including e.g., imports and exports of goods and services, trade balance, income and transfers, current account balance, reserves and other financial transactions, and overall balance, with detailed components as relevant.</p> <p><i>Encouraged extension: International Investment Position (IIP). **</i></p>	<p>Broadly, same coverage as recommended. Data compiled according to <i>BPM5</i> recommendations to the extent possible.</p> <p><i>Same coverage as recommended.</i></p>	<p>Annual</p> <p>Annual</p>	<p>Annual and quarterly</p> <p>Annual and quarterly (selected components disseminated monthly)</p>	<p>6–9 months</p> <p>6–9 months</p>	<p>4 months for annual data, and 2 months for quarterly data</p> <p>4 months for annual data and 2 months for quarterly data</p>
<p>Data categories and indicators</p>	<p><b>Balance of payments aggregates</b> Imports and exports of goods and services, current account balance, reserves, overall balance</p>	<p>Same coverage as recommended.</p>	<p>Annual (Quarterly encouraged)</p>	<p>Annual and quarterly</p>	<p>6 months</p>	<p>4 months for annual data, and 2 months for quarterly data</p>

**Table 1. Romania: Data Categories and Indicators: Comparison of the GDDS Recommendations and National Practices**

(\* Indicates SDDS standard is met)

	Coverage		Periodicity		Timeliness <sup>1</sup>	
	GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
	<b>External debt and debt service</b> Public and publicly guaranteed debt outstanding (with maturity breakdown)	Same coverage as recommended.	Quarterly	Twice yearly	1-2 quarters	2 weeks
	Public and publicly guaranteed debt service schedule	A debt service schedule is not disseminated.	Twice yearly (with data for 4 quarters and 2 semesters ahead)	Not applicable	3-6 months	Not applicable
	<i>Encouraged extension: Private external debt not publicly guaranteed</i>	<i>Information on flows related to private sector external debt is included in the balance of payments statement and stock data are included in the international investment position statement</i>	<i>Annual</i>	<i>Quarterly and annual</i>	<i>6-9 months</i>	<i>4 months for annual data and 2 months for quarterly</i>
	<b>International reserves:</b> Gross official reserves denominated in U.S. Dollars	Same coverage as recommended.	Monthly	Monthly	1-4 weeks	1 month
	<i>Encouraged extension: Reserve related liabilities.</i>	<i>Same coverage as recommended.</i>	<i>Monthly</i>	<i>Monthly</i>	<i>1-4 weeks</i>	<i>1 month</i>
	<b>Merchandise trade:</b> Total exports and total imports	Same coverage as recommended.	Monthly	Monthly	8 weeks-3 months	1 month
	<i>Encouraged extension: Major commodity breakdowns with longer time lapse</i>	<i>Same coverage as recommended.</i>	<i>Monthly</i>	<i>Monthly</i>	<i>8 weeks-3 months</i>	<i>1 month</i>
	<b>Exchange rates:</b> Spot rates	Same coverage as recommended.	Daily	Weekly	<sup>2/</sup>	1 working day
<b>5. Socio-demographic data<sup>3</sup></b>						
Data categories and indicators	<b>Population:</b> Educational level and other characteristics (only at the Population Census)	Population size, births and deaths are available by age-sex distribution, area, location, and educational level where applicable. Population growth rate and age-specific and total fertility rates are computed and disseminated.	<sup>4/</sup>	Annual	<sup>4/</sup>	6 months

**Table 1. Romania: Data Categories and Indicators: Comparison of the GDDS Recommendations and National Practices**

(\* Indicates SDDS standard is met)

	Coverage		Periodicity		Timeliness <sup>1</sup>	
	GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
	<b>Health:</b> <sup>4</sup>	<p>Infant mortality rates by area, morbidity and mortality rates by disease and area, medical personnel by specialization, number of facilities and beds by institution, and health expenditures are collected and disseminated.</p> <p>Contraceptive prevalence rates and maternal deaths are disseminated.</p> <p>Data on malnutrition are collected and disseminated as needed.</p>	<u>4/</u>	<p>Annual. Data on infectious diseases are disseminated monthly.</p> <p>Monthly</p> <p><i>Ad hoc</i></p>	<u>4/</u>	<p>6 months; monthly within one week.</p> <p>6 months</p> <p><i>Ad hoc.</i></p>
	<b>Education:</b>	<p>Data available on enrollment rates by level, type of program, and field of study; graduates classified by ISCED levels; teaching staff by level; and the number of primary and secondary institutions.</p> <p>Repetition rates by level and gender, and expenditures on education are collected annually but disseminated in an ad hoc fashion. Progression to grade 5 and literacy rates are available on an ad hoc basis.</p>	<u>4/</u>	<p>Annual</p> <p><i>Ad hoc</i></p>	<u>4/</u>	<p>Before beginning of next academic year</p> <p>Ad hoc</p>
	<b>Poverty:</b>	Data (except access to credit) derived from the "Living Standard Measurement Survey 1998" ("LSMS 1998").	<u>4/</u>	Every three years.	<u>4/</u>	One year after fieldwork completed

\*\* As proposed by Mr. Marian Mustăreacă, Director, Statistics Division. [Note added by NBR.]

<sup>1</sup> With respect to reference data or end of reference period.

<sup>2</sup> Dissemination as part of a high-frequency (e.g. monthly) publication.

<sup>3</sup> All indicators should be classified as applicable by age, gender, urban/rural residence and/or relevant attributes.

<sup>4</sup>The World Bank, in collaboration with other international institutions, is developing a set of recommended good practices.

**Table 2. Romania: Salient Features of the Data Quality Matrix**

	Statistical Infrastructure	Conceptual Framework	Source Data	Statistical Techniques	Serviceability	Accessibility
<b>Real Sector</b>						
National accounts aggregates; Production index	Government Ordinance no. 111/2000 issued in September 2000 authorizes the NISES to collect, process, analyze and disseminate data for the real and socio-demographic sectors. This ordinance does not specify that the statistics should conform to international standards, but does stipulate that the standards should be free from interference by any other domestic agency. It also guarantees the independence of the staff though the President and Vice-Presidents of the NISES are appointed by the Prime Minister.	The national accounts are based on the <i>European System of Accounts 1995 (1995 ESA)</i> . Annual estimates of gross domestic product (GDP) at current and constant prices are produced using the production, expenditure and income approaches. The National Bank of Romania (NBR), with the assistance of the NISES, produces financial accounts. Quarterly estimates of GDP at current and constant prices are produced using the production and expenditure approaches. Supply and use tables (SUTs) are produced annually at current and constant prices.	The NISES conducts a survey based on a comprehensive business register (REGHS), updated monthly, which covers all legal units (public and private enterprises, family associations and the self-employed) carrying out an economic or social activity. Annually, business accounts collected by the MOF, information supplied by the State Property Fund, data supplied by the NBR, and statistical surveys operated by the NISES are also reconciled with the REGIS. Another source of data for enterprises since 1993 is the annual Structural Survey of Enterprises.	Discrepancies are treated as follows: (1) <i>Between production, expenditure and income measures of GDP</i> : Production and expenditure components are fully reconciled through SUTs annually for both current and constant price data; (2) <i>Between quarterly and annual estimates</i> : For some data, such as government budget data, there are total consistencies. For other data the quarterly estimates are adjusted to the annual data through a simple prorating; and, (3) <i>Among institutional sector accounts</i> : Each transaction is balanced across the sectors, but the figures for each sector are not themselves reconciled.	Annual SUTs are prepared and balanced for 105 activities and 105 products. The national classifications used are consistent with international standards. The SUTs are compiled at both current prices and at the average prices of the preceding year, as recommended by the <i>1995 ESA</i> . Balancing is done simultaneously at current and constant prices ensuring that the implicit deflators underlying the data are reasonable. For the sector accounts, individual transactions are balanced between sectors. However, the transactions for each sector are not reconciled leading to small differences between net lending/borrowing as recorded in the capital and financial accounts.	The national accounts and price indices are published in the NISES <i>Monthly Statistical Bulletin</i> and in the <i>Statistical Yearbook</i> . Data is also available for a fee on CD-ROM or diskette. Finally, summary data are available from the NISES website ( <a href="http://www.insse.ro">http://www.insse.ro</a> ).



**Table 2. Romania: Salient Features of the Data Quality Matrix**

	<b>Statistical Infrastructure</b>	<b>Conceptual Framework</b>	<b>Source Data</b>	<b>Statistical Techniques</b>	<b>Serviceability</b>	<b>Accessibility</b>
Consumer Price index (CPI)	See national accounts	The Romanian CPI, a Laspeyres type index, measures changes in prices for goods and services excluding goods for own consumption and imputed rent for owner-occupied dwellings. Prices are collected from 68 collection centers in the 42 regional capitals of Romania. The classification system is the Romanian CPI Nomenclature, which conforms to COICOP.	The weights are derived from the 1997 Household Integrated Survey. Beginning in 1999 with the update of the base year to 1997, the weights are being updated annually.	The CPI is not seasonally adjusted. Price data are collected three times a month (i.e., every 10 days) through personal visits. Each collection center obtains a single price for each item on their list, giving a total of around 60,000 items every ten days. At the national level, each item index is computed as the arithmetic mean of the price ratios of its constituent varieties. Beginning with 2001, the geometric mean is used.	No advance release calendar is published. The CPI is published for the overall index and three principal groupings: (a) food products (54 groups); (b) nonfood products (112 groups); and (c) services (48 groups). The detailed breakdown of the data allows users to evaluate the quality of individual components.	Disseminated is through a monthly press release, the NISES monthly <i>Prices Statistical Bulletin</i> , the annual <i>Statistical Yearbook</i> , and via the internet ( <a href="http://www.insse.ro">http://www.insse.ro</a> ). A detailed methodology for the CPI is published every January in the <i>Prices Statistical Bulletin</i> , and a summary of the methodology is published in other issues.
Labor market indicators – employment, unemployment, and wages	See national accounts.	Employment and wages data are compiled monthly, quarterly, and annually. The classification system used is the Romanian Classification of Activity in the National Economy (CAEN) which is consistent with EUROSTAT's NACE Rev.1 down to the 4-digit level. The quarterly labor force survey, which does not include data on wages, conforms to ILO standards.	<i>Monthly employment and wages</i> data are derived from a monthly sample survey of 10,000 enterprises and public authorities. <i>Monthly unemployment</i> is based on data on registered unemployed workers available from the National Agency of Employment and Professional Training. <i>Quarterly employment and unemployment data</i> are based on a quarterly labor force survey of 18,000 households. <i>Annual employment and wages data</i> are derived through a sample survey of 32,000 entities.	The NISES uses sample surveys to derive employment and wages data. The sampling techniques follow international guidelines and recommendations. Unemployment data are based on the actual number of registered unemployed workers.	Monthly employment and wages data are disaggregated by industrial classification. The quarterly employment series provides details on gender, age, and geographic district. Unemployment data distinguish gender, geographic district, and status (those receiving monetary benefits, vocational training, or compensatory payments, and those without monetary benefits).	Brief details of the methodology are included with published data. Comprehensive details of the quarterly labor force survey are included in the final publication three months after the end of the reference quarter.

**Table 2. Romania: Salient Features of the Data Quality Matrix**

	Statistical Infrastructure	Conceptual Framework	Source Data	Statistical Techniques	Serviceability	Accessibility
<b>Fiscal Sector</b>						
Central government budgetary aggregates	<i>The Budget Law of Romania</i> authorizes the MOF to collect the information from local governments and government agencies to prepare statistics on government operations as needed for budgetary purposes.	<i>The Budget Law of Romania</i> provides the basic parameters for the MOF reporting of fiscal data, but no description of its methodology is publicly available beyond that provided in footnotes to fiscal data tables.	Monthly data are based on the unaudited accounting records of actual transactions maintained by the Treasury Department of the MOF and reports submitted by individual ministries and other authorities. Annual data are audited by the Controller of Accounts prior to being made final and submitted to the Parliament for final approval. Foreign grants not transacted through the NBR are generally omitted from budget accounts.	No statistical or seasonal adjustments are made. Receipts and payments in foreign currency are transacted through the NBR at the prevailing market exchange rate on the date the transaction is effected.	Data are presented with some component detail and in time series format. No financing data are disseminated, thus users are unable to assess reasonableness of the data. Also, no attempts have been made to reconcile government financing data with financial sector claims on and liabilities to government.	The MOF is responsible for compiling and disseminating fiscal data (operations and debt). <i>The Budget Law of Romania</i> requires the Treasury Department of the MOF to consolidate the reports on the implementation of the local and central government budgets. The MOF provides these consolidated reports to the parliament, government agencies, and other official users, and the IMF for publication in the <i>Government Finance Statistics Yearbook</i> . In addition, annual and monthly aggregated data for the central and local government and the Social Security Fund are disseminated on the MOF's website and in publications of the NBR and the NISES

**Table 2. Romania: Salient Features of the Data Quality Matrix**

	<b>Statistical Infrastructure</b>	<b>Conceptual Framework</b>	<b>Source Data</b>	<b>Statistical Techniques</b>	<b>Serviceability</b>	<b>Accessibility</b>
	The Ministry of Finance prepares data on fiscal and debt operations of the central and general government levels for the policy and analytical needs of the government. It disseminates these data to the public as a public service.					
Central government debt	Same as above.	Data comprise all debt incurred by the public sector, as The Public Debt Law of Romania No. 81/1999 requires MOF approval of all domestic and foreign debt.	Debt data are compiled from the accounting records of the MOF's Treasury Department.	No statistical or seasonal adjustments are made.	Lack of financing detail limit the ability of users to assess reasonableness of data.	
<b>Financial Sector</b>						
Broad money and credit aggregates; central bank aggregates; Interest rates	Data compiled by the National Bank of Romania (NBR) are governed by provisions of (a) its charter as outlined in the Banking Act (Law number 58/1998); (b) the National Bank of Romania Act (Law number 101/1998); (c) the Chart of Accounts and the Methodological Norms specifying the use of the NBR's accounts; (d) the Foreign Exchange	The monetary survey is compiled and disseminated monthly broadly consistent with the International Monetary Fund's (IMF) <i>Monetary and Financial Statistics Manual (MFSM)</i> . Consolidated stock monthly data in billions of lei are available one month after the end of the reference period and are published in the National Bank of Romania (NBR) <i>Monthly Bulletin</i> . The consolidated monetary survey results are also published annually in the NBR's	Data are based on the monthly balance sheets and other accounting records of the NBR and on the monthly returns of commercial banks.	The monetary survey is based on actual accounting records of the NBR and the commercial banks. No sampling or estimations are applied. No statistical or seasonal adjustments are made.	The data are published within a balance sheet framework of the monetary survey. Separate balance sheet data for the monetary authorities and other depository corporations are published, which permit some cross-checking of the data. Data revisions and changes in the data compilation practices are noted in notes to the tables published in the NBR's <i>Annual Report</i> .	

**Table 2. Romania: Salient Features of the Data Quality Matrix**

	<b>Statistical Infrastructure</b>	<b>Conceptual Framework</b>	<b>Source Data</b>	<b>Statistical Techniques</b>	<b>Serviceability</b>	<b>Accessibility</b>
	Regulation Number 3/1997; and, (e) guidelines of the MOF on actions for closing the financial year. The dissemination of statistical data is mandated by the National Bank of Romania Act.	<i>Annual Report</i> . In addition to monthly and annual publications, the NBR has a home page ( <a href="http://www.bnro.ro">http://www.bnro.ro</a> ) where users can access the most recent data				
<b>External Sector</b>						
Balance of payments aggregates; International reserves; Merchandise trade; Exchange rates; International Investment Position (IIP); and External debt and debt service.	NBR is responsible for producing and disseminating data on balance of payments, international reserves, and exchange rates. The NBR carries out its responsibilities in accordance with statutes of the National Bank of Romania Act, which mandates the dissemination of statistical data.	The framework of the balance of payments mostly conforms to the recommendations of <i>BPM5</i> . The reliance on the international transactions recording system limits the degree of concordance with <i>BPM5</i> . Data on external debt are based on MOF records for public and publicly guaranteed debt, supplemented by NBR records on private debt not publicly guaranteed. The NBR compiles an international investment position statement.	The principal sources of data are customs statistics, banking sector reports, including records of the NBR, records of the commercial banks on their customers' foreign exchange transactions, and reports from the MOF for public and publicly guaranteed external debt. The NBR adjusts imports of goods from the c.i.f. to the f.o.b. basis using a ratio of 1.0834, which is based on a study conducted by the NISES in 1994 and reviewed in 1997.	The NBR does not use any sampling in the compilation of balance of payments and the data are not seasonally adjusted.	Published time series allow for checking of data for reasonableness. Users are alerted to revisions and changes in methodology through notes to published tables.	Methodological notes are published and updated annually in the <i>Balance of Payments and International Investment Position Report</i> . Data are provided to the Parliament, MOF, and certain international organizations ahead of official public release through press releases and the NBR's <i>Monthly Bulletin</i> and <i>Annual Report</i> . Data disseminated by the NBR contain commentaries and analyses to assist users in assessing developments.

**Table 2. Romania: Salient Features of the Data Quality Matrix**

	<b>Statistical Infrastructure</b>	<b>Conceptual Framework</b>	<b>Source Data</b>	<b>Statistical Techniques</b>	<b>Serviceability</b>	<b>Accessibility</b>
<b>Socio-Demographic Sector</b>						
Population; Health; Education; Poverty	See national accounts above.	Statistics on education are based on the <i>International Standard Classification of Education 1997</i> , and on morbidity and mortality on the <i>International Standard Classification of Diseases Rev. 10</i>	Administrative and civil registration records; population and housing censuses; and surveys of health status and educational institutions.	Population is estimated from the most recent census, using data on births, deaths and migration flows reported through a comprehensive system of vital registration.	Data are presented in sufficient component detail and time series to permit users to assess reasonableness of data. Current population data are compared with data from previous periods and with the Civil Population Register. Tabulated data are checked for consistency. Data volume and quality are rechecked against the questionnaires on the basis of a sample of 0.5% of total sectors (post enumeration survey).	Romanian demographic data are in compliance with EUROSTAT recommendations. The NISES publications include definitions and brief notes on current demographic data. The concepts, definitions, and sources for the census are described in various volumes of the Census Report. Brief methodological notes are available in the <i>Statistical Yearbook of Romania</i> . Data are released simultaneously to all users through publications, postings on the NISES web site, and upon request