

Report on the Observance of Standards and Codes—Data Module

Hungary

Prepared by a staff team¹ of the International Monetary Fund on
the basis of information provided by the Hungarian authorities.

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HUNGARY

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

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FOREWORD

The data module of the Report on Observance of Standards and Codes (ROSC) has evolved significantly since its inception in early 1999. The first data modules assessed the monitorable elements of a country's data dissemination practices—the coverage, periodicity, and timeliness of data and the use of advance release calendars—against the Fund's Special Data Dissemination Standard (SDDS). Since the SDDS focuses on the disclosure of information upon which a user of statistics could make an assessment of the suitability of the data for a particular use, it does not directly assess the quality of data. Therefore, the early data module ROSCs did not deal with issues of data quality.

Nevertheless, concerns about data quality have prompted the Statistics Department to develop a set of tools or assessment frameworks which could be used to assess data quality based on information disclosed by countries. This work has been the focus of a major effort by STA and has paralleled, to some extent, the development of the ROSC; an early version of the quality assessment framework has been used in this report. The work on data quality has led to the development of the data quality assessment frameworks (DQAFs) for specific datasets, e.g., the national accounts. The DQAFs, which are at a preliminary stage, will be employed on an experimental basis in ROSCs. The experience gained with these assessments will be reviewed at a later date.

ACRONYMS

<i>1995 ESA</i>	<i>1995 European System of Accounts</i>
<i>Act LX of 1991</i>	<i>Act on the National Bank of Hungary of 1991</i>
APV Rt	Hungarian Privatization and State Holding Company
ARCs	Advance Release Calendars
BOP	Balance of Payments
<i>BPM5</i>	<i>Balance of Payments Manual</i>
BTO	National Domestic Product Classification
CGD	Central Government Debt
<i>CGO</i>	Central Government Operations
CMFB	Committee on Monetary, Financial, and Balance of Payments
COFOG	Classifications of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
ECB	European Central Bank
EU	European Union
FDI	Foreign direct investment
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GGO	General government operations
HCSO	Hungarian Central Statistical Office
HDB	Hungarian Development Bank
HFSA	Hungarian Financial Supervisory Authority
HST	Hungarian State Treasury
IIP	International investment position
ILV	International reserves
IND	Production index
ITRS	International Transactions Reporting System
KELER	Central Clearinghouse and Depository (Budapest)
MAK	Hungarian State Treasury
MET	Merchandise Trade
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
MSD	Monetary Statistics Division
NACE	Standard Classification of Economic Activities of the European Communities
NBH	National Bank of Hungary
NPEs	Nonfinancial Public Enterprises
NPI	Nonprofit Institution
NSDP	National Summary Data Page

ODCs	Other Depository Corporations
OFC	Other Financial Corporations
POP	Population
PPI	Producer Price Index
ROSCs	Reports on the Observance of Standards and Codes
SD	Statistics Department
SDDS	Special Data Dissemination Standard
SITC/HCN	Hungarian Combined Nomenclature
TEÁOR'98	The Hungarian Standard Industrial Classification of All Economic Activities
ULC	Unit labor cost
XCV/1995	1995 Act on Foreign Exchange
XLVI/1993	1993 Act on Statistics of Hungary

EXECUTIVE SUMMARY

This report is a summary assessment of Hungary's data dissemination practices against the IMF's Special Data Dissemination Standard (SDDS) complemented by an in-depth assessment of the dimensions of data quality that underlie the national accounts, prices, government finance, monetary, and balance of payments statistics. This assessment was carried out by a mission that visited Budapest during January 22–30, 2001.

The mission concluded that:

- Hungary meets the SDDS specifications for the coverage, periodicity, and timeliness of all data categories, and for the dissemination of advance release calendars.
- In most cases the Hungarian agencies have a legal and institutional framework that supports statistical quality, and they demonstrate an awareness of quality as the cornerstone of statistical work.
- All agencies demonstrate professionalism, are transparent in their practices and policies, and provide ethical guidelines to their staffs.
- Accuracy and reliability could be improved in a few data categories by strengthening of source data and statistical techniques.
- In general, the statistical data compiled in the five sectoral areas meet users' needs although users may have some difficulty in reconciling some statistical aggregates that are common across datasets, notably those that relate to the national accounts and the balance of payments.
- Accessibility of data and metadata is high, and assistance to data users is of high quality.
- The overall structure of the national accounts follows internationally endorsed standards and recommendations of the 1995 European System of Accounts (1995 ESA). The delimitation of the economy, the production and assets boundaries, and the classifications used are in accordance with internationally recommended systems.
- The Producer Price Index (PPI) and the Consumer Price Index (CPI) are based on internationally endorsed standards.
- With several important exceptions, the Hungarian fiscal accounts generally follow internationally accepted standards for government finance statistics. The structure of the accounts departs from standard presentations by including certain financing items above rather than below the line. In addition, the coverage excludes several institutions that are normally included.

- With regard to the monetary statistics, the concepts and principles underlying the surveys of the National Bank of Hungary (NBH) and the depository corporations are generally consistent with the Fund's statistical methodology as described in the Monetary and Financial Statistics Manual (MFSM). However, a number of shortcomings were identified, including the misclassification of deposits of a credit institution in the process of liquidation, the incorrect sectorization of nonprofit institutions, and the valuation principles that are applied to some financial assets and liabilities.
- Hungary's balance of payments statistics are compiled in broad conformity with the conceptual framework of the fifth edition of the IMF's Balance of Payments Manual (BPM5). However, the accounts are recorded on a cash basis, excluding from the balance of payments those transactions that have no payment counterpart or banking mediation. In this connection, the exclusion of reinvested earnings limits the comprehensiveness of the coverage of all resident–nonresident transactions.

I. INTRODUCTION

1. The data dissemination module of this Report on Observance of Standards and Codes (ROSC) covers a summary of Hungary's practices on the coverage, periodicity, and timeliness of the data categories specified in the SDDS, practices on the provision of advance release calendars for these categories, complemented by an assessment of the quality of national accounts, prices, government finance statistics, monetary statistics, and balance of payments. This assessment is based on information (data and metadata) provided to STA prior to and during a staff mission, and also relies on official information publicly available.

2. Section II includes an overview of the SDDS and an assessment of Hungary's data dissemination practices against the SDDS. A summary assessment of the quality of the principal macroeconomic statistical datasets, following the assessment framework that was developed by the Statistics Department (STA), is presented in Section III. Section IV summarizes the views of a cross section of users on the usability of Hungary's statistical data and lists the recommendations made by the Fund staff for improving the quality of these data. The comments provided by the Hungarian authorities on the mission's assessment and their plans for future statistical development are presented in Section V. The report also contains, as an appendix (Appendix I), a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Section III.

II. DATA DISSEMINATION PRACTICES AND THE SDDS

A. Overview of the SDDS

3. The standard against which Hungary's data dissemination practices are assessed is the IMF's Special Data Dissemination Standard (SDDS)¹. The SDDS is a "best practice" standard. It covers four sectors of the economy (real, fiscal, financial, and external), as well as population, and identifies four dimensions (data, access, integrity, and quality) of data dissemination for each sector. For each of these dimensions, the SDDS prescribes two to four monitorable elements, or good practices, that can be observed, or monitored, by the users of statistics. See Box 1. However, IMF staff monitoring of the SDDS, as authorized by the Fund's Board of Executive Directors, is limited to the dimensions of data (coverage, periodicity and timeliness) and access (advance release calendars). Moreover, it should be emphasized that the SDDS is a disclosure standard, i.e., it aims to encourage the authorities to provide information to users, including information they can use to assess the suitability of

¹ A detailed description of the SDDS can be found on the IMF's Dissemination Standards Bulletin Board (DSBB) on the Internet at <http://dsbb.imf.org>.

the data for purposes that they identify. The SDDS itself does not aim to assess the quality of data for any specific or predetermined use.

B. Current Dissemination Practices

4. Hungary has subscribed to the Special Data Dissemination Standard (SDDS) since May 24, 1996 and started posting its metadata in April 1997. Hungary met the SDDS specifications for the coverage, periodicity and timeliness of the data, and for the dissemination of Advance Release Calendars (ARCs) on January 24, 2000. The Data Template on International Reserves and Foreign Currency Liquidity has been disseminated since May 2000, and the NSDP has been hyperlinked since July 2000.

5. The four institutions responsible for the compilation and dissemination of the SDDS prescribed data categories are the National Bank of Hungary (NBH), the Hungarian Central Statistical Office (HCSO), the Ministry of Finance (MOF), and the Hungarian State Treasury (HST). The NBH has responsibility for the dissemination of the analytical accounts of the banking sector, the analytical accounts of the central bank, interest rates, share price indices, balance of payments, the international investment position, and the template on international reserves and foreign currency liquidity. The HCSO compiles and disseminates data on the national accounts, the production index, price indices, labor market, and population. The MOF is responsible for compiling and disseminating data on the fiscal sector, viz., central and general government operations, while the HST's Government Debt Management Agency disseminates data on central government debt.

6. Hungary provides access to these data through a variety of publications and these Internet websites:

- The HCSO's website (<http://www.ksh.hu/eng/news/cal0111.html>)
- The Ministry of Finance's website (<http://www.meh.hu/default.htm>)
- The NBH's website (<http://www.mnb.hu/index-a.htm>)

BOX 1. DIMENSIONS AND ELEMENTS OF THE SPECIAL DATA DISSEMINATION STANDARD (SDDS)

Data dimension (coverage, periodicity and timeliness)

- the dissemination of 18 data categories, including component detail, and tracking categories covering the four main sectors of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars (ARCs) providing at least a one-quarter ahead notice of approximate release dates, and at least a one-week ahead 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.

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.
- to 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.

At the March 29, 2000 meeting of the Executive Board, Directors approved the incorporation of a new SDDS data category on external debt. The transition period for implementing this data category expires in March 2003.

As a result of the Third Review of the SDDS in March 2000, IMF staff began monitoring observance of the Standard through NSDPs maintained on the Internet. Monitoring commenced at the end of June 2000, and is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Data dimension: coverage, periodicity, and timeliness

7. The coverage, periodicity, and timeliness for macroeconomic data in Hungary are summarized and compared with SDDS specifications in Table 1. Hungary meets the SDDS specification for the data dimension for all data categories. Periodicity and timeliness exceed the specifications of the Standard for the labor market indicators (employment, unemployment and wages/earnings), balance of payments (BOP), and international investment position (IIP).

Access dimension

8. Advance release calendars that meet the SDDS requirements are disseminated on the Internet website of the agency responsible for the dissemination of the data. Data are released simultaneously to all interested parties, generally on the websites of the relevant agencies, and on Hungary's NSDP (<http://www.ksh.hu/eng/imf/nsdp.html>) hosted by the HCSO.

Integrity dimension

9. The terms and conditions under which official statistics are compiled and disseminated in Hungary are available to the public—in electronic and non-electronic formats—in both Hungarian and English, and they provide a legal framework that supports the integrity of the statistical system.

10. Procedures on internal access to the data prior to public release are disseminated on the DSBB for the data categories to which they apply². Monetary data produced by the NBH are not provided to government officials before their public release, and are disseminated without ministerial commentary. Central government operations (CGO) and merchandise trade (MET) are the only two data categories that are disseminated with ministerial commentary.

Quality dimension

11. Summary methodology statements for all data categories have been provided to the Fund. They have been posted on the DSBB at <http://dsbb.imf.org/summeth.htm>. In addition, methodological information is disseminated by the HCSO, the MOF, and the NBH through publications and the Internet.

12. Hungarian statistical agencies also disseminate component details and additional data series that make possible cross-checks and checks of reasonableness for all data categories as prescribed by the SDDS.

² These data categories are Production index; Consumer price index; General government operations; Central government debt; Balance of payments; International reserves; Merchandise trade International investment position; and Population. Internal releases of data for central government debt and population are made upon ministerial request.

Monitoring of data and access dimensions

13. The IMF staff monitoring of SDDS observance is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars. During the third and fourth quarters of 2000, Hungary's dissemination practices were largely in observance of SDDS requirements; nevertheless, in a few cases data were released on an agency website but there was a delay in updating the NSDP.

Table 1. Hungary: Overview of Current Practices regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comments
		SDDS	Hungary	SDDS	Hungary	
Real Sector						
National accounts	Yes	Q	Q	Q	Q	Quarterly data are currently produced at current and constant (1998) prices by category of expenditure.
Production index/indices	Yes	M	M	6W (M encouraged)	6W	
Employment	Yes	Q	M	Q	25 days	Periodicity and Timeliness exceed SDDS requirements. Monthly rates are based on moving averages.
Unemployment	Yes	Q	M	Q	25 days	Periodicity and Timeliness exceed SDDS requirements. Monthly rates are based on moving averages. Data are disseminated on the number of unemployed, and the unemployment rate.
Wages/earnings	Yes	Q	M	Q	45–48 days	Periodicity and Timeliness exceed SDDS requirements. Monthly data are based on moving averages.
Consumer price index	Yes	M	M	1M	11–14 days	Timeliness exceeds SDDS requirements. An annual-chained Laspeyres index (December of the previous year = 100) is used.
Producer price index	Yes	M	M	1M	1M	An annual-chained Laspeyres index (December of the previous year = 100) is used.

Table 1. Hungary: Overview of Current Practices regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comments
		SDDS	Hungary ₁	SDDS	Hungary ₁	
Fiscal sector						
General government operations	Yes	A	A	2Q	2Q	
Central government operations	Yes	M	M	M	M	Data not consolidated.
Central government debt	Yes	Q	Q	Q	50 days	Timeliness exceeds SDDS requirements.
Financial sector						
Analytical accounts of the banking sector	Yes	M	M	M	2W	Timeliness exceeds SDDS requirements.
Analytical accounts of the central bank	Yes	M (W recommended)	M	2W (W encouraged)	1W	Timeliness exceeds SDDS requirements.
Interest rates		D	D	²	D	
Stock market	Yes	D	...	²	...	Data of the Budapest Stock Index (BUX) redisseminated by the NBH on a daily basis.
External sector						
Balance of payments	Yes	Q	M	Q	50 days	Periodicity and Timeliness exceed SDDS requirements.
International reserves	Yes	M (W recommended)	M	W	W	Published gross and net (i.e., excluding short-term liabilities)
Reserves template	Yes	M	M	M	M	
Merchandise trade	Yes	M	M	8W (4–6W encouraged)	5–6W	5–6W except for December data which are disseminated within 8W.

Table 1. Hungary: Overview of Current Practices regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comments
		SDDS	Hungary ¹	SDDS	Hungary ¹	
International investment position	Yes	A (Q recommended)	M	2Q (Q encouraged)	50 days	Periodicity and Timeliness exceed SDDS requirements.
Exchange rates	Yes	D	D	²	D	No regular quotations for forward exchange rates; market trading is insignificant, though established.
Addendum: population	Yes	A	M	...	M..	Monthly data not adjusted to take account of international migration.

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; and (...) not applicable.

¹ Refers to current practices in Hungary.

² Given that the data are broadly disseminated by private means, the timeliness with which official data are published is not so important. Although dissemination is recommended via recorded telephone messages or by fax, the dissemination of these data may form part of other dissemination mechanisms (preferably, high frequency).

III. SUMMARY ASSESSMENT OF DATA QUALITY

A. The Framework for Assessing Data Quality

14. Work toward a framework for assessing the quality of data has been under way in the IMF's Statistics Department for some time. This initiative responds to a number of needs, in particular, to complement the quality dimension of the SDDS, to focus more closely on the quality of the data provided by countries to the IMF that underpin the institution's surveillance of their economic policies, and to assess systematically the quality of the information provided for the IMF's Reports on the Observance of Standards and Codes (ROSCs). Against this background, the Statistics Department of the IMF has developed a tool that would provide a structure and a common language to efforts to assess data quality and establishes a link with the SDDS. The data quality assessment framework that has emerged comprises a generic framework that brings together internationally accepted core principles for official statistics and serves as the overarching structure for dataset-specific frameworks (for national accounts, balance of payments, monetary, government finance, and price statistics) that are organized around selected indicators of quality.

15. The Data Quality Assessment Framework (DQAF) covers five dimensions of quality and a set of prerequisites for the assessment of data quality (see below). The coverage of these dimensions recognizes that data quality encompasses quality of the institution or system behind the production of the data as well as the quality of the individual data product. Within this framework, each dimension comprises a number of elements, which are in turn associated with a set of desirable practices. The following are the statistical practices that are associated with each dimension.

- Prerequisites of quality—the environment is supportive of statistics; resources are commensurate with needs of statistical programs; and quality is recognized as a cornerstone of statistical work.
- Integrity—professionalism in statistical policies and practices is a guiding principle; statistical policies and practices are transparent; and policies and practices are guided by ethical standards.
- Methodological soundness—concepts and definitions used are in accord with standard statistical frameworks; the scope is in accord with internationally accepted standards; classification and sectorization systems are in accord with internationally accepted standards; and flows and stocks are valued and recorded according to internationally accepted standards.
- Accuracy and reliability—source data available provide an adequate basis to compile statistics; statistical techniques employed conform with sound statistical procedures; source data are regularly assessed and results validated; and revisions, as a gauge of reliability, are tracked and mined for the information they may provide.

- Serviceability—statistics cover relevant information on the subject field; timeliness and periodicity follow internationally accepted dissemination standards; statistics are consistent over time, internally, and with major data systems; and data revisions follow a regular and publicized procedure.
- Accessibility—statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis; up-to-date and pertinent metadata are made available; and prompt and knowledgeable support service is available.

16. A central feature of this framework is its structure, which focuses on principles of quality that are organized in an orderly progression from the abstract to the more specific. Thus, for each of the five dimensions and the set of prerequisites, a set of elements, indicative of desirable practices, and a group of indicators or pointers to these practices have been developed.

17. The findings from the application of this framework to the Hungarian statistical system are presented below. Assessments of five macroeconomic datasets (national accounts, prices, government finance statistics, monetary statistics, and the balance of payments) were conducted using information provided to STA and official information publicly available. The mission's findings are also presented in the form of standardized summary tables using a five part scale (Tables 2.1–2.5).

B. Summary Findings

18. While the Fund staff determined that Hungary's macroeconomic statistical databases met all requirements for the conduct of effective surveillance, they were nevertheless aware that outstanding data shortcomings in a number of areas had the potential to complicate the accurate analysis of economic developments and the timely formulation of appropriate policies. These statistical issues were important points of reference against which the data quality assessments were undertaken. These issues were taken into account in discussions with the Hungarian authorities.

Prerequisites of quality

19. The **Hungarian Central Statistical Office (HCSO)**, which prepares the national accounts and price statistics, has a legal and institutional environment that is adequate to support the collection, production, and dissemination of high quality statistics. Available resources are constrained but adequate. The work of the HCSO is supported by a modern computerized system upgraded in 1993, 1996 and onwards. However, due to the low level of wages, the employment of new qualified staff is difficult. Quality has long been the focus of both the management and staff of the HCSO, as evidenced by participation in the National Statistical Data Collection Program.

20. Institutional constraints at the **Ministry of Finance (MOF)** inhibit the development of a broad view of fiscal data reporting and dissemination as an important component of a unified

and consistent statistical system to guide national economic policies. The structure of fiscal accounts appears, in certain respects, to be determined primarily by nonstatistical considerations that fail to promote fiscal transparency and efficiency. The Division for Public Finance Methodology and Statistics, which is responsible for the presentation of fiscal data using an internationally acceptable methodology, consists of six individuals, only two of whom are professional staff.

21. The **National Bank of Hungary** (NBH) has the legal authority and responsibility for the collection of financial statistics and has developed a well organized system for compiling surveys for the banking system. In addition, balance of payments statistics are compiled on the basis of an adequate legal framework provided by the NBH, Statistics, and Foreign Exchange Acts. Statistical reporting is mandatory and the confidentiality of data is guaranteed by law. The processing of reported data is efficiently handled by a well-trained professional staff in the Statistics Department. The consistently high quality of these data is ensured by routine procedures that are used to review internal and external data sources. A new computerized system launched in 1997 is designed to integrate all dimensions of the statistical process using the International Transactions Reporting System (ITRS) as the centerpiece of the BOP statistical process.

Integrity

22. Practices are in place at the HCSO to ensure professionalism in statistical policies and practices, transparency, and ethical standards. Notably, the professional independence of the HCSO is recognized in the Law on Statistics, and the Act on Civil Servants is an important ethical standard for the HCSO.

23. The staff of the MOF and related institutions that prepare and disseminate fiscal and debt data employ a high level of professionalism in these activities. Through the use of advance release calendars, a policy prohibiting external access to data in advance of its release, and the use of regular press releases/reports to disseminate updated data, the MOF has been able to establish the credibility of the data presented in the official accounts. The Act for Civil Servants regulates the rights, roles, and responsibilities of civil servants, and as the individual responsible for its execution, the Minister of Interior has promulgated "General Ethical Norms of the Civil Servants."

24. Professionalism and transparency in statistical policies and practices underpin the compilation of monetary and BOP statistics by the NBH. The terms and conditions under which these statistics are disseminated and the practice of internal government access are known to the public. The choice of sources and methods is informed primarily by statistical considerations and meets high standards of objectivity. Ethical standards are broadly defined in the legal framework of the NBH, and a code of conduct exists for its staff .

Methodological soundness

25. The overall structure of the **national accounts** follows internationally endorsed standards and recommendations (*1995 European System of Accounts*). The delimitation of the

economy, the production and assets boundaries, and the classifications used are in accordance with internationally recommended systems. However, most government-related transactions are recorded on a cash basis instead of accrual basis due to limitations in the source data.

26. The **Producer Price Index** (PPI) and the **Consumer Price Index** (CPI) are based on internationally endorsed standards and recommendations and use classifications compatible with internationally recommended systems. The overall structure of the PPI follows the Producer Price Index section of the European Union regulation on short-term economic indicators. The overall structure of the CPI follows the European Union regulation for the Harmonized CPI.

27. With several important exceptions (see below), the Hungarian **fiscal accounts** generally follow internationally accepted classification standards as defined by Fund's *Manual on Government Finance Statistics (GFS)*. Monthly data encompass the central government, social security funds, and two extra budgetary accounts, which in the annual data are combined with local government accounts to generate general government statistics. In accordance with *GFS* requirements, the accounts are currently prepared on a cash basis, but the MOF is working toward adopting accrual accounting principles required by Eurostat and the new *GFS* manual. The structure of the accounts departs from standard presentations by including some repayments of net lending as revenue, and their coverage excludes several institutions from the definition of government that would normally be included. The most important of these are the operations of the Hungarian Privatization and State Holding Company, better known by its acronym APV Rt, a government joint stock holding company responsible for the management /privatization of many prominent nonfinancial public enterprises (NPEs). The operations of the APV Rt were taken off-budget in 1996 and its financial operations are currently recorded as net lending in the fiscal accounts only as dividends are officially transferred, making the overall budgetary outturn subject to executive decisions regarding their timing. Capital projects to upgrade NPE performance are thereby also excluded from the budgetary concept of net lending. Another potentially important example is the National Road Construction Company, which is owned by the Hungarian Development Bank (HDB), but receives indirect subsidies to build and maintain public roads. Although the HDB is required to undertake some noncommercial activities on behalf of the state, which are of a quasi-fiscal nature, its operations are excluded from the coverage of the government sector.

28. With regard to the **monetary statistics**, a survey of the depository corporations is prepared that consolidates the survey of the central bank with the aggregated balance sheets of the other depository corporations, focusing on the domestic and external counterparts of the money supply. The Monetary Statistics Division uses concepts and principles that are consistent with the Fund's *Monetary and Financial Statistics Manual (MFSM)* to compile the surveys of the central bank and the depository corporations. The consolidated survey of the NBH and the aggregated balance sheet for 249 other depository corporations (commercial banks, specialized credit institutions, and cooperative credit institutions) provides comprehensive coverage of those institutions, the liabilities of which constitute components of broad money.

29. The principles underlying the classification of financial instruments and the sectorization of institutional units are based on international standards and are on the whole consistent with the Fund's statistical methodology as described in the *MFSM*. With regard to financial instruments, the classification framework is based on the liquidity of the asset and the legal characteristic that describe the creditor/debtor relationship. The principles of sectorization are also consistent with the *MFSM*. However, a number of issues were identified, including the misclassification of deposits of a credit institution in the process of liquidation and the incorrect sectorization of nonprofit institutions. The recommended principle of market price valuation of financial assets and liabilities is not always strictly followed. The new valuation rules of the accounting law effective from January 1, 2001 and the new unified sectoral breakdown in monetary and BOP statistics to be introduced in May 2001 will satisfactorily resolve these problems.

30. Hungary's **balance of payments** statistics are compiled in broad conformity with the conceptual framework of the fifth edition of the IMF's *Balance of Payments Manual (BPM5)*. While resident institutional units are in accord with the *BPM5*'s definition of center of economic interest, the exclusion of reinvested earnings and other transactions that have no payment counterpart or banking mediation limits the scope of BOP statistics in their coverage of all resident–nonresident transactions.³ Transactions are recorded on a cash basis, rather than on the accrual-based accounting principles of *BPM5*.⁴ Valuation of financial leasing, which is based on lease payments rather than imputed market value, departs from international standards. Classification and sectorization of the BOP in accordance with *BPM5* are integral elements of the work program of the compiling agency, and recent initiatives on the reclassification of financial derivatives in line with revised international standards represent an important contribution in advancing the methodological soundness of Hungary's BOP statistics. However, classification of goods for processing and repairs under the Services component, instead of the Goods component, of the current account represents a deviation from the guidelines of *BPM5*.

Accuracy and reliability

31. The source data for the **national accounts** are obtained from a comprehensive data collection program. Accurate surveys together with appropriate administrative records with comprehensive coverage provide the main source for compiling national accounts statistics and source data undergo appropriate validation and consistency checks before they are used. The data are compiled using sound procedures and methods. However, the estimates of imputed

³ As a result of the exclusion of reinvested earnings, the current account deficit is reportedly underestimated by 2–3 percent of GDP.

⁴ These include merchandise trade which is sourced from the NBH's ITRS. The authorities are examining the feasibility of using customs-based trade data, in line with the principles of *BPM5*. This would also make the merchandise data of the BOP consistent with those of the national accounts.

rent (representing 5–6 percent of GDP) are derived from benchmarks that are more than five years old.

32. The **PPI** and **CPI** are compiled using sound procedures and methods. The weights and prices are obtained from a comprehensive data collection program. Price data for the PPI are collected on a monthly basis by mail questionnaire for 6,500 products from 1,000 enterprises, representing at least 70–80 percent of each product group. For the CPI, more than 100,000 quotes are collected each month for 1,100 items from about 8,000 outlets.

33. End-year **fiscal data** are certified by an independent auditor. Recently the accuracy of data has been enhanced by a new ledger system adopted at the Treasury and the creation of the Government Debt Management Agency Ltd, an independent agency responsible for debt management and compiling and disseminating data on government debt. However, the relatively high level of fiscal decentralization, accompanied by many intergovernmental transfers, complicate efforts to consolidate properly the government accounts. In addition, the incomplete netting of transfer funds tends to exaggerate the size of government activities and consequently impairs proper classification of government expenditures by function.

34. **Monetary statistics** are compiled on the basis of preliminary daily and final monthly report forms. Apart from the accounting records of the NBH, the basic data sources for the survey of depository corporations sector are the individual report forms of the other depository corporations. Report forms used by the Other Depository Corporations (ODCs) are revised on an annual basis to take account of the needs of users and reflect changes in the presentation of accounting records. The reported data are sufficiently timely and complete to permit in-depth analysis of the accounting data. In-built computerized checks contribute to the accuracy and reliability of the data.

35. The comprehensive collection of settlement-based source data under the closed-type international transaction reporting system (ITRS) promotes the timeliness of, and encompasses the definitions, classifications and sectoral coverage required of, primary data for **balance of payments** compilation. Effective and well documented data management procedures, combined with in-built computerized and manual editing checks at all stages of the compilation process contribute to overall accuracy and reliability. Intermediate results are validated against the IIP statistics, and related information including foreign direct investment (FDI) flows sourced from quarterly enterprise surveys introduced in 1999, and executed jointly with the HCSO. Data revisions, as a gauge of reliability, are not tracked, as the time series are relatively short and characterized by breaks owing to the transition from *BPM4* to *BPM5* in 1996, and to revisions designed to enhance the methodological soundness of BOP statistics.

Serviceability

36. The **national accounts** program adequately responds to users' needs based on assessments received from other official users. Timeliness and periodicity follow generally accepted good practices. The national accounts data are consistent over time and internally. The revision of national accounts follows a regular and publicized procedure, in which the links between the preliminary and final data are identified and explained. The statistical

discrepancy between the final version of GDP by production activities and GDP by expenditure components (which is within an acceptable range of 1–2 percent of GDP) was shown explicitly in the publication for the 1997 national accounts, but not in the publication for the 1998 data; the HCSO plans to show explicitly the statistical discrepancy in future publications of the national accounts. National accounts are not reconcilable with balance of payments data (which are not based on accrual accounting).

37. The **PPI** and **CPI** adequately respond to users' needs. Timeliness and periodicity follow generally accepted good practices, and the indices are consistent over time.

38. The **fiscal data** meet SDDS specifications for timeliness and periodicity, but lack most fundamental internal and external crosschecks for fiscal data accuracy, thereby limiting their usefulness for most analytical purposes. The overall budgetary position does not coincide with the available financing reported by the MOF, nor does the MOF's amount of government recourse to the banking system coincide with banking sector data for credit to the government. In part this latter discrepancy is due to the cash accounting basis for government accounts, which does not account for changes in the float of outstanding government payments, but the different definitions of government employed in the two systems are also important. Whereas the MOF accounts exclude the APV Rt, this holding company is classified within the general government sector in the monetary accounts, where its balances are included in net credit to government.

39. The Monetary Statistics Division of the NBH reviews developments that have an impact on the statistical data with other departments, and asks these departments to provide comments on the guidelines developed for the preparation of report forms. The data for the surveys of the NBH and the depository corporations are preliminary when first released and are finalized within 25 days and 52 days, respectively. The surveys of the NBH and of the depository corporations sector are disseminated on a monthly basis. The division implements a revision policy that is supported by extensive documentation. Revisions are clearly identified in the Monthly Report and Annual Report of the NBH, and in the statistical releases posted on the web site.

40. Hungary compiles and disseminates monthly **balance of payments** statistics with a lag of 50 days after the end of the reference month. Preliminary data on the current account and nondebt creating financing are disseminated in a press release format 35 days after the end of the reference month, and are aimed at meeting the needs of financial markets and other users of statistics. The distinction between preliminary and final data is clearly identified in press releases as well as in the time series data included in hard copy publications and disseminated on the NBH Internet website. Data revisions follow a regular and publicized procedure; precise release dates for both preliminary and final data are announced on 12-month ahead advance release calendars available on the NBH's Internet website (<http://www.mnb.hu>) and hard copy publications, and on the IMF's DSBB (<http://dsbb.imf.org>). While the BOP statistics exhibit inter-temporal and internal consistencies, they are not reconcilable with the national accounts produced by the HCSO, which are largely based on accrual accounting and use different data sources.

Accessibility

41. The dissemination of **national accounts** and **price statistics**, the corresponding metadata, and the related service and support are commensurate with users' needs. The HCSO website has been developed as a tool to provide enhanced accessibility. The HCSO has a release calendar for all publications on its Internet website.

42. The MOF does not issue any publications other than its annual budget documents, which provide a preliminary report on performance of the most recent fiscal year, final accounts for the preceding year, and the proposed budget for the next two years. Monthly data on central government operations, including the social security fund and the two extra budgetary accounts, are provided on the Office of the Prime Minister's website (<http://www.meh.hu>), as are annual data on consolidated general government, which includes the local governments. A conversion table from the Hungarian fiscal accounts to the GFS format is available in Hungarian. The metadata provided do not disclose all departures from standard international accounting principles in the **fiscal data**. The NBH and the HCSO also include selected information on fiscal performance in their publications.

43. **Monetary statistics** are widely accessible (in Hungarian and English) and their interpretation is enhanced by the dissemination of tables, charts, and text. Data are available in several formats, including monthly reports and on the NBH's Internet website (<http://www.mnb.hu>). Data users are fully informed of the dissemination of new data through the publication of advance release calendars on the website of the NBH. Current and pertinent metadata on statistical concepts, classifications, basis for recording, data sources, and statistical techniques are also available on the Fund's DSBB. Nonpublished but nonconfidential data are available upon request.

44. Dissemination formats for **balance of payments** data and metadata include press releases, electronic dissemination on the NBH's Internet website (<http://www.mnb.hu>) and the IMF's DSBB (<http://dsbb.imf.org>), and monthly and annual hard-copy publications, all of which provide an array of presentations—in Hungarian and English—targeted at different users. Nonpublished but nonconfidential data are available upon request, and BOP statistics are released on a pre-announced schedule in accordance with the requirements of the SDDS.

Table 2.1. Hungary: Data Quality Assessment Framework—Summary for National Accounts Statistics

Elements	Assessments					Comments
	O	LO	MNO	NO	NA	
Prerequisites of quality						
0.1 Leg. & inst. environment	X					
0.2 Resources.		X				Due to low wages, it is often difficult to appoint qualified new staff.
0.3 Quality awareness	X					
1. 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/sectoriz.	X					
2.4 Basis for recording		X				Most government-related transactions are recorded on a cash basis instead of accrual basis due to limitations in the source data.
3. Accuracy and Reliability						
3.1 Source Data	X					
3.2 Statistical techniques		X				The estimates of imputed rent (representing 5–6 percent of GDP) are derived from benchmarks that are more than 5 years old.
3.3 Assessment & validation	X					
3.4 Revision studies					NA	Time series relatively short; do not yet warrant revision studies.
4. Serviceability						
4.1 Relevance	X					
4.2 Timeliness & periodicity	X					
4.3 Consistency		X				The statistical discrepancy between GDP by production activities and GDP by expenditure components (representing 1–2 percent of GDP in 1998–99) is not published systematically. BOP statistics not reconcilable with the national accounts.
4.4 Rev. policy & practice	X					
5. Accessibility						
5.1 Data Accessibility	X					
5.2 Metadata accessibility	X					
5.3 Assistance to users	X					

Note: O = Practice Observed; LO = Practice Largely Observed; MNO = Practice Materially Non-observed; NO = Practice Non-observed; NA= Not Applicable. Comment: only if different from O.

Table 2.2. Hungary: Data Quality Assessment Framework—Summary for Price Statistics

Elements	Assessments					Comments
	O	LO	MNO	NO	NA	
Prerequisites of quality						
0.1 Leg. & inst. environment	X					
0.2 Resources.		X				Due to low wages, it is often difficult to appoint new qualified staff.
0.3 Quality awareness	X					
1. 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/sectoriz.	X					
2.4 Basis for recording	X					
3. Accuracy and Reliability						
3.1 Source Data	X					
3.2 Statistical techniques	X					
3.3 Assessment & validation	X					
3.4 Revision studies					NA	Data are final when first released.
4. Serviceability						
4.1 Relevance	X					
4.2 Timeliness & periodicity	X					
4.3 Consistency	X					
4.4 Rev. policy & practice	X					
5. Accessibility						
5.1 Data Accessibility	X					
5.2 Metadata accessibility	X					
5.3 Assistance to users	X					

Note: O = Practice Observed; LO = Practice Largely Observed; MNO = Practice Materially Non-observed; NO = Practice Non-observed; NA= Not Applicable. Comment: only if different from O.

Table 2.3. Hungary: Data Quality Assessment Framework—Summary for Government Finance Statistics

Elements	Assessments					Comments
	O	LO	MNO	NO	NA	
Prerequisites of quality						
0.1 Leg. & inst. Environment		X				Institutional infrastructure hampers comprehensive statistical functions. Staffing levels inadequate. Processes that focus on statistical development are inadequate.
0.2 Resources		X				
0.3 Quality awareness		X				
1. Integrity						
1.1 Professionalism	X					
1.2 Transparency	X					
1.3 Ethical Standards	X					
2. Methodological soundness						
2.1 Concepts and definitions	X					General government coverage is incomplete. Some nonprofit institutions performing government functions are not included in the general government sector.
2.2 Scope			X			
2.3 Classification/sectoriz.			X			
2.4 Basis for recording	X					
3. Accuracy and Reliability						
3.1 Source Data		X				Underlying data do not provide adequate information to fully net out transactions between different levels of government. No statistical techniques are used.
3.2 Statistical techniques					NA	
3.3 Assessment & validation	X					No revisions are made to the data.
3.4 Revision studies					NA	
4. Serviceability						
4.1 Relevance		X				Effective processes are not in place to monitor the practical utility for macroeconomic analysis.
4.2 Timeliness & periodicity	X					
4.3 Consistency			X			Internal and inter-sectoral cross checks are not available.
4.4 Rev. policy & practice	X					
5. Accessibility						
5.1 Data Accessibility	X					Methodological issues are not fully documented.
5.2 Metadata accessibility		X				
5.3 Assistance to users	X					

Note: O = Practice Observed; LO = Practice Largely Observed; MNO = Practice Materially Non-observed; NO = Practice Non-observed; NA= Not Applicable. Comment: only if different from O.

Table 2.4. Hungary: Data Quality Assessment Framework—Summary for Surveys of the Central Bank and Depository Corporations

Elements	Assessments					Comments
	O	LO	MNO	NO	NA	
Prerequisites of quality						
0.1 Leg. & inst. environment	X					
0.2 Resources.	X					
0.3 Quality awareness	X					
1. 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/sectoriz.		X				A number of issues were identified, including the misclassification of deposits of a credit institution in the process of liquidation in the monetary aggregates, and the incorrect sectorization of all nonprofit institutions as part of the general government.
2.4 Basis for recording		X				Securities are not valued on the basis of market prices, but on acquisition prices.
3. Accuracy and Reliability						
3.1 Source Data	X					
3.2 Statistical techniques	X					
3.3 Assessment & validation	X					
3.4 Revision studies		X				Statistical practices are not guided by formal revision studies.
4. Serviceability						
4.1 Relevance	X					
4.2 Timeliness & periodicity	X					
4.3 Consistency	X					
4.4 Rev. policy & practice	X					
5. Accessibility						
5.1 Data Accessibility	X					
5.2 Metadata accessibility	X					
5.3 Assistance to users	X					

Note: O = Practice Observed; LO = Practice Largely Observed; MNO = Practice Materially Non-observed; NO = Practice Non-observed; NA= Not Applicable Comment: only if different from O.

Table 2.5. Hungary: Data Quality Assessment Framework—Summary for Balance of Payments Statistics

Elements	Assessments					Comments
	O	LO	MNO	NO	NA	
Prerequisites of quality						
0.1 Leg. & inst. environment	X					
0.2 Resources.	X					
0.3 Quality awareness	X					
1. 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				Reinvested earnings are excluded from both current and financial accounts.
2.3 Classification/sectoriz.		X				Goods for processing and repair classified under “Services” instead of “Goods.”
2.4 Basis for recording		X				BOP transactions recorded on a cash basis. Financial leasing recorded according to lease payments instead of imputed market value of the given goods.
3. Accuracy and Reliability						
3.1 Source Data	X					
3.2 Statistical techniques	X					
3.3 Assessment & validation	X					
3.4 Revision studies					NA	Time series relatively short; do not yet warrant revision studies.
4. Serviceability						
4.1 Relevance	X					
4.2 Timeliness & periodicity	X					
4.3 Consistency		X				BOP statistics not reconcilable with the national accounts.
4.4 Rev. policy & practice	X					
5. Accessibility						
5.1 Data Accessibility	X					
5.2 Metadata accessibility	X					
5.3 Assistance to users	X					

Note: O = Practice Observed; LO = Practice Largely Observed; MNO = Practice Materially Non-observed; NO = Practice Non-observed; NA= Not Applicable Comment: only if different from O.

IV. USERS' VIEWS AND FUND STAFF RECOMMENDATIONS

A. Users' Views

45. An informal survey of the usability of the statistical data produced by the Hungarian authorities was conducted by Fund staff among key users of Hungarian economic statistics.⁵ In general, most users were satisfied with the coverage, periodicity, and timeliness of Hungarian economic data, and believed that there had been marked improvement in recent years. In general, these views were consistent with the findings of the mission and the main areas identified for improvements are broadly in line with the proposals suggested by the Fund staff.

46. Two areas were mentioned frequently in which coverage could be improved: the national accounts and the government finance statistics. In this connection, household income data and a better coverage of service sectors in the national accounts were cited. Users also indicated that fiscal analysis could be improved by redefining the coverage of the general government in the government finance statistics to include those public institutions, such as the APV Rt, that undertake functions of a governmental nature, and providing more frequent breakdowns of expenditure by economic classification.

47. Users suggested several changes in other areas that would extend the coverage of data and enhance periodicity. They suggested shifting unemployment data from a three-month moving average to monthly frequency; splitting gross external debt between bank and nonbank private sector; breaking down net external borrowing in the balance of payments by creditor; providing amortization schedules for private and public sector debt; and providing monthly real effective exchange rate calculations on a unit labor cost (ULC) basis.

48. Advance release calendars were perceived as very useful and generally adhered to.

49. Data quality, defined in terms of methodological soundness and reliability, was perceived to be good and compared favorably with other countries in the region. Areas in which there was scope for improvement were:

- balance of payments statistics—include reinvested earnings from FDI in the current account and base merchandise trade on customs rather than payments data.
- government finance statistics—provide internationally comparable data on the general government sector, preferably according to the EU-required definition.
- quarterly national accounts—introduce seasonal adjustment and a clearer revisions policy.

⁵ These users included analysts employed by foreign investment banks, rating agencies, international news wires, and international financial dailies.

B. Fund Staff Recommendations

50. Based on the results of the data quality assessments and subsequent technical discussions with the Hungarian authorities in the respective statistical agencies, the mission proposes the following measures for their consideration to bring Hungary's statistical databases into greater compliance with international standards and improve the usefulness of the data for users:

National accounts

- In the compilation of annual national accounts, the data on imputed rent, which are currently extrapolated from 1993 data, should be derived on the basis of more up-to-date survey data.
- The HCSO should systematically disseminate the statistical discrepancy between the final version of GDP by production activities and GDP by expenditure components in the national accounts publications.
- The benchmarking of quarterly national accounts to the annual estimates should be systematically applied on the basis of the annual preliminary and final data.
- The HCSO is encouraged to continue working on the development of seasonally adjusted quarterly national accounts estimates, and to regularly disseminate the data after the procedure is considered reliable.

Fiscal accounts

- The operations of the APV Rt should be integrated into the central government budget. Gross privatization receipts, not just dividends paid by the APV Rt to the budget, should be included as budgetary receipts, and all expenditures of the APV Rt, including capital transfers to rehabilitate public enterprises, should be treated as budgetary outlays.
- To the extent that the HDB finances noncommercial activities, such as road building through the National Road Construction Company, that are of a quasi-fiscal nature, it is important that such activities be included in the consolidated government accounts by netting its positions with that of the central government.
- Those nonprofit institutions of significant size that undertake essentially government functions should similarly be integrated into budgetary accounts, regardless of their legal organization.
- The authorities should focus on identifying intergovernmental transfers, reconciling conflicting source data, and netting out intergovernmental transfers in the consolidated accounts.

- The authorities should strengthen the accounting procedures for monitoring and recording government borrowing operations to facilitate reconciliation with the overall budgetary position. As part of this process, authorities should clearly identify and correctly classify those budgetary financing items now included above the line in the national budgetary presentation.

Monetary statistics

- The deposits liabilities of the credit institution in the process of liquidation should be excluded from the monetary aggregates in the monetary accounts and classified as restricted deposits, in keeping with the recommendations of the MFSM.
- Those nonprofit institutions that are mainly engaged in providing goods and services to households should be classified under 'other resident sector', consistent with the recommendations of the MFSM, and not treated as part of general government.
- The securities recorded on the balance sheets of the depository corporations should be valued at market prices and not on the basis of acquisition prices.

Balance of payments statistics

- The balance of payments should be compiled on accrual-based accounting principles rather than on a cash basis.
- The NBH should include data on reinvested earnings in both the current and financial accounts of the BOP.
- The NBH should reclassify transactions relating to goods for processing and repair as part of goods, instead of as services, while financial leasing should be recorded according to the imputed value of the leased goods instead of lease payments.

V. RESPONSE BY THE AUTHORITIES

51. Reacting to the summary assessments that the mission discussed with senior officials of the NBH, the HCSO, and the MOF, prior to its departure from Budapest, the authorities indicated their general agreement with the mission's findings. They pointed out that the deficiencies identified in a number of areas would be addressed during 2001 in the context of Hungary's efforts to fully implement the methodology of the *1995 ESA* and to meet the standards for compiling and reporting statistical data established by the European Central Bank. In particular, they reported that, with the introduction by the NBH of changes in the accounting and sectorization systems applicable to the monetary and balance of payment statistics, both the NBH and the HCSO would become fully compliant with the *SNA 93* and the *ESA 95* as of May 2001.

52. For **monetary statistics**, the Hungarian authorities provided the following comments on the staff's assessment in the Executive Summary and in paragraph 29:

- *“misclassification of deposits of a credit institution on the process of liquidation”* – The amount of deposits with the credit institution in the process of liquidation is negligible. Its share in the various monetary aggregates is between 0.1 and 0.3 per thousand. Therefore we do not consider it to be expedient to revise the current classifications of the said items. (Though, if needed, in the future we are going to take care of the correct classification of such deposits, introducing restricted deposits).
- *“incorrect sectorization of nonprofit institutions”* – The share of credits to and deposits of nonprofit institutions in total domestic credit and in M3 is also quite low (2.0 and 0.6 – 1.0 percent, respectively). Further, at the time of inspection it was absolutely clear that this problem was going to be solved within a few months time – even if we bear in mind that the study is aimed at presenting a snapshot of the situation. To our opinion it is therefore inappropriate that this important circumstance is not mentioned in the introduction.
- *“the valuation principles that are applied to some financial assets and liabilities”* - See the last sentences in the comment above.

53. In the area of the **national accounts**, the authorities indicated that they agreed with the measures proposed by the Fund staff and that, indeed, they were already in the process of implementing some of the proposals:

- The HCSO has initiated a project to improve the estimation for rent of owner occupied dwellings in the annual national accounts. The improved estimates are scheduled to be available in late 2002.
- The statistical discrepancy between the GDP data by production activities and by expenditure components has been published for 1999 in the latest annual publication of the national accounts, and will be published systematically in future publications.
- The benchmarking of quarterly national accounts to the annual estimates has been applied on the basis of the annual (preliminary and final) data starting with the data for 2000 (1999 quarterly data have not yet been adjusted).
- Seasonally adjusted quarterly national accounts will be published by the HCSO in the near future.

54. With respect to the **fiscal accounts**, the authorities indicated that in its first “fiscal notification” to Eurostat, the Ministry of Finance would be introducing several classification revisions that would bring the fiscal accounts into closer conformity with generally accepted standards.

55. The Hungarian authorities reported that the following measures will be introduced to improve the usability of the **monetary statistics**:

- Valuation of securities at market prices will be implemented in May 2001.
- The correct sectorization of nonprofit institutions will be achieved in the monetary statistics with the introduction of new reporting forms for the NBH and the ODCs in May 2001. One exception to this development will be the continued inability to identify separately private and public nonfinancial corporations.
- Preparations will start in 2001 to include money market funds (investment funds that issue low-risk liquid shares that are close substitutes for deposits) among the NBH's reporting requirements, consistent with the standards established by the ECB.
- A separate line (restricted deposits) will be introduced in the monetary statistics for deposit liabilities of credit institutions under liquidation.

56. For the **balance of payments**, the Hungarian authorities expressed their commitment to improving the quality of the statistical data but indicated that some of the mission's recommendations could not be immediately implemented for the following reasons:

- The incorporation of customs-based merchandise trade data in the balance of payments statistics was complicated by the lack of harmonization in the release dates of the customs and balance of payments statistics.
- The NBH would need additional information from the HCSO that would allow enable the conversion of the customs-based import data from a c.i.f. basis to a f.o.b. basis.
- The first release of the customs data is often subject to large revisions, which would result in large swings in the monthly balance of payments data.
- There are gaps in timing between the reporting of export and import values of goods for processing in the customs statistics, as current regulations allow enterprises a twelve-month lag in reporting goods for inward processing.
- Regarding reinvested earnings, the first annual survey of foreign direct investment was completed at the beginning of 2001. Since it is a new joint project of the NBH and the HCSO, the results need to be carefully analyzed against other available sources of information (e.g., tax records) and pending methodological issues should be settled before publication and use of the data for other statistical purposes.
- A joint project by the NBH and the HCSO aimed at building a new data collection system in the field of trade in services, with special attention to travel, has been launched, and will provide source data for the balance of payments following the generation and analysis of survey results.

57. Responding to the users' views on external debt statistics, the authorities made the following comments:

- The breakdown of external debt into bank and nonbank private sector components can be derived from published statistics. Publication of individual components is being considered.
- A breakdown of net external borrowing by creditor is available in the World Bank's Global Development Finance.
- Amortization schedules for private and public sector debt are published on a quarterly basis. Only publicly guaranteed private sector debt are disclosed for private nonfinancial corporations.

DETAILED ASSESSMENTS USING THE DATA QUALITY ASSESSMENT FRAMEWORK

The following detailed information on indicators of statistical practices in the areas of the national accounts, price, government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the Hungarian officials in response to the questionnaires developed by the mission for the individual data sets. This information, which is organized along the lines of the generic DQAF, was used by the mission to prepare the summary assessment of data quality elements (Section IV), based on a five-part scale of observance (Tables 2.1–2.5).

A. National Accounts Estimates (Annual and Quarterly)

0. Prerequisites of quality

0.1 Legal and institutional environment

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

The 1993 Law on Statistics of Hungary (XLVI/1993) does not specifically mention the responsibility for compiling and disseminating national accounts data but the law states that the Hungarian Central Statistical Office (HCSO) is responsible for coordinating all statistical activities, notably through the National Statistical Data Collection Program that the Government approves each year.

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

Data sharing and coordination between data producing agencies are adequate, notably through the National Statistical Data Collection Program. Close contacts are maintained with external data suppliers.

0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.

The Law on Statistics guarantees access by the HCSO to administrative records and other data.

According to the Law on Statistics, all statistics collected and published by the HCSO are governed by the confidentiality provisions which specify that the HCSO cannot publish, or otherwise make available to any individual or organization, statistics that would enable the identification of data for any individual person or entity. In addition, the 1992 Law on Protection of Personal Data and the Disclosure of Data of Public Interest also specifies that the HCSO cannot publish, or otherwise make available to any individual or organization, statistics that would enable the identification of data for any individual person or entity.

The 1993 Law on Public Servants and the Law on Protection of Personal Data and the Disclosure of Data of Public Interest (1993) include penalties for the staff who disclose confidential data.

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

The Law on Statistics establishes the obligation to respond to statistical surveys organized by an official statistical agency. The Law also includes provisions for penalizing offenders in case of noncompliance with the requirement to provide data. However, in practice, this provision is not used as serious efforts are made to create goodwill among the data providers to obtain the necessary information.

0.2 Resources

0.2.1 Staff, financial, and computing resources are commensurate with institutional programs.

The national accounts program has adequate staff resources. However, due to the low level of wages, the HCSO is experiencing difficulties appointing and retaining qualified staff. The national accounts program has adequate financial resources. However, sometimes surveys have to be financed from external sources, such as the National Bank of Hungary.

The work at the HCSO is supported by a modern computerized system, upgraded in 1993, 1998 and onwards. The national accounts program has adequate computing resources. Each staff member has a PC.

0.2.2 Measures to ensure efficient use of resources are implemented.

No measures exist.

0.3. Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

The National Statistical Council, which comprises data users and data providers, gives advice on policy and priorities, and provides comments on the National Statistical Data Collection Program.

Concepts, methodologies, and accounting conventions used within the HCSO are in harmony with those of national accounts (ESA 1995).

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The legal and institutional environment under which the HCSO compiles statistics are adequate to guarantee independence in conducting these functions.

1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations.

According to the Law on Statistics, the HCSO is independent in determining methodology, release dates, design of surveys, and definitions used.

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

There appears to be no entitlement and no previous experience in this area.

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 under which the data are produced and disseminated are available to the public. The 1993 Law on Statistics of Hungary and the 1992 Law on Protection of Personal Data and the Disclosure of Data of Public Interest are available on the HCSO Internet website.

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

The quarterly and annual GDP data are made available to the offices of the Prime Minister, the Minister of Finance, and the president of the National Bank of Hungary on the afternoon of the day before they are published.

1.2.3 Products of statistical agencies are clearly identified as such.

The HCSO's products are clearly identified.

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

Advance notice is given of major changes in methodology.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized

Specific ethical guidelines for official statistics are not yet available but are being prepared. The Law on Public Servants (1993) is an important ethical standard for the HCSO.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows international standards, guidelines, or agreed practices.

National accounts concepts and definitions are based on the *1995 ESA*.

2.2 Scope

2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices.

The delimitation of the constituent units of the economy is in accordance with the *1995 ESA*. In particular, the Duty Free Zone is included in the economy.

The production boundary is generally in accordance with the *1995 ESA*, except that some illegal activities are not covered.

The assets boundary is generally in accordance with the *1995 ESA*, except that valuables and entertainment, literary or artistic originals are not covered.

2.3 Classification/sectorization

2.3.1 Classification/ sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices.

Internationally recommended systems are used for classification purposes. The Nomenclature générale des Activités économiques dans les Communautés Européennes (NACE), Rev.1, is used as a national classification for industries by kinds of activities. Hungarian national classifications are used for household final consumption and government consumption by purpose, which are very similar to the COICOP and COFOG, respectively. SITC and HCN (Hungarian Combined Nomenclature) are used for international transactions. International transactions in services are based on the *Balance of Payments Manual*, 5th edition. The COICOP will be used in the 2000 data for household final consumption.

2.4 Basis for recording

2.4.1 Timing rules used for recording flows are broadly consistent with international standards, guidelines, or agreed practices.

The timing rules used for recording flows: In accordance with the 1995 *ESA*, accrual basis is used for most transactions except production in the government and part of nonprofit institutions (NPI) sectors where cash basis is used. The source data for government finance statistics are recorded on a cash basis instead of accruals basis. However, additional data are collected from the Ministry of Finance which are suitable for accrual adjustments in the compilation general government data.

2.4.2 Valuation rules used for recording flows and stocks are broadly consistent with international standards, guidelines, or agreed practices.

The valuation rules used for recording flows and stocks are in accordance with the 1995 *ESA*: basic prices are used for measuring output and purchasers' prices for intermediate consumption. In government and NPI sectors, cost basis is used. Final use of GDP is measured at market (purchasers') prices. Owner occupied dwellings are valued at market prices similar to rental value. Exports of goods are valued at f.o.b. and imports of goods are valued also at f.o.b.

3. Accuracy and reliability

3.1 Source data

A comprehensive and up-to-date business register provides the basis for sample surveys for corporations and other large enterprises. The business register is updated from many sources, including the Tax Department and the Business Court. As in many countries, the HCSO is experiencing some difficulties with updating enterprises going out of business.

Annual business statistics on nonfinancial corporations are collected through a regular establishment/enterprise survey program, covering 60–70 percent of all units for all industries. For the activities covered, all unit sizes are represented, and scientific random sampling techniques are used (stratified sampling). Proper imputation methods are used to handle nonresponse, and grossing-up factors are derived based on sample design. Data collected are sufficiently detailed (the survey questionnaire has a general section for all corporations and a specialized section specific to industries).

Data for unincorporated enterprises (representing 11–12 percent of GDP) are derived from tax data.

Household statistics are collected through a quarterly survey since 1994. The coverage of the survey is comprehensive geographically and by socio-income groups. Scientific random sampling techniques are used (stratified sampling). Proper imputation methods are used to

handle nonresponse, and grossing-up factors are derived based on sample design. Data collected are sufficiently detailed.

The HCSO undertakes an annual survey on nonprofit organizations. A periodic (in 1999 and every 10 years) census is conducted for agriculture/livestock.

Subannual surveys of establishments/enterprises are conducted to obtain detailed quarterly/monthly indicators consistent with annual data, in particular, for manufacturing (monthly), construction (monthly), trade (monthly), transportation and telecommunication (quarterly), gross fixed capital formation (quarterly), inventories (quarterly), and labor force (quarterly).

There are provisions to conduct ad hoc surveys, when necessary, to supplement the regular survey program.

Detailed data are obtained from other statistical systems and from the appropriate agencies (such as customs statistics, balance of payments statistics, government finance statistics, tax declarations for enterprises). These data are generally available on timely basis.

3.2 Statistical techniques

GDP by activities

The output estimates are compiled at a sufficient level of industrial detail (agriculture: 2 digit of NACE, construction: 2 digit, service industries: 4 digit).

The estimates of intermediate consumption are compiled at a sufficient level of industrial detail (2 digit of NACE).

Regular national accounts compilation covers the whole economy (except illegal activities, which are excluded, as noted above).

The national accounts cover all transactions as exhaustively as possible, including informal activities (representing 16 percent of GDP) which are estimated through specific procedures depending on the industry. The national accounts data also include estimates for under-reporting of quasi-corporations and unincorporated enterprises.

In compiling GDP by activities, only the estimates of imputed rent are derived from benchmarks that are more than 5 years old. Imputed rent, which represents 5–6 percent of GDP, is extrapolated from 1993 data on the basis of housing data.

Owner-occupied dwellings: output is valued as the estimated rentals that tenants would pay for similar accommodation. However, the estimates are prepared on the basis of a fixed ratio derived from 1993 benchmarks.

Work-in-progress: growing crops, stocks of fish (in fish farms), large construction projects, and livestock reared for purposes of food are treated as work-in-progress. However, standing timber is not treated as work-in-progress. Output of large equipment, which mainly comprises shipbuilding, is not relevant in the case of Hungary.

Inventory valuation adjustment: output and intermediate consumption are adjusted for holding gains/losses accruing on inventories.

Consumption of fixed capital: data on consumption of fixed capital are estimated only for General government (in order to calculate the gross value added). The estimates are derived from accounting data (the perpetual inventory method is not used as the conceptual basis) and adjusted to a current price basis.

Cash vs. accrual: the cash data on taxes and subsidies on products are converted to accrual by allocating them to the period to which they relate. However, the data on government arrears, government revenue data, and government expenditure data are recorded on a cash basis and are not converted to accrual due to limitations in the source data.

For compiling the volume measures of GDP, the double indicator method is used. Deflators/price indices are compiled at a four-digit level of detail for output. Intermediate consumption is deflated by industry, at the two-digit level. Volume measures of taxes/subsidies on products are estimated by applying base year tax rates to the volume of transactions subject to a specific tax/subsidy, in most cases (if detailed data permit). Output volume of trade margins are estimated by applying the base year margin rates to the corresponding volume of sales. GDP volume change is measured using annual chain indices (starting with 1999 data).

GDP by expenditure components

The GDP estimates by expenditure components are derived independently. In particular, household final consumption expenditure, gross fixed capital formation, and changes in inventories are derived independently (i.e., not as a residual).

Household final consumption expenditure is compiled into 80 compatible groups following the national classification. Government final consumption expenditure is compiled at the one-digit level or more of the COFOG classification. Gross fixed capital formation and changes in inventories are compiled by activities and by type of assets.

In compiling GDP by expenditure components activities, the estimates of imputed rent (5 percent of GDP) is based on a fixed ratio derived from benchmarks that are more than 5 years old.

Government final expenditure is exclusive of incidental sales. Expenses of residents abroad are included in household final consumption expenditure. However, expenditures on items that are

considered stores of wealth (such as jewelry, works of art) are not included (the Hungarian national accounts data do not cover valuables).

Dedicated price indices/deflators for 80 groups are used to deflate GDP components of the corresponding classifications. The household consumption implicit deflator is checked to move in line with trends in the CPI.

3.3 Assessment and validation

No information is available about sampling errors and nonsampling errors for the business survey and the household budget survey. Information is available about nonresponse in these surveys.

The data from the business survey are compared against data from the Tax Department (for 1999, the difference for output represents 3.7 percent for the same population of enterprises).

In compiling GDP estimates by activities, over 90 percent of the source data for output are obtained from surveys/censuses or appropriate administrative records.

No information is available on the coverage of intermediate consumption estimates obtained from surveys/censuses or appropriate administrative records (for enterprises with no accounting information, the ratio output/intermediate consumption from similar enterprises applied to the output estimates to derive intermediate consumption estimates).

In compiling GDP estimates by expenditure components, over 90 percent of the source data is obtained from surveys/censuses or appropriate administrative records.

Appropriate measures are taken to validate the source data and make them consistent with national accounts.

3.4. Revision studies

Since time series are relatively short, revision studies are not yet warranted.

4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

Although no explicit/external reviews have been conducted to assess whether the national accounts program meets user needs, the users of the national accounts have generally indicated that the data adequately respond to their needs. User needs are discussed at the National

Statistical Council, which comprises data users and data providers. In addition, the HCSO has initiated meetings with user groups, aimed at the establishment of a more effective dialogue.

4.2 Timeliness and periodicity

4.2.1 Periodicity follows dissemination standards.

National accounts are compiled/disseminated with both annual and quarterly periodicity.

4.2.2 Timeliness follows dissemination standards.

The timeliness of quarterly national accounts estimates is 90 days for GDP by expenditure components at current and constant prices, meeting the SDDS requirement

The timeliness of national accounts aggregates is as follows:

Preliminary I (quarterly index for total GDP): 60 days

Preliminary II (sum of quarterly data) : 90 days,

Preliminary III : 9 months,

Final (comprehensive framework) : 15 months.

For the preparation of the Budget by the Ministry of Finance, Preliminary II data are available.

4.3 Consistency

4.3.1. Statistics are consistent or reconcilable over a reasonable period of time.

Consistent time series are available for annual data continuously since 1991.

Consistent time series are available for quarterly data continuously since the first quarter of 1996.

The data are published with comments, notably explaining erratic movements in the time series, when they occur.

Back series are generally not adjusted to account for methodological developments. No major methodological developments occurred in the recent past, except the change of base year for constant prices in 1995 (back series were not adjusted). No major changes in data sources occurred in the recent past.

Changes in structural ratios are thoroughly investigated as part of the comprehensive checking procedure of the national accounts data.

4.3.2. Statistics are internally consistent (e.g., accounting identities observed).

Internal consistency of the annual accounts

In the final version of the national accounts, the GDP data by production activities and by expenditure components are reconciled through a statistical discrepancy item (the GDP data by production activities are accepted). The statistical discrepancy represented 1.0 percent of GDP in 1997 and 1.3 percent in 1998, and it will amount to about 1.5 percent in 1999. The statistical discrepancy was shown explicitly in the publication for the 1997 national accounts. However, in the publication for the 1998 data, the statistical discrepancy was not shown explicitly and was included in the changes in inventories. The HCSO plans to show explicitly the statistical discrepancy in future publications of the national accounts.

After reconciliation, similar growth rates are obtained from the GDP series by production activities and the GDP series by expenditure categories.

National accounts data are not currently reconciled within the supply-use tables framework. However, the HCSO is in the process of developing a methodology based on an input-output table.

Total supply of goods and services do not match the independently derived total uses as explained above. The data are reconciled through a statistical discrepancy item.

A consolidated financial account for the economy has not yet been compiled. Therefore, the net lending of resident and nonresident surplus sectors cannot be compared to net borrowing of resident and nonresident deficit sectors derived independently.

GDP estimates at current prices, volume measures, and (implicit) deflators are consistent within the “value = volume \times price” framework.

Revisions are used to identify and remove causes of inconsistencies in the estimates.

Consistency of the quarterly estimates of GDP with the annual estimates

Concepts and definitions for compiling quarterly GDP estimates are identical to those used to compile the annual estimates.

The discrepancy between the sum of quarterly estimates and the annual final data (for 1995–98) is removed through benchmarking procedures (the benchmarking is not applied for annual preliminary data). For 1999, the discrepancy between the sum of quarterly estimates and the annual preliminary III data represents 0.4 percent of GDP.

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

The BOP statistics, for which transactions are recorded on a cash basis rather than on the accrual-based accounting principles of the IMF's *Balance of Payments Manual (BPM5)*, are not reconcilable with the national accounts, which are largely based on accrual accounting and use different data sources.⁶ Although this lack of intersectoral consistency is due to the limitations in the BOP statistics, it hinders the ability of users to validate the quality of the national accounts.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established, and transparent schedule.

Revised national accounts data are released according to a regular, well-established, and transparent schedule. The release schedule is, in particular, predetermined and stable from year to year, and announced in advance of expected release dates.

The release and revision dates coordinated with the arrival of major data sources.

4.4.2 Preliminary data are clearly identified.

The revision policy identifies the status of the data. In particular, the preliminary and revised data are identified in tables. The revised data are accessible on a sufficiently detailed level.

The revision policy have provision for explaining the links between the preliminary and the final data. The reasons for revisions are explained.

5. Accessibility

5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons.

National accounts estimates are disseminated at a detailed level and with time series.

Seasonally adjusted quarterly national accounts estimates are not yet disseminated because time series are not long enough. However, experimental seasonally adjusted estimates were published in 2000. The HCSO plans to regularly disseminate seasonally adjusted estimates in the future.

⁶ Notably, the national accounts are based on customs statistics.

5.1.2 Dissemination of media and formats are adequate.

National accounts estimates are disseminated regularly, through dedicated annual and quarterly national accounts publications, and through electronic means.

5.1.3 Statistics are released on a pre-announced schedule.

National accounts estimates are disseminated regularly, according to a well-established production and release schedule. An advance half-yearly release calendar that gives one-quarter-ahead notice of the precise release dates is disseminated on the HCSO Internet website (<http://www.ksh.hu/eng/news>).

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

The quarterly data are released simultaneously to all interested parties by issuing the news release "Gyorstajekoztato" (Quarterly GDP).

5.1.5 Nonpublished (but nonconfidential) data at the compilation level are made available to users upon request.

Nonconfidential data at the compilation level are available from the HCSO upon request.

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 international standards are annotated.

Comprehensive descriptions of annual and quarterly national accounts methodology are published.

Differences from international standards are documented.

- **5.3 Assistance to users**

5.3.1 Contact person for each subject field is publicized.

A national accounts contact person is available to provide further assistance as required. The name, telephone number and e-mail address of contact persons are indicated in the publications and on the HCSO website.

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

Catalogues of publications and other services, along with information on any fees, are widely available at the HCSO, and on the HCSO Internet website.

B. Price Statistics (Consumer Price Index and Producer Price Index)

0. Prerequisites of quality

0.1 Legal and institutional environment

The 1993 Law on Statistics of Hungary (XLVI/1993) does not specifically mention the responsibility for compiling and disseminating price statistics but the law states that the HCSO is responsible for coordinating all statistical activities, notably through the National Statistical Data Collection Program that the Government approves each year.

All the operations for compiling the Producer Price Index (PPI) are centralized at the HCSO headquarters.

The compilation of the Consumer Price Index (CPI) is coordinated by the HCSO headquarters with the 19 HCSO regional agencies.

The Law on Statistics guarantees access by the HCSO to administrative records and other data.

According to the Law on Statistics, all statistics collected and published by the HCSO are governed by the confidentiality provisions which specify that the HCSO cannot publish, or otherwise make available to any individual or organization, statistics that would enable the identification of data for any individual person or entity. In addition, the 1992 Law on Protection of Personal Data and the Disclosure of Data of Public Interest also specifies that the HCSO cannot publish, or otherwise make available to any individual or organization, statistics that would enable the identification of data for any individual person or entity.

The 1993 Law on Public Servants and the Law on Protection of Personal Data and the Disclosure of Data of Public Interest (1993) include penalties against the staff who disclose confidential data.

The Law on Statistics established an obligation to respond to statistical surveys organized by an official statistical agency. The Law also include provisions for penalties against the offender in case of noncompliance with the required provision of the data. However, in practice, this provision is not used as serious efforts are made to create goodwill among the data providers to obtain the necessary information.

0.2 Resources

The price statistics program has adequate staff resources. However, due to the low level of wages, the HCSO is experiencing difficulties in appointing and retaining qualified staff.

The price statistics program has adequate financial resources.

The work at the HCSO is supported by a modern computerized system, upgraded in 1993, 1998 and onwards. The price statistics program has adequate computing resources. Each staff member has a PC.

0.3. Quality awareness

The National Statistical Council, which comprises data users and data providers, gives advice on policy and priorities, and provides comments on the National Statistical Data Collection Program.

Concepts, methodologies, and accounting conventions used within the HCSO are in harmony with Eurostat standards and recommendations.

1. Integrity

1.1 Professionalism

- According to the Law on Statistics, the HCSO is independent in determining methodology, release dates, design of surveys, and definitions used.

1.2 Transparency

The terms and conditions under which the data are produced and disseminated are available to the public.

For the PPI, there is no internal government access to the data prior to their release to the public.

For the CPI, data are made available to the offices of the Prime Minister, the Minister of Finance, and the president of the National Bank of Hungary on the afternoon of the day before they are published.

There is no ministerial commentary attached to the release of the data.

Advance notice is given of major changes in methodology.

Advance release calendars are publicized and disseminated.

The data are released simultaneously to all interested parties.

Documentation on the methodology of price statistics is disseminated.

1.3 Ethical standards

Ethical guidelines for officials are not yet available but are being prepared. The Law on Public Servants (1993) provides general ethical guidelines.

2. Methodological soundness

2.1 Concepts and definitions

The overall structure of the PPI follows the Producer Price Index section of the European Union regulation on short-term economic indicators.

The overall structure of the CPI follows the European Union regulation for the Harmonized CPI.

2.2 Scope

The delimitation of the constituent units of the economy is in accordance with the 1995 European System of Accounts (ESA).

For the PPI, all resident market enterprises in the entire country are included in the scope of the PPI. In particular, the Duty Free Zone is included. The index covers the totality of industries: mining and quarrying, manufacturing, electricity, gas, steam, and water supply, (NACE Sections C, D, E). The production boundary is in accordance with the *1995 ESA*. The PPI covers all the industrial products and services sold by industrial enterprises on the domestic or export market.

For the CPI, the index covers the entire country (the 19 county capitals and 102 cities and villages) and all households except institutionalized households (student, old-age homes, military garrisons, etc.). The consumption boundary is in accordance with the *1995 ESA*. The CPI covers all goods and services bought by the reference population for the purposes of consumption; own-produced goods, goods received as income in kind, direct taxes, charitable donations, and second hand sales (except cars) are excluded. The price collection does not cover special forms of commerce such as automatic vending, shopping by mail, and tax-free shops.

2.3 Classification/sectorization

PPI

The 1995 *ESA* is followed to classify market enterprises, transactions, and other flows. The Hungarian Standard Industrial Classification of All Economic Activities (TEÁOR'98) is used, which fully conforms to NACE Rev.1. Products are classified by the national Domestic Product Classification (BTO) that conforms to the CPA at the 6-digit level.

The NACE, Rev. 1, is used to classify economic activity (industry) of establishments and enterprises.

CPI

The Classification of Individual Consumption by Purpose (COICOP) is used. Specifications provide detailed descriptions of the characteristics (such as brand, size, fabric/material, etc.) of the surveyed product.

2.4 Basis for recording

PPI

The timing and valuation rules used for recording flows are in accordance with 1995 ESA. The timing rule used for recording flows is based on the sales of the period. The valuation rule used for valuing the sales (for the weights of the PPI) and the product prices collected is based on basic/producer prices. Output for own-use are not covered in the PPI (only sold products are covered).

Price data are collected monthly by mail. Prices refer to all sales of the selected representative products in the observed month.

Prices collected are basic prices received by the producer. VAT and consumption taxes are excluded. Subsidies on products are included. Export prices—at frontier parity—are converted to national currency by actual rate of exchange quoted at the time of fulfillment.

CPI

The timing rule used for recording flows is in accordance with 1995 ESA. All representative items are observed between the 2nd and 22nd day of every month.

The valuation rules used for recording flows are in accordance with 1995 ESA. Prices collected reflect those that consumers would pay on the day of the survey, including sales taxes. Discounts and rebates that may apply to the specific products purchased are included; the consumer credit charges are excluded.

3. Accuracy and reliability

3.1 Source data

PPI

A comprehensive and up-to-date business register provides the basis for sample surveys. The business register is updated from many sources, including the Tax Department and the

Business Court. As in many countries, some difficulties are experienced with updating enterprises going out of business.

Business statistics are collected through a regular establishment/enterprise survey program for compiling sales weights of the PPI. Sales data are collected through an annual survey. The sample, representing 90 percent of the production for the industries covered, is selected on a judgmental basis (random sampling is not used). The weights are changed every year and refer to the annual sales of industrial products and services two years prior to the current year.

For the product selection, first the commodities (product groups) are selected in the 4-digit classes by judgmental sampling (the most important groups), then the main producers (enterprises) of the selected commodities are selected, and finally from these enterprises, the particular price-representing products are selected, also by judgmental selection. Random sampling is not used.

Price data are collected on a monthly basis by mail questionnaire for 6,500 products from 1,000 enterprises, representing at least 70–80 percent of each product group.

Surveys of household unincorporated enterprises are not conducted. Few small enterprises are covered in the PPI because they represent a small share in manufacturing.

No periodic (two or more years) surveys/censuses of output are conducted on a regular basis.

There are provisions to conduct ad hoc surveys, when necessary, to supplement the regular survey program.

No detailed data are obtained from other statistical systems.

CPI

The CPI weights are derived from the national accounts on the basis of data from the Household Budget Survey and other sources. Data for the Household Budget Survey are collected through a program of quarterly surveys from approximately 10,000 households. The coverage of the survey is comprehensive geographically and by socio-income groups. Scientific random sampling techniques are used (stratified sampling). Proper imputation methods are used to handle nonresponse, and grossing-up factors are derived based on sample design. Data collected are sufficiently detailed. The weights are changed every year and refer to the annual consumption two years prior to the current year.

Prices are collected on a monthly basis for 1,100 items. The number of price quotation for each item is 30–150 depending on its characteristics. More than 100,000 quotes are collected each month from approximately 8,000 outlets. Most prices are collected by personal visit to retail outlets. Some major companies with a central pricing policy supply prices directly. For utilities, there is a central collection through printed form or by telephone.

There are provisions to conduct ad hoc surveys, when necessary, to supplement the regular survey program.

No detailed data are obtained from other statistical systems.

3.2 Statistical techniques

PPI

The sales estimates are collected through the annual product statistics (PRODCOM survey) at a sufficient level of industrial detail for use as weights.

The PPI is compiled as an annual-chained Laspeyres index with December of the previous year=100. Commodity indices (that is, indices for groups of products) are weighted by the value of sales to obtain indices at the 4-digit level of the national classification of activities (which is equivalent to the 4-digit level of NACE Rev. 1). The weights are changed each year based on the value of sales two years prior to the current year.

CPI

The estimates from the national accounts and Household Budget Survey are compiled at a sufficient level of consumption detail for use as weights.

The index is compiled as an annual-chained Laspeyres index with December of the previous year=100. For the computation of lowest level indices, the price relatives of the representative items are calculated by dividing the average price of the given item in the current month by the average price of the base month. Laspeyres methodology is used in which fixed weights are used to aggregate indices from the lower level to higher levels. Over periods of more than one year, it is an annually chained Laspeyres-type index.

When a price observation is temporarily unavailable in a given month, its price is imputed based upon the price movement of similar products in the same item category in the same geographical area. The estimated (imputed) price is used for two months.

The list of items, outlets, and the weights are revised every year.

3.3 Assessment and validation

PPI

No information is available about sampling errors and nonsampling errors for the monthly statistical survey collecting product prices for the PPI because random sampling is not used.

There is practically no nonresponse in the monthly statistical survey for collecting product prices for the PPI due to the follow-up by the HCSO staff.

In compiling PPI data by activities, all source data are obtained from surveys.

The source data on product prices are analyzed to correct for underreporting/misreporting, in particular to check for temporal consistency, and consistency with other related data sources. Collected prices are compared to the price series for the same variety during the last 3–4 months. If necessary, prices are checked by phone from the contact person of the reporting enterprise.

CPI

No information is available about sampling errors and nonsampling errors because random sampling is not used.

In compiling CPI data, all source data are obtained from surveys.

The source data on product prices are analyzed to correct for underreporting/misreporting, in particular to check for temporal consistency, and consistency with other related data sources. Price collectors at each regional office of the HCSO check all price changes and are required to provide explanations for unusual movements. Collected prices are also checked at the HCSO headquarters. Calculations are reviewed by the members of the Consumer Price Division for reasonableness and consistency.

3.4. Revision studies

Not applicable (data are final when first released).

4. Serviceability

4.1 Relevance

Although no explicit/external reviews have been conducted to assess whether the price statistics program meets user needs, the users of the price statistics have generally indicated that the data adequately respond to their needs. User needs are discussed at the National Statistical Council, which comprises data users and data providers.

4.2 Timeliness and periodicity

The timeliness of the monthly PPI and the detailed indices is 30 days.

The timeliness of the monthly CPI and the detailed indices is 11–14 days.

The periodicity of both the PPI and the CPI is monthly.

4.3 Consistency

Temporal consistency

Consistent time series of the chained PPI at the aggregate level are available continuously since 1970 (1992 at 2 digits level, and 1998 at 4 digits level).

Consistent time series of the CPI are available continuously since 1970 (from 1992 at 3 digit level).

The PPI and CPI data are published with comments, notably explaining erratic movements in the time series, when they occur.

Back series for the PPI and CPI are generally not adjusted, notably due to the difficulty of collecting source data for the past periods.

Internal consistency

There is no statistical discrepancy between the PPI by product and PPI by economic activities.

Similar rates of price change are obtained from the PPI series by production activities and the PPI series by product.

The PPI and CPI data are generally considered final when first released and therefore are not revised.

Intersectoral consistency

Not applicable.

4.4 Revision policy and practice

The PPI and CPI data are released according to a regular, well-established, and transparent schedule. The release schedule is, in particular, predetermined and stable from year to year, and announced in advance of expected release dates.

The release dates are coordinated with the arrival of the price data sources.

There is no need of a revision policy since the PPI and CPI data are generally considered final when first released.

5. Accessibility

5.1 Data accessibility

The PPI and CPI data are disseminated regularly, in particular, at a detailed level and with time series, according to a well-established production and release schedule, through a dedicated monthly publication, and through electronic means.

Nonconfidential data at the compilation level are available from the HCSO upon request

5.2 Metadata accessibility

Comprehensive descriptions of PPI and CPI methodology are published.

- **5.3 Assistance to users**

A contact person for PPI and CPI is available to provide further assistance as required. The name, telephone number, and e-mail address of contact persons are indicated in the publications and on the HCSO website.

C. Government Finance Statistics

0 Prerequisites of quality

0.1 Legal and institutional environment

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

The compilation and dissemination of the government finance statistics data are governed by the terms and conditions of the 1992 Law on Public Finance and the 1993 Act on Statistics of Hungary (XLVI/1993). The financial information system of the general government is provided for in Government Decree No. 217/1998. These laws assign the responsibility for fiscal data compilation to the Ministry of Finance, which is also responsible for providing data in the context of the annual budgetary presentation. The Act on Statistics regulates the information collection from other sectors.

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

The 1993 Act on Statistics designates the Ministry of Finance as an organ of the official statistical service, thereby providing the legal basis for inter-agency coordination. At an operational level, most of the source data are compiled within the Ministry of Finance, based on the reporting of (1) government ministries; (2) the social security fund; (3) the extrabudgetary funds; and (4) local governments. These operations are soon to be transferred

to the Treasury. Debt data are compiled and disseminated by the Government Debt Management Agency Ltd.

0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.

The confidentiality of data reported by individual persons and entities are guaranteed under the Statistics Act. The Act of Public Finances does not allow publishing budgetary data before their submission to Parliament, and the Act for Civil Servants regulates the rights, roles, and responsibilities of civil servants. The Minister of Interior, who is responsible for implementing the Act, has issued the manual "General Ethical Norms of the Civil Servants" to familiarize civil servants with their responsibilities under the law. Special legislation directed at the Ministry of Finance is under preparation in conjunction with the wider accession effort for the EU.

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

Responses are generally required by law from government agencies and are not voluntary.

0.2 Resources

0.2.1 Staff, financial, and computing resources are commensurate with institutional programs.

The Division for Public Finance Methodology and Statistics in the Ministry of Finance has six employees, only two of which are professional staff. The division responsible for maintaining the mainframe data base has 8 employees, comprising 4 experts and 4 statistical assistants. Computing facilities are maintained outside the division.

0.2.2 Measures to ensure efficient use of resources are implemented.

No cost effectiveness measures have been adopted.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

At present institutional constraints at the Ministry of Finance inhibit the development of a broad view of fiscal data reporting and dissemination as an important tool for economic policy purposes. The primary focus on the quality of the statistical product is driven by the planned accession to the European Union and the need to be in compliance with Eurostat requirements. The Ministry of Finance, in the context of its first "fiscal notification," submitted to Eurostat and the EU a set of fiscal accounts prepared within an ESA 1995 framework at end-March 2001.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Statistics are compiled by government agents who are mandated by law to provide accurate and unbiased results.

1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations

The most significant departure from GFS methodology is the exclusion of the operations of the Hungarian Privatization and State Holding Company (APV Rt), a government joint stock holding company responsible for the management/privatization of most nonfinancial public enterprises (NPEs), from the government accounts. Prior to 1996, it was included but was subsequently moved off-budget. Most nonprofit organizations, many of which undertake government functions, are also not included in government accounts. Apart from these broader issues, the choices of sources and methods appear to be generally directed by statistical considerations.

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

There appears to be no entitlement, and no previous experience in this area. The Ministry of Finance has recently concluded a report that reviews the government budgetary experience and has distributed it to selected fiscal policy experts for comment.

1.2 Transparency

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

Information on GFS statistics are provided through a variety of sources, including government Internet websites.

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

Early access to monthly data are generally restricted to the Minister of Finance who receives the data on the day prior to their release to the public. Annual data are used in preparation of the budget, and in this context partial information is provided to ministers, state secretaries, the president of the National Bank of Hungary, the president of the Central Statistical Office, and the president of the Economic Competition Agency, under strict embargo conditions during

the administrative reconciliation of the Bill on the fulfillment of the annual budgetary provisions, before its submission to the Parliament.

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

The information in statistical tables is identified by source.

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

Major changes in methodology are announced at the time the changes are introduced. There are no policies that require advance notice of major changes in source data and/or statistical techniques.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized.

The Act on Public Servants establishes a written code of conduct applicable to the staff of the Ministry of Finance. The Statistical Law also provides for the confidentiality of fiscal data compilation. As one step in preparing for accession to the EU, the Ministry of Finance is drafting a law which will specifically address ethical standards for MOF staff.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follow international standards, guidelines, or agreed practices: see dataset-specific framework.

- Several financing items are reported above the line. The more significant departures are discussed under Section 2.2 Scope.

2.2 Scope

2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices: see dataset specific framework.

- The government accounts do not include the operations of the Hungarian Privatization and State Holding Company (APV Rt), which is the government joint stock holding company responsible for the management/privatization of most nonfinancial public enterprises (NPEs). They also exclude the activities of nonprofit institutions, some of which perform government functions. One of these, the National Motorway Company, is responsible for highway construction in Hungary and its subsidy requirements may become significantly more important if the government implements the announced

program for rehabilitation of the national road transportation system. Debt assumption transactions are not included in the accounts

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices: see dataset-specific framework.

The consolidated general government data are presented by section, comprising central and local governments, extrabudgetary funds and social security funds. Central and local government expenditures are identified by functional classification. Problems in classification result in several data anomalies, the most significant of which is that financing data do not correspond to the overall budgetary balance. The differences arise from several sources, including an overstatement of budgetary expenditures due to incomplete netting out of all intragovernmental transfers, and conceptual differences (institutional coverage) between the two sources for government bank borrowing.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

As far as practicable, transactions are recorded on the basis of market prices or, in cases where payment is not required, on a cost basis.

2.4.2 Recording is done on an accrual basis.

- The accounts are currently presented on a cash basis, which is consistent with the current GFS manual. Work is underway to provide an accrual set of accounts to conform with Eurostat requirements and the new GFS manual. Also see section 0.3.1.

2.4.3 Grossing/netting procedures are broadly consistent with international standards, guidelines, or agreed practices.

Transactions in foreign currency are converted to local currency using the exchange rate prevailing at the National Bank of Hungary as the time they take place. Debt assumption transactions are not included in government accounts.

3. Accuracy and reliability

3.1 Source data

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

Data are compiled from the individual submissions of the government ministries, the state social security fund, the two extrabudgetary accounts, and reports from the local governments.

The Ministry of Finance undertakes a reconciliation exercise to match intragovernmental transfers between the Central and Local governments, but the netting of these transactions is incomplete, leading to some overstatement of government expenditure. There is no published reconciliation of Hungary fiscal accounts with the GFS report.

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

Budget and extrabudgetary accounts can be aligned with GFS categories through use of a template which identifies the proper classification.

3.1.3 Source data are timely.

All central government units report directly to the Ministry of Finance. Local government reporting is on an annual basis.

3.2 Statistical techniques

3.2.1 Data collection employs sound statistical techniques.

The source data used in government accounts are not based on estimation techniques.

3.2.2 Other statistical procedures (e.g., retrieval, storing, and statistical analysis) employ sound statistical techniques.

The data compilation system is fully computerized with checks to ensure accuracy.

3.3 Assessment and validation

3.3.1 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 planning.

Monthly data on central government operations only are disseminated approximately two weeks after the end of the reference period, and are not revised further. Initial preliminary actuals of annual data also exclude local government data and are released at a press conference about two months after the end of the fiscal year. Final data including local government operations are audited and disseminated within six months of the end of the reference year.

3.3.2 Main intermediate results are validated against other information where available.

Most information is derived from source data which is not readily available elsewhere and cannot be validated from second sources. In those cases where second sources exist, such as transfers between different government units, the data are compared for accuracy.

3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to guide users.

Most fiscal data are prepared from source data that cannot be compared to summary data from other sources. Consolidations of source data are checked for accuracy.

3.4 Revision studies

3.4.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes.

An internal study is circulated to participating agencies that provide source data at the central government level.

3.4.2 Revision studies and analyses are made public to guide data users.

The MOF does not make the results of the limited internal studies/analyses of data revisions that they undertake public.

4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

There are no formal scheduled meetings with public users. As an organ of the Official Statistical Service, the Ministry of Finance is represented on the National Statistical Council which operates, under the Statistics Act, as a professional advisory and opinion-forming body representing the interests of society and data users in informing data collection procedures defined in the annual national data collection program which is executed under Government Decree. International organizations which use fiscal data such as the EU, World Bank, and the IMF also provide comments on the presentation of fiscal data.

The Ministry of Finance is represented at meetings of Eurostat's Working Group on government finance statistics, and ministry staff participate regularly in ad hoc international statistical meetings and seminars including those conducted by the IMF and the EU.

4.2 Timeliness and periodicity

4.2.1 Periodicity follows dissemination standards.

Hungary compiles and disseminates monthly data on central government operations, quarterly data on central government debt, and annual data on general government operations, thereby fully meeting the requirements of the SDDS.

4.2.2 Timeliness follows dissemination standards.

Hungary disseminates monthly data on central government operations within 15 days of the reference period, quarterly data on central government debt within 50 days of the end of the reference period, and annual data for general government activity within six months of the end of the fiscal year. These standards meet the SDDS requirement for general government reporting and exceed them for both central government operations and debt, where the requirements are monthly and quarterly, respectively.

4.3 Consistency

4.3.1 Statistics are consistent or reconcilable over a reasonable period of time.

Monthly fiscal data date from 1990, and incorporate several conceptual changes, including the exclusion of APV Rt accounts in 1996. These changes were generally identified when they were implemented, and some are identified in the metadata provided on the Ministry of Finance website. Unusual changes in economic trends are explained in the monthly Ministry of Finance press releases and in press conferences held by the Minister.

4.3.2 Statistics are internally consistent (e.g., accounting identities observed).

The financing data do not coincide with the overall budgetary balance derived from above the line, which can arise from reporting errors in financing (see Section 4.3.3) or from misreporting above the line. The accuracy of expenditure data is affected by the relatively high level of decentralization in the Hungarian fiscal system, with transfers to local government comprising about one-fourth of all government outlays. Not all transfers are completely netted, leading to some overstatement of consolidated government expenditures.

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

External accounts use government statistics on grants and loans in their accounts. The data for government recourse to bank borrowing as reported in the budgetary accounts do not agree with banking sector data on net credit to the government. The differences can be attributed to several factors, which include the different conceptual measures in the two accounts, with the government accounts excluding the APV Rt and the banking data including them, and changes in the float of checks issued by the government but not yet submitted to the banks for clearance. The statistics for changes in the stock of government domestic nonbank debt do not correspond to the flow in domestic nonbank borrowing.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established and transparent schedule.

Monthly data are not revised. Annual data which do not include local government data are released within two months of the end of the fiscal year. Consolidated general government

accounts which include local government accounts are released in final, audited form within six months of the end of the reference year.

4.4.2 Preliminary data are clearly identified.

Preliminary data are only disseminated after the end of the fiscal year and are clearly identified as preliminary.

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).

The presentation of fiscal data generally follows standard formats.

5.1.2 Dissemination media and formats are adequate.

In addition to the Ministry of Finance website, data are available on the DSBB.

5.1.3 Statistics are released on a pre-announced schedule.

An advance release calendar that gives notice one quarter in advance is provided on the Internet website of the Finance Ministry (<http://www.meh.hu>), but in effect the release calendar extends beyond the end of the quarter as the actual release dates follow a standard pattern.

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

Statistics are released simultaneously to all interested parties through a press release provided to the media in Hungarian and in English; detailed tables are released simultaneously on the Ministry of Finance's Internet website, and the components prescribed for SDDS coverage on Hungary's National Summary Data page (NSDP).

5.1.5 Nonpublished (but nonconfidential) sub-aggregates are made available upon request.

Government statistics are available upon written request from the MOF.

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 international standards are annotated.

Hungary's GFS summary methodology statement is posted on the DSBB. Some documentation on concepts, scope, classifications, basis of recording, data sources, and deviations from internationally accepted standards are disseminated, in Hungarian and English, on the Ministry of Finance's Internet website. Publications such as the Fund's *Government Finance Statistics Yearbook* also provide some information on methodological deviations from internationally accepted standards.

SDDS summary methodology statements and base page metadata are regularly reviewed and updated.

5.2.2 Different levels of detail are provided depending on intended audience and type of collection.

Some detailed information on components of the fiscal accounts (revenue and expenditure) are available on the Ministry of Finance's Internet website in time series format, and also posted on the DSBB.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized.

A contact person is identified on the DSBB.

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

The Internet is the primary dissemination format for fiscal data and metadata, which is free. All dissemination formats are identified on the DSBB.

D. Monetary Statistics

0. Prerequisites of Quality

0.1 Legal and institutional framework

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

The National Bank of Hungary (NBH) is responsible for compiling and disseminating the surveys (analytical accounts) of the central bank, preparing the aggregated accounts of the other depository corporations (ODCs) or other credit institutions, and preparing and disseminating the consolidated survey of the depository corporations (banking and credit institutions).

The legal authority and responsibility for the compilation and dissemination of financial statistics is specified in the *Act on the National Bank of Hungary (Act LX of 1991)*. Article 34 of this act states that “In order to perform its tasks, the NBH operates an information system to which credit institutions and other legal entities not characterized as credit institutions providing supplemental financial services, investment service providers, and clearing houses are obliged to supply information required by the NBH.” The act thus authorizes the NBH to collect source data from financial corporations. With regard to dissemination, Article 34 states that “The NBH makes public all important information relating to the operation of the system of credit institutions and to the financial situation in the country. Detailed data for these will be regularly available to the Parliament, the Government, and the ministries.”

The Monetary Statistics Division (MSD) of the Statistics Department (SD) is in charge of the collection of the source data and the compilation and dissemination of the surveys of the NBH and the depository corporations.

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

Formal procedures have been put in place within the NBH that govern the reporting of information to the MSD by other departments. These procedures are documented and apply mainly to the Controlling Department, which reports the accounting data, and the Operations Department, which reports on banking operations. In addition to the accounting data for the NBH, the MSD collects balance sheet data the ODCs. After consultations with the Hungarian Financial Supervisory Authority (HFSA), the reporting institutions, and other departments of the NBH, the SD prepares and circulates to the ODCs *Guidelines for Preparing the Information Provided by the Banks and Specialized Institutions* to standardize the reporting process. A similar *Guidelines for Preparing the Information Provided by the Banks and Specialized Institutions* is prepared for the NBH as a reporting institution.

The NBH and the Hungarian Financial Supervisory Authority (HFSA) consult on developing report forms for the banks’ balance sheets and profit and loss accounts, which are jointly used

by both institutions for statistical and supervisory purposes. In addition, the SD shares information with the HFSA on the activities of financial institutions, other than the depository corporations, which perform supplemental financial services.

The NBH publishes data on the issuance of government securities. The Ministry of Finance reports information on outstanding amounts of total Government bonds and Treasury bills issued, and—on the basis of the reports of the NBH and ODCs—the MSD calculates the amount of Government securities outside the depository corporations subsector as a difference.

The NBH collaborates with the Hungarian Central Statistical Office (HCSO) to compile financial accounts within the framework of the national accounts.

0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.

Only the staff of the MSD and the HFSA have access to information to access to the data reported by the ODCs. Article 34 of the Act on the National Bank of Hungary prohibits the publication of data in a form in which information reported by the individual institutions or their individual clients can be identified. It is an unwritten rule that statistical indicators compiled from information supplied by less than four individual data sources will not be published. Breaching the confidentiality of individual data providers or their clients is considered a criminal offence in the criminal code.

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

The Act on the National Bank of Hungary (Act LX of 1991) grants the legal authority and responsibility for the compilation and dissemination of data for financial institutions to the NBH. Article 34 states that “In order to perform its tasks, the NBH operates an information system to which credit institutions and other legal entities not characterized as credit institutions providing supplemental financial services, investment service providers, and clearing houses are obliged to supply information required by the NBH.” In collaboration with the HFSA, the NBH has the right to initiate procedures that would lead to the imposition of fines on nonreporting institutions or on institutions, the quality of whose data is determined to be unacceptable.

0.2 Resources

0.2.1 Staff, financial, and computing resources are commensurate with institutional programs.

The MSD has 17 professional staff who are divided into two sections. Between six and seven of these staff deal with issues of methodology while the others are involved with technical matters such as processing report forms. The academic qualifications and technical skills required for employment are high and there is little on-the-job training except for the training provided to staff who attend Money and Banking Statistics Courses sponsored by the IMF.

The systems of data collection and compilation are highly computerized and special software has been developed for this purposes. Depository corporations submit report forms by electronic means.

0.2.2 Measures to ensure efficient use of resources are implemented.

There are no systems in place that measure the cost-effectiveness of the program for compiling monetary statistics.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

Final data compiled by the SD are checked against preliminary data and explanations are sought for any differences. This process includes verifying input data with the reporting institutions as well as with computerized checks for monitoring accuracy and reliability.

The Supervision Department of the NBH verifies that data reporting practices followed by the depository corporations are consistent with the guidelines established by the NBH and that the reported data can be reconstructed from the accounting records. Each bank is inspected every 2–3 years.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis.

The statutory provisions under which the NBH compiles monetary statistics are adequate to support independence in conducting these functions. Financial institutions are required by the Act on the National Bank to supply information to the NBH, which determines the content and coverage of reported information and the methodological framework for reporting these data.

1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations.

In compiling monetary statistics, the methodological framework is designed to cover the accounts of all depository corporations whose assets are claims on the resident and nonresident sectors of the economy and whose liabilities are classified as components of broad money. This analytical framework highlights the distinction between the sectors of the economy that are money holders and those that are money issuers. To this end, report forms have been developed to gather disaggregated information from accounting records of those financial institutions whose liabilities are included in the national definition of broad money.

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

The professional staff of the SD on occasion meet with the press to explain complicated statistical formulations or changes in the presentation of disseminated data. Plans are being developed to document and explain the methodology of compiling the monthly statistical data on the Internet website of the NBH (<http://www.mnb.hu>).

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 under which monetary statistics are collected, processed and disseminated are available to the public in electronic and hard copy formats.

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

Following approval of the data by the MSD, a limited number of senior NBH staff has access to data during the afternoon prior to the day of publication (but after the closure of the Stock Exchange). Publication routinely takes place at the beginning of the following day and the schedule is not affected by the access of the NBH staff. No public official outside of the NBH has access to these data prior to publication.

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

The SD of the NBH is identified as the source of the surveys of depository corporations and of the central bank

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

In the case of significant changes in methodology, in the last press release before implementing the change, an advance notice is given.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized.

The 1991 Act on the National Bank of Hungary (LX/1991) provides broad ethical guidelines for employees of the NBH, and while there is a written code of conduct applicable to the staff of the NBH, it is not publicized.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows international standards, guidelines, or agreed practices.

The analytical framework used by the SD to compile the surveys of the central bank and the depository corporations reflect concepts and principles that are, in general, consistent with the Fund's statistical methodology as described in the *Monetary and Financial Statistics Manual (MFSM)*. This analytical framework focuses on a measure of broad money that comprises the liabilities of the depository corporations (the financial assets of other sectors of the economy) and on the claims of the depository corporations on other sectors of the economy. Accordingly, a survey of the depository corporations is prepared which consolidates the survey of the central bank with the aggregated balance sheets of the other depository corporations. The main monetary and credit aggregates identified in this framework are broad money (comprising banknotes and coins in circulation, enterprise and household deposits, deposits of local governments and nonprofit institutions, and bonds and savings notes), net foreign liabilities, net credit to general government, and credits to local governments, nonprofit organizations, enterprises, households, and other financial institutions.

2.2 Scope

2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices.

The financial corporations sector comprises the NBH, 249 ODCs (banks, specialized credit institutions, and cooperatives) that are mainly engaged in financial intermediation and issue liabilities that are included in the national definition of money, and 931 Other Financial Corporations (OFCs). The Survey of Depository Corporations (banking sector) compiled by the MSD of the NBH, from balance sheet data for the NBH and data reported by the all 249 depository corporations, is comprehensive in its coverage of those financial institutions that are engaged in financial intermediation and whose issue liabilities are included in the national definition of money. The balance sheet data that are the source data for these surveys represent the centralized accounting records for the branches and regional offices of the individual institutions.

In accordance with the reporting requirements of the European Central Bank, preparations will start in 2001 for the inclusion of money market funds (investment funds that issue low risk liquid shares that are close substitutes for deposits) into the sector of ODC. With regard to the other financial corporations, balance sheets are reported on a monthly basis for all insurance companies and data on pension funds are provided on a quarterly basis on selected balance sheet and profit and loss accounts. A Financial Corporations Survey, which consolidates the three subsectors of the central bank, the ODCs, and OFCs is not currently compiled for Hungary.

2.3 Classification/sectorization

2.3.1 Classification/ sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices: see dataset-specific framework

The principles underlying the classification of financial instruments and the sectorization of institutional units are, with few exceptions, based on international standards and are generally consistent with the Fund's statistical methodology as described in the *MFSM*.

With regard to financial instruments, the classification framework is based on the liquidity of the asset and the legal characteristic that describe form of the underlying creditor/debtor relationship. During 1999, unclassified assets constituted only 9 percent on average of the total assets in the central bank survey, while unclassified liabilities made up 7 percent of total liabilities during the same period.

The following deviations from the standards of the *MFSM* has been identified:

- Although sectoral information on derivatives is available from Hungary's International Investment Position, a lack of detailed accounting information makes it impossible to classify financial derivatives separately from the other financial instruments that are components of foreign assets and liabilities. The collection of information on these financial instruments will be facilitated by the implementation of the 1995 ESA in 2001 and the introduction of a new instrument classification scheme.
- Deposits of a credit institutions that is in the process of liquidation are included in Hungary's monetary aggregates. This statistical treatment diverges from the recommendations of the *MFSM* which require the exclusion of all deposit liabilities of non-operating banking institutions from monetary aggregates and their classification as restricted deposits. The SD plans to revise the classification of these deposits during 2001 to meet the reporting requirements of the ECB.
- The principles of sectorization applied in the monetary statistics is consistent with the *MFSM* and groups similar kinds of institutional units with respect to their objectives, functions, and economic behavior. However, two deviations from these principles have been identified: all nonprofit institutions, including those that are mainly engaged in providing goods and services to households, are classified as part of general government; and no distinction is made between public and private nonfinancial enterprises in the nonfinancial corporations sector.
- It is expected that refinements in the sectorization will be implemented with the introduction of a new statistical framework in 2001 based on the 1995 ESA.

2.4 Basis of recording

2.4.1 Recording is done on an accrual basis.

The accrual accounting guidelines recommended by *MFSM* require interest accruing on deposits, loans, and securities other than shares be incorporated into the outstanding amount of the financial asset or liability, rather than being treated as part of other accounts receivable/payable. Accrual accounting is, however, not used. The NBH chart of accounts does not provide for the allocation of accrued interest to specific instruments and although the data reported by the ODCs allow for the classification of accrued interest by sector, it is not possible to allocate this interest to specific financial instruments.

The statistical reporting requirements of the ECB do not specify the incorporation of accrued interest into individual financial instruments. Nevertheless, the Controlling Department is exploring the feasibility of reprogramming the computer system so that accrued interest would be allocated to the appropriate financial instruments in the accounting data reported for monetary statistics. For the ODCs, it is envisaged that a period of several years will be required for the reporting of comparable information.

Interest arrears are, however, allocated to the relevant financial instrument.

2.4.2 Market prices are used to value flows and stocks

The general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be done on the basis of market prices or market-price equivalents. The valuation of loans is an exception to this principle and loan values should be based on creditors' outstanding claims without adjustment for expected loan losses. This amount comprises the outstanding principal plus any accrued interest and is referred to as the book value of a loan.

This valuation principle is, however, not strictly applied by the depository corporations because securities are valued in their accounts on the basis of acquisition prices. The new accounting law that was introduced in January 2001 requires the valuation of securities at market prices and these changes will be reflected in the balance sheet reports effective May 2001.

Consistent with the recommendations of the *MFSM*, the loan portfolio and deposits on the balance sheets of the depository corporations are valued at book value. Loan valuation is not adjusted for expected loan losses and provisions for expected losses are recorded as separate negative entries on the asset side of the balance sheet. The new accounting law introduced in January 2001 which requires loans to be recorded net of provisions should not prove an impediment to obtaining statistical information on loans based on book values—the guidelines prepared by the MSD and the Bank Supervision Department for data reporting require depository corporations to report this information on a gross basis.

The *MFSM* also recommends that financial instruments denominated in foreign currency should be converted into national currency values at the market exchange rate prevailing at the balance sheet date. Foreign currency denominated assets and liabilities are correctly valued in Hungary's monetary statistics at market prices and converted to Hungarian forint using the midpoint market exchange rate. Since 1999, financial derivative positions, which form part of foreign assets and foreign liabilities, are valued at market prices in accordance with *BPM5*.

3. Accuracy and Reliability

3.1 Source data adequacy

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

The source data for compiling the survey of the central bank are the accounting records of the NBH that are prepared by the Controlling Department and are available on a daily basis. Since 1999, foreign assets and liabilities and balance sheet totals have been adjusted to take account of financial derivatives for statistical purposes.

Apart from the accounting records of the NBH, the basic data sources for the survey of depository corporation sector are the individual report forms (preliminary daily/final monthly) of the other depository corporations. The analytical accounts are compiled on the basis of preliminary daily and final monthly report forms. The reported data are sufficiently disaggregated in terms of instruments and sectors to permit in-depth analysis of the accounting data.

The source data for compiling surveys for the central bank and the depository corporations sector are subject to internal consistency checks. The MSD verifies the accuracy of the data by checking the corresponding interbank positions reported by the NBH and the Other Depository Corporations. In addition, the reported data of the banks are randomly checked against accounting records collected by the Bank Supervision Department during routine inspections.

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

These source data reasonably approximate the definitions, scope, classifications, time of recording, and valuation required.

3.1.3 Source data are timely

The Controlling Department of the NBH prepares the accounting data for the NBH on a daily basis and makes them available at the end of each working day. Source data for the ODCs are available from report forms that are prepared on a preliminary daily basis and on a final monthly basis. The deadlines for reporting preliminary and final data are the fifth and the fifteenth working day after the end of the month. The data for the banks are reported by

electronic means using the giro system. Some cooperative credit institutions, however, submit their returns by facsimile.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The statistical techniques used to compile monetary statistics are automated. In processing source data, computerized files are used which incorporate standardized macros. For the survey of depository corporations, estimates are used only to supplement data for the daily report forms of the ODCs that are not available on a daily basis. The final monthly surveys do not include estimates or adjusted data.

The MSD prepares guidelines on an annual basis covering the practices and procedures to be followed by the ODCs in the completing reports form that are submitted to the NBH.

3.3 Assessment and validation

3.3.1 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 planning.

Report forms used by the ODCs are revised on an annual basis to reflect changes in the presentation of accounting records and the needs of compilers. The presentational format of data for the NBH published in the Monthly Report of the NBH will be revised late in 2001 to be identical with the information published on the NBH website. In addition, the institutional coverage of the Other Depository Corporations subsector will be expanded to include mutual investment funds issuing shares that are highly liquid.

3.3.2 Main intermediate results are validated against other information where applicable.

Positions with the central bank reported by the ODCs are checked by data from the NBH's own records.

3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to guide users.

Errors in the reported data are documented on a routine basis and letters are sent to the responsible depository corporations. Prior to conducting an inspection, the Bank Supervision Department of the NBH usually requests the SD to raise any outstanding data issue to be reviewed with the bank in question.

3.4 Revision studies

3.4.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes.

No studies or analyses are conducted on a routine basis which are used to guide and improve statistical processes.

3.4.2 Revisions studies and analyses are made public and used to guide data users.

Not applicable.

4. Serviceability

4.1 Relevance of information

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

MSD reviews developments that have an impact on statistical data requirements with the Economics and Research Department and the Monetary Policy Department of the NBH, the two departments that analyze the statistical data. These departments were recently consulted about changes that will affect the reporting of balance sheet data of depository corporations, following the implementation of the new accounting law. Departments are also requested to provide comments on the guidelines developed by the SD for the preparation of report forms by the ODCs.

Making monetary statistics compatible with the ECB requirements is an important aspect of the review work of NBH.

4.2 Periodicity and timeliness

4.2.1 Periodicity follows dissemination standards.

The surveys of the NBH and of the depository corporations sector are disseminated on a monthly basis, which is consistent with the specifications of the SDDS.

4.2.2 Timeliness follows dissemination standards

The surveys of the NBH and of the depository corporations sector are disseminated two weeks after the end of the reference period, which is in keeping with the specification of the SDDS.

4.3 Consistency

4.3.1 Statistics are consistent or reconcilable over a reasonable period of time.

The SD maintains comprehensive methodological notes for time series data, describing the main breaks in series, their causes, and the adjustments made. Explanations are also provided for outlying observations in times series.

There are no discrepancies between monthly and quarterly data.

4.3.2 Statistics are internally consistent (e.g., accounting identities observed)

The SD routinely cross checks data on the net foreign assets positions the NBH and the depository corporations sector with the corresponding measures derived from the international investment position. Interbank positions between the NBH and the ODCs are checked for consistency in the data reported in the comparable accounts of the ODCs and the NBH.

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

Due to apparent differences in the institutional coverage of the general government, it is not possible for the SD to reconcile net credit to government derived from the survey of depository corporations with net the borrowing of the general government reported in the fiscal accounts.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established and transparent schedule.

Revision policies are well established and are readily available. The data for the surveys of the NBH and the depository corporations are preliminary when first released and are finalized within one month and two months, respectively, except in case of the year-end data which are finalized five months after the end of the reference year.

4.4.2 Preliminary data are clearly identified

Revisions made to the surveys of the NBH and depository corporations are clearly identified in the Monthly Report and Annual Report of the NBH, and in the statistical releases posted on the web site. This includes the provision of comments for retroactive changes.

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).

Published monetary statistics are supplemented by the dissemination of tables, charts, and text.

5.1.2 Dissemination media and formats are adequate

Monetary data are disseminated in many formats including press releases, the NBH's Monthly Report, and on the NBH website, (<http://www.mnb.hu>).

5.1.3 Statistics are released on a pre-announced schedule.

The SD disseminates an advance release calendar on the website of the NBH showing the publication schedule of the surveys of the NBH and depository corporations for the coming twelve month period. This calendar is updated twice a year.

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

The data are released simultaneously by the NBH to all interested parties in the press releases *Banking Survey and Developments in the Monetary Aggregates*, *Analytical Accounts of the NBH (prelim.)*, and *Household and Corporate Sector Borrowing and Deposit Rates*, *Interbank Lending Rates*.

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 international standards are annotated.

The statistical concepts, scope, classifications, basis for recording, data source, and statistical techniques are available in the information posted for Hungary on the Fund's Dissemination Standards Bulletin Board (DSBB).

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized.

The names of contact persons in the SD is publicized to major users. These are also available in Hungary's information posted on the DSBB.

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

The Internet is the primary dissemination format for monetary statistics and metadata. All dissemination formats are identified on the DSBB. Catalogues listing publications and other services are not widely available.

E. Balance of Payments Statistics

0. Prerequisites of Quality

0.1 Legal and institutional environment

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

The compilation and dissemination of the balance of payments (BOP) data are governed by the terms and conditions of the 1991 Act on the National Bank of Hungary (LX/1991), the 1995 Act on Foreign Exchange (XCV/1995), and the 1993 Act on Statistics of Hungary (XLVI/1993). These laws provide collectively the legal basis for the collection of statistical information used in BOP compilation: the Act on the NBH regulates the information collection from financial institutions; the Act on Statistics regulates the information collection from other sectors; and the Act on Foreign Exchange regulates the information collection of all transactions settled in foreign exchange.

Dissemination of balance of payments data is guaranteed under Article 34 of the Act on the NBH, and the Statistics Act but the former provides this guarantee within the ambit of a Central Banking Information System. A comprehensive legal framework for the statistical functions of the National Bank of Hungary is expected to be addressed within the context of EU accession.

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

The 1993 Act on Statistics of Hungary (XLVI/1993) designates the NBH as an organ of the official statistical service, thereby providing the legal basis for inter-agency coordination. At an operational level, most of the source data are compiled within the NBH, based on the reporting of (1) credit institutions; (2) enterprises on their borrowing/lending activities from/to nonresidents; (3) enterprises on their stocks of overall assets and liabilities against nonresidents held outside the resident banking sector, and on cumulated transactions and other changes affecting these positions; and (4) exchange offices on their cumulated turnover and cash holdings.

However data on the government sector's foreign exchange-denominated liabilities managed by institutions other than the NBH are sourced from the Hungarian State Treasury, and beginning in 1999, there has been a joint NBH–HCSO initiative in the launching of annual and quarterly surveys of Foreign Direct Investment (FDI) enterprises. The existing coordinative

mechanism for data sharing appears adequate, and any shift towards compilation methods reliant on data sources external to the NBH are not likely to encounter legal obstacles.

0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.

The confidentiality of data reported by individual persons and entities are guaranteed under Article 34 of the Act on the NBH, and under the Statistics Act.

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

The reporting of (1) credit institutions; (2) enterprises on their borrowing/lending activities from/to nonresidents; (3) enterprises on their stocks of overall assets and liabilities against nonresidents held outside the resident banking sector, and on cumulated transactions and other changes affecting these positions; and (4) exchange offices on their cumulated turnover and cash holdings are mandatory under the Act of the NBH, the Act on Foreign Exchange, and the Statistics Act. The Hungarian State Treasury (MAK) reports on the government sector's foreign exchange-denominated liabilities (vis-à-vis nonresidents).

0.2 Resources

0.2.1 Staff, financial and computing resources are commensurate with institutional programs.

The BOP Division of the Statistics Department of the NBH has a staffing of 29 (17 professional and 12 support staff), or 36 percent of the Department's staff resources. The ratio of professional to support staff has improved within recent years, and 7 of the 17 professional staff have undergone BOP training courses offered by the IMF.

The Division's computing resources are mainframe-based, using ORACLE 7.3 software (extended version), and are commensurate with institutional functions. A new computerized system launched in 1997 replaced the mainframe computerized system of the 1960's and forms the core of the 5-year BOP Project designed to integrate the functions of the statistical process (source data collection, and processing; and BOP compilation and dissemination).

As the NBH utilizes a centralized budgeting system, the financial resources available to the BOP Division could not be assessed. However, BOP work schedules appear not to have been stymied by the lack of staff and financial resources.

0.2.2 Measures to ensure efficient use of resources are implemented.

No measures exist.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

Focus on the quality of the statistical product is driven by the need to be in compliance with BPM5, and to meet the statistical requirements of the European System of Central Banks and Eurostat. Additionally, the Statistics Department undertakes to incorporate an element of statistical development in its annual work program; in 2000 focus was placed on sectorization of the accounts.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Statistics are compiled on an impartial basis.

1.1.2 Choices of sources and methods are informed solely by statistical considerations

- The choices of sources and methods appear to be informed by statistical considerations, including data quality as evident by compilers' concerns of replacing data sourced from the international transaction reporting system (ITRS) of the NBH with customs-based merchandise trade data. While such a transition will enable the recording of goods transactions to be in accord with BPM5, coverage and timeliness issues relating to customs-based merchandise trade data are yet to be addressed. In addition, the lack of a public commitment to including data on reinvested earnings in the balance of payments, using the results of the first annual FDI survey completed in early 2001, has raised questions. The authorities explained that the survey results would need to be carefully analyzed against other available sources of information and that pending methodological issues should be settled before publication and use of the data for other statistical purposes. They also stated that it would be advisable to have a time series of estimated values for reinvested earnings in order to allow at least a minimal comparability of these aggregates over time.

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

There appears to be no entitlement, and there has been no incidence of erroneous interpretation and misuse of BOP statistics; the NBH attributes this to the availability of detailed metadata which inform usage of the statistical product.

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 under which BOP statistics are collected, processed and disseminated are available to the public in electronic and hard copy formats.

1.2.2 Internal government access to statistics prior to their release is publicly identified.

As indicated in Hungary's BOP metadata on the Dissemination Standards Bulletin Board (DSBB), the Finance Minister has access to the data on the day prior to its release to the public, after trading closes on the Budapest Stock Exchange.

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

Products of the National Bank of Hungary are clearly identified.

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

Major changes in methodology are announced at the time the changes are introduced.

While no policy exists for advance notice of major changes in source data and statistical techniques, the NBH has drawn attention to the fact that the results of new FDI enterprise surveys introduced in 1999/2000 will be integrated into the BOP accounts to address the issue of treatment of reinvested earnings. (see "Methodological Notes" para.20 available on the NBH's Internet website (<http://www.mnb.hu>))

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized

The 1991 Act on the National Bank of Hungary (LX/1991) provides broad ethical guidelines for employees of the NBH. While there is a written code of conduct applicable to the staff of the NBH, it is not publicized.

The broader legal basis on which the BOP Division collects statistical information for BOP compilation also appears to be a source of ethical guidelines, as data collected by the Statistics Department of the NBH, under the Statistics Act, cannot be made available to staff in other departments of the NBH.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows international standards and guidelines, or agreed practices.

- Beginning in 1996, the compilation of Hungary's BOP followed the broad conceptual framework of BPM5, and deviations from the concepts defined therein are identified in metadata available in electronic format, and in hard copy publications.

2.2 Scope

2.2.1 Transactions/institutional units are covered in the balance of payments statistics in conformity with international statistical guidelines.

- Hungary's BOP statistics defines resident institutional units in conformity with BPM5's concepts of economic territory, residence, and center of economic interest.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices.

Fours sectors are distinguished in the BOP statistics: the NBH, the government sector, credit institutions, and enterprises and other sectors.

The government sector is comprised of the central and local governments, extrabudgetary funds and social security funds. The State Holding and privatization Company (APV Rt.) is included in this sector.

The credit institutions sector consists of commercial banks, special credit institutions, cooperative credit institutions and building societies.

Enterprise and other sectors include nonfinancial corporations (GIRO, KELER, insurance corporations and pension funds, other financial intermediaries and auxiliaries), households and nonprofit institutions serving households.

Classification of Hungary's BOP accounts broadly conforms to the requirements of *BPM5*, and BOP compilers have sought to address the reclassification of financial derivatives in light of modifications to the international standard. Effective from January 1999, the gross and net payments on the different type of interest rate derivatives are classified under the financial account as opposed to the previous practice of recording them under income on money market instrument and financial derivatives, the same applies for the interest payments linked to the long term currency swap deals, and recording of transactions in options.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

- Transactions in real resources (goods and services) are recorded on the basis of market prices, with the exception of financial leasing, which is recorded according to the lease payments instead of the imputed market value of the given goods.
- The assets of the NBH and the credit institutions in debt securities are valued at historic cost, while for other sectors, stocks are recorded as cumulated flows at actual market prices.
- Since 1999, the NBH and credit institutions have begun to report stock of financial derivative positions at market (replacement) value. However, in contrast to the transactions, there is no information on the derivative positions of enterprises and other sectors.

Monthly flow data, reported in aggregated form by currencies, are recalculated and aggregated to national level in forints, at the workday-weighted monthly average of the daily official NBH exchange rates.

End-month stock data, also reported by currencies, are recalculated and aggregated to national level in forints at the end month official exchange rates.

2.4.2 BOP accounting is done on an accrual basis.

- In general, change of ownership as specified in the BPM5 is the principle governing the recognition of transactions and their time of recording. However use of the ITRS as the primary data source for BOP compilation leads to deviation from standard practices in a number of areas as follows:
- Goods are at invoice value and are recorded at the time settlement transactions appear in the reporting system of credit institutions. Goods for processing and repair, and goods procured in ports by carriers are not included in the goods category in accord with BPM5; transactions of the former are recorded on a value-added basis under 'Services,' while transactions of the latter are recorded at the time of payment, rather than at the time of change in ownership.
- Incomes are recorded in the current account on a cash basis rather than on an accrual basis; this results in the exclusion of reinvested earnings from both the current and financial accounts.
- In 1999/2000, the NBH launched a joint set of four questionnaires together with the HCSO, aimed at statistical monitoring of the enterprise sectors' direct investment transactions and positions; two of these are annual surveys designed to obtain information on reinvested earnings and stock data. Surveys for the reference year 1999

were completed in early 2001. While data processing activities appear to be completed, a decision on the techniques for incorporating annual data on reinvested earnings into monthly BOP statistics has not yet been made, and a time frame for integration has not been identified by the authorities.

- The ITRS is also the source for entries in the financial and capital account.

3. Accuracy and reliability

3.1 Source data

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

The primary data sources of Hungary's BOP statistics are the monthly reports of (1) credit institutions; (2) enterprises on their direct borrowing/lending activities from/to nonresidents; (3) enterprises on their stock of overall assets and liabilities against nonresidents held outside the resident banking sector, and on cumulated transactions and other changes affecting these positions; (4) exchange offices on their cumulated turnover and cash holdings; and (5) the Hungarian State Treasury (MAK) on the government sector's foreign exchange-denominated liabilities (vis-à-vis nonresidents).

The ITRS is based on the reporting both credit institutions, and enterprises.

Since 1998, **credit institutions** report separately all settlement transactions above a threshold which was set at US\$100,000 in 1998, and was lowered to US\$50,000 in 1999. Below this threshold, credit institutions report all their own and their clients' transactions affecting their claims and liabilities vis-à-vis non residents in aggregated form, broken down by currencies, countries, and BOP transaction types.

Beginning in 2000, **enterprises** report on a monthly basis on their direct borrowing/lending activities for loans of USD500,000 or more from/to nonresidents; within the last year there have been about 1,800 such loans; annual reporting is required for loans below this threshold. Enterprises also report on a monthly basis on their stock of overall assets and liabilities held outside of resident banking sector against nonresidents, and on cumulated transactions and other changes affecting these positions.

These sources form part of a comprehensive data collection program which, except for the reporting of the Foreign Exchange Offices and MAK, are derived from within the NBH settlement-based ITRS system. Both internal and external data sources assume full coverage of the institutional units, transactions and positions required for BOP compilation, and are reliable.

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

Data derived from the ITRS are based on the recording of transactions at the time of settlement instead of at time of change in ownership; transactions in goods and services that have no payment counterpart are excluded.

Definitions, scope and classifications used in source data are broadly in line with *BPM5*.

3.1.3 Source data are timely

Source data, which originate primarily from the ITRS, are timely.

3.2 Statistical techniques

3.2.1 Data compilation employ sound statistical techniques.

Under the BOP Project launched in 1996, data management procedures include the development of computerized edit checks to identify coding and other errors in source data, and to minimize processing errors of editing and coding.

The NBH publishes an annual manual “Instructions on how to prepare information for the Central Bank.” The edition for use by credit institutions in 2001 was published in September 2000. This annual publication, which includes a detailed workbook, updates transaction classification codes and are compatible with the requirements of *BPM5*.

3.2.2 Other statistical procedures employ sound statistical techniques.

The NBH seasonally adjusts the current account time series using a model based on the SEATS TRAMO software. The methodological framework of the model are modified on the basis of results, and notes on this framework are published in the NBH’s *Monthly Report*.

3.3 Assessment and validation

3.3.1 Source data are routinely assessed; the results of the assessments are monitored and made available to guide planning.

The closed-type ITRS is the primary source of BOP statistics, and therefore an assessment of survey-based information is not applicable.

Credit institutions report separately all settlement transactions above a threshold of US\$50,000, while enterprises report on their direct borrowing/lending activities for loans of

US\$500,000 or more from/to nonresidents; the reporting formats allow for verification of classification, and high value transactions are certified with respondents.

3.3.2 Main intermediate results are validated against other information where available.

Secondary data sources used to supplement and verify data compiled from the ITRS are as follows:

- Results of the quarterly FDI enterprise surveys are used to control settlement data sourced from the banking sector, and to obtain detailed classification of transactions (geographic and economic activity breakdowns).
- Daily reports of security traders and the Central Clearinghouse and Depository (Budapest) Ltd. (KELER) are available to the Statistics Department of the NBH and are used for BOP validation purposes.
- Information reported in the financial press is used to verify high-value FDI and other transactions.

3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to guide users.

- NBH staff are alerted on the scope of the errors and omissions and seek to understand them by crosschecks between current, capital and financial accounts; internal data processing checks are also built into the ITRS to minimize classification errors.
- The behavior of the BOP statistical time series are routinely assessed against some related series, e.g., financial flows data are validated with the corresponding stock of external debt data, and reported data on investment income are assessed in relation to the corresponding stock in the IIP statistics. However validations for other items on the current account, such as freight earnings (which could be validated against volume/value measures of trade flows) and travel transactions (which could be validated against migration data, and surveys of hotel occupancy and travel expenditure) are not undertaken primary due to the periodicity and timeliness constraints of BOP compilation and dissemination.
- Data reconciliations of selected transactions are conducted with a major trading partner on an ad hoc basis.
- Validations appear to be both routine and ad hoc, and as an internal quality control exercise, results are not available to the public.

3.4 Revision studies

3.4.1 Studies and analyses of revisions are carried out routinely, and used to inform statistical processes.

Studies and analyses of revision are not undertaken by NBH or any other agency.

3.4.2 Studies/analyses of revisions are made public to guide data users.

Not applicable.

4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

As an organ of the Official Statistical Service, the NBH is represented on the National Statistical Council which operates, under the Statistics Act, as a professional advisory and opinion-forming body representing the interests of society and data users in informing data collection procedures defined in the annual national data collection program which is executed under Government Decree.

NBH's Statistics Department is represented at meetings of Eurostat's Working Group on Balance of Payments, and the Committee on Monetary, Financial and Balance of Payments (CMFB), as well as those of OECD's Working Party on Financial Statistics and Joint OECD-Eurostat "Trade-in-services statistics" experts. NBH staff participate regularly in ad hoc international statistical meetings and seminars including those conducted by the IMF and the ECB.

4.2.1 Periodicity follows SDDS requirements.

Hungary compiles and disseminates monthly BOP data, thereby exceeding the quarterly periodicity requirement of the SDDS.

4.2.2 Timeliness follows SDDS requirements.

Hungary disseminates preliminary data on the current account and selected components of the financial account no later than 35 days after the end of the reference month. Final data, including all components of the BOP, are disseminated no later than 50 days after the end of the reference month. The quarterly timeliness requirement of the SDDS is exceeded.

4.3 Consistency

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

Monthly BOP data dating from 1990 are available in time series format; breaks in series are identified and explained in metadata available electronically, and in hard-copy publications, and are primarily related to the shift to *BPM5* format in 1995. Pre-1995 statistics utilize *BPM4* classifications, and the lack of information has rendered it impossible to reclassify the data sets into *BPM5* structure.

Unusual changes in economic trends are explained in the monthly BOP press releases (preliminary and final), and in the NBH's Monthly Report.

4.3.2 Statistics are internally consistent

The NBH compiles and disseminates monthly BOP data which are used to generate quarterly and annual BOP statements.

Since 1997, annual net errors and omissions have been fairly stable, primarily as a result of continuous improvements in the classification and coverage of transactions of credit institutions and enterprises.

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

BOP statistics are consistent with money and banking statistics as part of the integrated Central Bank Information System, and with external debt statistics produced by the NBH. However there is no reconciliation with the national accounts (specifically the rest of world accounts) produced by the HCSO; the latter employs the accrual principle of accounting, and utilize data from surveys, the Customs Department and other administrative sources as the basis for compiling their accounts.

The opening and closing positions of the standard components of the IIP are available with monthly periodicity, and changes in positions reflecting transactions, exchange rates, prices and other changes are disseminated in an aggregative format in the monthly "Bulletin of the NBH." Detailed information is disseminated in the NBH's monthly publication "Hungary balance of payments and external assets and liabilities" known as the "White Book."

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established and transparent schedule.

Preliminary monthly data are available with a lag of 35 days, and final data are disseminated 15 days later (or 50 days after the end of the reference month). In the event of any revisions to final data, the changed status is noted in the next monthly press release, the actual time

series and the methodological notes available on NBH's Internet website; the changed status is also clearly identified in the next issue of the "*Monthly Report of the NBH.*"

4.4.2 Preliminary data are clearly identified

Preliminary data are clearly identified on the Internet and in hard-copy publications.

5. Accessibility

5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons.

Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons.

5.1.2 Dissemination of media and formats are adequate.

Users find the dissemination of media and formats to be adequate.

5.1.3 Statistics are released on a pre-announced schedule.

An advance release calendar that gives the precise release dates for the next twelve months is disseminated on the NBH's Internet website, and published in the "*Monthly Report of the NBH.*" The calendar is updated twice a year, in June and December.

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

Statistics are released simultaneously to all interested parties by issuing the press releases "Hungary's preliminary balance of payments" and "Hungary's final balance of payments" in Hungarian and in English; detailed tables are released simultaneously on the NBH's Internet website, and the components prescribed in the SDDS coverage are released on Hungary's National Summary Data page (NSDP) on the day of release.

5.1.5 Nonpublished (but not confidential) sub-aggregates are made available upon request

Nonpublished, nonconfidential, sub-aggregated data are made available upon request. No fee is charged. Requests for seasonally-adjusted BOP components are frequently made by business analysts.

5.2 Metadata accessibility

5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources and statistical techniques is available, and differences in international standards are annotated.

Hungary's BOP summary methodology statement is posted on the DSBB. Detailed documentation on concepts, scope, classifications, basis of recording, data sources, and deviations from internationally accepted standards are disseminated, in Hungarian and English, on the NBH's Internet website. Publications such as the Fund's *Balance of Statistics Yearbook*, and the HCSO's *Annual Statistical Yearbook* also contain metadata that identify deviations from internationally accepted standards.

SDDS summary methodology statements and base page metadata are regularly reviewed and updated.

5.2.2 Different levels of detail are provided depending on intended audience and type of collection.

The press releases "Hungary's preliminary balance of payments" and "Hungary's final balance of payments" provides in tabular format, information on the current account, and "nondebt creating financing" (net); while the latter is not a standard component of the *BPM5*, it is derived as the aggregate of net equity capital of direct investment and net equity securities of portfolio investment.

Detailed information on all components of the BOP (current, capital and financial accounts) are available on the NBH's Internet website in time series format, and are published in the "*Monthly Bulletin of the NBH*" (English and Hungarian versions).

5.3.1 Contact person for each subject field is publicized.

A contact person is identified on the DSBB, and in the *Monthly Bulletin of the NBH*.

5.3.2 Catalogues of publications and other services, along with information on any fees, are widely available.

The Internet is the primary dissemination format for BOP data and metadata. All dissemination formats are identified on the DSBB. Hard-copy catalogues of publications and other services are not produced by the NBH.