

**IMMEDIATE  
ATTENTION**

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To: Members of the Executive Board

From: The Secretary

Subject: **Jordan—Report on the Observance of Standards and Codes—Data  
Module—Detailed Assessments Using the Data Quality Assessment  
Framework**

The attached supplement to the data module of the report on the observance of standards and codes for Jordan (SM/02/315, 10/8/02) relates to detailed assessments using the data quality assessment framework and is circulated for the information of the Executive Directors.

It is expected that this report will be posted on the Fund's external website after October 15, 2002.

Questions may be referred to Mr. Ayales (ext. 36063) in STA.

Att: (1)

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Department Heads



INTERNATIONAL MONETARY FUND

JORDAN

**Detailed Assessments Using the Data Quality Assessment Framework (DQAF)**

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October 7, 2002

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Jordan's Report on the Observance of Standards and Codes (ROSC)—Data Module. Also included as appendices are: Jordan's current data dissemination practices against the General Data Dissemination System (GDDS) and the Special Data Dissemination Standard (SDDS), background information on the GDDS and the SDDS, the generic framework used for the assessment of the quality of Jordan's macroeconomic statistics, a brief description of Jordan's National Information System, and the results of a users' survey.

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## ACRONYMS

<i>1993 SNA</i>	<i>1993 System of National Accounts</i>
ASE	Amman Stock Exchange
ASYCUDA	Automated System for Customs Data Management
<i>BPM4</i>	<i>Balance of Payments Manual</i> , fourth edition
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
CBJ	Central Bank of Jordan
CDs	Certificates of Deposit
COFOG	Classification of the Functions of the Government
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DCS	Depository Corporations Survey
DOS	Department of Statistics
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
ESCWA	UN Economic and Social Commission for Western Asia
FDI	Foreign Direct Investment
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics (IMF)
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual, 2001</i>
HEIS	Household Expenditure and Income Survey
IAS	International Accounting Standards
ILO	International Labor Organization
IMF	International Monetary Fund
NIC	National Information Center
NIS	National Information System
IPI	Industrial Production Index
ITRS	International Transactions Reporting System
ISIC	International Standard Industrial Classification of all Economic Activities
ISWGNA	Intersecretariat Working Group on National Accounts
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
<i>MSB</i>	<i>Monthly Statistical Bulletin</i>
ODCs	Other Depository Corporations
PPI	Producer Price Index
QNA	Quarterly National Accounts
ROSC	Report on Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
<i>SITC</i>	<i>Standard International Trade Classification</i>
SNA	System of National Accounts
WPI	Wholesale Price Index

## DETAILED ASSESSMENTS USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, consumer and product price indices, government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the Jordanian officials. This information, which is organized along the lines of the generic DQAF (see Appendix IV), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Jordan's *Report on the Observance on Standards and Codes (ROSC)—Data Module*. This report was prepared by a mission from the IMF's Statistics Department that visited Amman during January 23-February 6, 2002.<sup>1</sup>

### I. NATIONAL ACCOUNTS

#### 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 Department of Statistics (DOS) is an independent government institution operating under the General Statistics Act No. 24 of 1950. This Act has been supplemented by Acts Nos. 46 and 61 in 1966. A new statistical law is under review at the Council of Ministries, and is expected to be enacted in 2002.

The General Statistics Act authorizes the DOS to collect, compile and disseminate official statistics about the socio-economic development of the Hashemite Kingdom of Jordan, as well as to conduct population and establishment censuses. Although national accounts statistics are not mentioned explicitly in the General Statistics Act, Article 2 makes it sufficiently clear that the DOS is responsible for compiling the national accounts.

###### 0.1.2 *Data sharing and coordination among data producing agencies are adequate*

Article 4 of the General Statistics Act stipulates that all government agencies are required to cooperate with the DOS in the collection and validation of statistical data. The coordination of statistical activities in all ministries and government departments is one of the duties of the General Director of the DOS.

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<sup>1</sup> The mission team was headed by Mr. Edgar Ayales and included Mmes. Elizabeth Sumar and Maria Mantcheva, Messrs. Tobias Wickens and Rainer Koehler (all STA), Mr. David Collins (external consultant), and Ms. Lidia Tokuda (STA—Administrative Assistant).

The DOS has good working relations with agencies that produce source data for the national accounts—the Ministry of Finance (MOF), The Central Bank of Jordan (CBJ), the Custom's Department, the General Sales Tax Department, etc. The DOS takes the necessary measures to avoid duplication of statistical data collection activities.

*0.1.3 Respondent's data are to be kept confidential and used for statistical purposes only*

Articles 10 and 11 of the General Statistics Act deal with the confidentiality of the individual respondents data and the procedures for preventing disclosure of individual data. Article 10 states that the DOS is not allowed to disclose individual statistical information to any official or private authority, nor to reveal or make public such information. Article 11 stipulates that staff who violate these provisions are liable to penalties, including imprisonment.

Special aggregation rules have been developed to ensure that indirect disclosure of individual data does not occur when aggregations of data are presented. The DOS staff review all data prepared for dissemination for possible indirect disclosure. Access to individual data is restricted to staff who require the information in the performance of their duties. Safeguards against unauthorized access to confidential databases and hard copy files exist. The relational database for basic economic statistics is designed with security protection for users' access rights.

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

According to Articles 8, 9, and 13 of the General Statistics Act, the DOS is authorized to request the information that it deems necessary from all public and private institutions, as well as from individuals. All requested respondents must furnish the requested information accurately, in the format and time period determined by the DOS. The DOS is authorized to investigate the accuracy of the information furnished, and to request additional information if needed. The Statistics Act prescribes that noncompliance can result in imprisonment and a (nominal) fine.

In practice, this provision is seldom applied, as serious efforts are made to create goodwill among data providers. The DOS tries to encourage voluntary responses. Most questionnaires contain a short introduction on the objectives of the survey.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs*

The National Accounts Statistics Division (NASD) of the DOS has a staff of eight individuals, comprising the division head, five permanent, and two contractual employees. The DOS basic economic statistics divisions provide support for the collection and processing of source data. The number of staff employed in the NASD is deemed by the DOS to be inadequate for the compilation of both annual and quarterly national accounts

(QNA) in current and constant prices, as well as supply and use tables and accounts by institutional sectors. Staff training in national accounts methodology is not adequate. The head of the NASD participated in the IMF's six-week national accounts statistics course and two other staff were trained in a one-week national accounts course in Kuwait, organized by the Arab Planning Institute. The retention of a core of skilled national accountants is difficult, due to unattractive salaries relative to other government institutions.

Computing resources are commensurate with the national accounts statistical program, and there is a program for staff training in computing skills. In 1998, the DOS implemented a relational database for annual economic statistics data. Its main objective is to assist in the generation of national accounts statistics. The NASD staff have access to individual data from all annual surveys. The business register, as well as all supporting classifications, are incorporated in the database.

The financial resources for compiling the annual and quarterly national accounts aggregates are not adequate. Due to budgetary limitations, important basic economic statistics surveys—such as the annual Household Expenditure and Income Survey (HEIS) and the survey of capital stock— have not been launched.

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

The DOS does not estimate the costs of producing individual statistics. However, the cost of large censuses and surveys, such as the Establishment, the Population and the Agricultural Censuses, and the HEIS, is carefully monitored.

The DOS undertakes an annual review of its resources in the context of budgetary planning for the following year and in accordance with the statistical priorities identified by the government.

The implementation of the relational database is an important step in resource saving. The electronic dissemination of statistical products on the DOS Internet website ([www.dos.gov.jo](http://www.dos.gov.jo)) has been able to reduce staff hours spent on responding to data requests.

### **0.3 Quality awareness**

#### *0.3.1 Processes are in place to focus on quality*

Management is sensitive to issues regarding the quality of statistics. The Internet site of the DOS disseminates the mission statement of the organization emphasizing quality. The Public Relations Division of the DOS is working toward creating statistical awareness among the public.

*0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

The DOS staff regularly review the problems in collecting and processing economic statistics data. User questionnaires are available in hardcopy publications and on the website to monitor the quality of the disseminated data. The Public Relations Division carries out user surveys to obtain feedback on data quality issues—mainly from government agencies and academic institutions.

*0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

The management of the DOS is aware of tradeoffs among the dimensions of quality in the compilation of the national accounts estimates. Regular meetings are held with government agencies about ways of improving the quality of the disseminated data. The management of the DOS is aware of the need of developing a work plan for improving data quality.

**1. Integrity**

***1.1. Professionalism***

*1.1.1 Statistics are compiled on an impartial basis*

The General Statistics Act (1950) defines the role of the DOS as an independent data producing agency. Professional competency, which is promoted by disseminating methodological papers, plays a key role in the promotion practices at the DOS. The national accounts staff are often asked by the Ministry of Finance and by the Central Bank of Jordan to undertake training of their staff in national accounts concepts and definitions. The DOS national accounts experts participate in the meetings of the Arab League Sub-committee on national accounts and of the UN Economic and Social Commission for Western Asia (ESCWA).

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

The choices of sources and statistical techniques are based solely on statistical considerations. Ad hoc surveys are often conducted in response to particular statistical needs.

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

The DOS national accounts staff comment on erroneous interpretation or the misuse of statistics. The release of the preliminary annual and quarterly national accounts data is usually supplemented by explanatory material for the press.

## **1.2 Transparency**

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

The General Statistics Act defines the terms and conditions under which the DOS produces and disseminates official statistics. The General Statistics Act is disseminated on the DOS website and in hard copy. The DOS statistical publications contain information on how to access the website.

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

The DOS macroeconomic statistics staff usually discuss the national accounts data prior to its release with expert staff from CBJ and MOF. The purpose of the discussions is to find out possible inconsistencies with other macroeconomic statistics datasets (balance of payments, government finance, and monetary and financial statistics). However, the public is not made aware of this access to national accounts statistics prior to their release.

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

Products of the DOS are clearly identified as such by their name and logo. The national accounts data disseminated in the CBJ's publications identify the DOS as the source. The DOS publications state that "extracts may be published if sources are acknowledged."

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

Advance public notice is not always given of major changes in methodology, source data, and statistical techniques. The first release of the revised 1994-based national accounts estimates in July 2000 was done through a public press release and a series of briefings.

## **1.3 Ethical standard**

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

All new DOS staff are asked to attend a course on the code of conduct, and special courses are held for senior staff. The courses are part of the program of the DOS Training Center and they provide clear guidelines on ethical behavior.

## **2. Methodological Soundness**

### **2.1 Concepts and definitions**

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

The DOS *Statistics Yearbook 2000* presents annual national accounts data for 1992–99 based on the concepts and definitions recommended by the *1993 SNA*.

### **2.2 Scope**

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

The minimum requirements for the scope of national accounts tables and accounts, established by the Intersecretariat Working Group on National Accounts (ISWGNA), are generally met. In addition, quarterly GDP estimates by the production approach at current and constant prices are compiled. The DOS compiles and disseminates the following national accounts and aggregates:

- Value added and GDP (annual and quarterly) at current and constant (1994=100) prices by activity;
- Annual expenditure of GDP at current prices;
- Annual value added components at current prices by activity;
- Annual sequence of accounts (up to financial accounts) for the total economy (compiled for 1999 but still not disseminated);
- Annual rest-of-the-world accounts (until net lending).

Annual GDP estimates following the expenditure approach at constant prices are not compiled.

The delimitation of the constituent units of the economy is in accordance with the *1993 SNA*. All free zones are included as part of the economy.

The production boundary is mostly in accordance with the *1993 SNA*. In particular, own-account production of goods for own-final consumption, output of goods for own-account fixed-capital formation, research and development on own account, mineral exploration, and production of computer software are included in the measurement of output. The production of entertainment, literary, and artistic originals are negligible and are not included in the production boundary; neither are illegal activities in the scope of output measurement.

The assets boundary is broadly in accordance with the *1993 SNA*. The defense-related assets that could be used for civilian purposes are included among tangible assets. Valuables are not

distinguished from consumption and are not included in the assets. Historical monuments are not included in the asset boundary. The intangible assets are included in the assets boundary with the newly redesigned 1999 basic economic statistics questionnaires.

## **2.3      *Classification/sectorization***

### **2.3.1      *Classification/sectorization systems used are broadly consistent with international standards, guidelines, or good practices***

Institutional units, transactions, and other flows broadly follow the *1993 SNA*. The institutional sectors classification also follows the *1993 SNA*.

Industrial activities are classified according to the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 3 recommended by the United Nations, extended by two additional digit levels for national purposes. Products are classified by the Central Product Classification (CPC). The Classification of the Functions of the Government (COFOG) is used to classify government expenditures. The Classification of Individual Consumption by Purpose (COICOP) is not used in national accounts (the household final consumption expenditure is derived as a residual—see 3.2.1), but the HEIS that is being conducted in 2002 is based on COICOP for classification of household expenditures.

## **2.4      *Basis for recording***

### **2.4.1      *Market prices are used to value flows and stocks***

The valuation rules used for recording flows and stocks are in accordance with the *1993 SNA*. Market output is valued at basic prices. Output for own use is valued at equivalent market prices. Intermediate consumption is valued at purchaser's prices. Corrections are made when transfer prices are detected. Total imports are recorded on a c.i.f. basis, and adjustments are made to estimate them on a f.o.b. basis. These adjustments are based on information from ASYCUDA and an ad-hoc survey of insurance and transport companies. Exports are recorded on a f.o.b. basis. There are no transactions in foreign currencies that need to be converted to Jordanian dinars.

### **2.4.2      *Recording is done on an accrual basis***

In principle, all transactions are recorded on an accrual basis in accordance with the recommendations of the *1993 SNA*. The basic data for central government, which are on a cash basis, are adjusted to an accrual basis with respect to taxes and subsidies on products and expenditures.



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

Transactions between establishments within the same enterprise are recorded on a gross basis.

**3. Accuracy and Reliability**

**3.1 Source data**

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

A business register was established on the basis of the Establishment Census carried out in 1999. The register is maintained by a special unit within the DOS. Prior to the register, comprehensive lists of establishments updated for new registrations were available and the respective DOS survey divisions were responsible for their updating.

An Establishment Census was conducted during July—October 1999. It covered some 150,000 establishments in all nonagricultural activities classified at the four-digit level of ISIC Rev. 3. The census questionnaire was designed to collect data on a set of economic variables such as the type of statistical unit, the activity status, the principal and secondary economic activities, the legal status, employment data, data on revenues, capital, etc. The census is used as a sampling frame for the basic economic statistics surveys.

Annual economic surveys are conducted for all activities—mining, manufacturing, electricity, industrial services, agriculture, construction, wholesale and retail trade, transport and communications, hotels and restaurants, services. In terms of value added, the annual surveys cover more than 90 percent of the total economic activities. The coverage of the activities (in terms of value added) on two-digit ISIC level is adequate. Large enterprises (defined differently for different activities) are covered through complete enumeration. Small scale enterprises are covered through sample surveys.

The framework for the surveys in 1999 is the Establishment Census. The DOS sample surveys rely on stratified random sampling, where the units are stratified in several strata—gross revenues, number of employees, paid-up capital, area, etc. The response rate of the annual surveys is good, and proper imputation methods are used to handle nonresponse. Records are maintained about imputation procedures for each survey. Appropriate estimation procedures are used for grossing up from the sample survey to the total population. Data collected are sufficiently detailed to derive all key national accounts aggregates, namely output, intermediate consumption, fixed-capital formation, and changes in inventories. Inventory in value terms is collected for all activities.

Household Expenditure and Income Surveys (HEIS) are carried out every five years. The HEIS covers all geographical areas and all socio-economic groups. Stratified random

sampling is used for sampling the responding households. Proper imputation procedures are used in order to handle nonresponses. Grossing-up factors are derived scientifically, based on sample design. The last survey was conducted in 1997 and the next one will be launched in 2002. Data collected include purchases of consumption and durable goods, production for own-consumption, and own-account fixed capital formation. Households are still reluctant to provide data on purchases of valuables.

Comprehensive government finance statistics are available on a quarterly and annual basis for the budgetary central government. The DOS also collects annual data from all local governments, and the extrabudgetary funds (the Health Fund and the Social Security Corporation). The Ministry of Finance provides data on all defense-related expenditures. Data on capital stock for both central and local government are available. Detailed data are available to measure output, intermediate consumption, fixed capital formation, and final consumption expenditure of government.

For external transactions, the DOS has access to the Customs Department's ASYCUDA. The DOS processes the customs' declarations data on imports and exports on a monthly basis.

Periodic censuses are also undertaken. Decennial population censuses are conducted (the last one in 1994). The agricultural census is carried out every ten years, the last one being in 1997. An Industrial Census is conducted every five years.

Quarterly surveys are conducted for almost all economic activities—industry, agriculture, construction, wholesale and retail trade, transport, telecommunications, business services, etc. Data collected are sufficiently detailed to derive the key national accounts aggregates.

Ad hoc studies are conducted in order to fill data gaps. Recent examples are the surveys of hotels and small scale manufacturing establishments, and of c.i.f/f.o.b. valuation of goods.

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

In close consultation with the basic economic statistics divisions, the DOS national accounts staff redesigned all annual 1999 surveys so that source data approximate the definitions, scope, valuation and classifications required in the national accounts. The fiscal year of the state and all establishments is the same as the calendar year, which limits inconsistencies in the time of recording. There is good cooperation between the national accounts division and the divisions responsible for the basic economic statistics. Compilers are well aware that concepts and definitions underlying source data may differ from those required by the national accounts, and make the necessary adjustments.

### *3.1.3 Source data are timely*

Most source data are available on a timely basis. However, annual economic statistics surveys sometimes may have delays.

The price statistics compiled by the DOS (producer price indices, wholesale price indices, consumer price indices, as well as price indices for agricultural products) are timely. The custom's declarations data is obtained from the ASYCUDA system on a timely basis. There are no delays in obtaining the balance of payments statistics and monetary and financial statistics from the CBJ. The MOF supplies data on central government on a timely basis.

### **3.2. Statistical techniques**

#### **3.2.1 Data compilation employs sound statistical techniques**

##### *Production approach*

Estimates of output and intermediate consumption are compiled by economic activities at the four-digit level of ISIC Rev. 3. The reliance on fixed ratios derived from benchmarks is very limited.

Concerning the techniques used to address specific issues relating to GDP compilation, the following can be noted:

- Owner-occupied dwellings: output is valued as the estimated rentals that tenants would pay for similar accommodation.
- Work in progress is not applied to standing timber, since the forestry industry has no significant share in the gross-value added.
- Inventory valuation adjustment: in the estimates of output, sales are adjusted for changes in inventories. The DOS does not adjust the source data for eliminating holding gains/losses, since its effect is considered to be insignificant due to the low inflation rates.
- Consumption of fixed capital: the perpetual inventory method is used as the conceptual basis for estimating consumption of fixed capital only for the general government sector. For other sectors, depreciation is used as a measure for consumption of fixed capital.
- The cash data on central government transactions are converted to accrual in particular for the taxes and subsidies on products and central government expenditure data.

The following should be noted regarding the estimates at constant prices:

- The double deflation and double indicator methods are used for almost all activities.

- Output and intermediate consumption are deflated/extrapolated/inflated by industrial activity at four-digit level of ISIC Rev. 3.
- Value added at current prices is not deflated directly by output or input prices.
- The volume measures for taxes less subsidies on products are estimated by extrapolation using volume measures of transactions subject to tax .
- Output volume of trade margins are estimated by extrapolating the base-year trade margins using volume extrapolators of sales.
- The volume changes are measured using a base year, which is changed every five years.

#### *Expenditure approach*

The GDP estimates by expenditure components are not all derived independently as household final consumption expenditure is determined as a residual.

Concerning the detail at which GDP estimates are compiled, the following should be noted:

- Government final consumption expenditure is compiled for 12 groups (for 1999) and for 10 groups for the data prior to 1999.
- Gross-fixed capital formation is compiled by acquiring activities and by types of assets.
- Changes in inventories are compiled by activities and types of inventories

The degree of reliance on fixed ratios derived from benchmarks or other sources that are more than five years old is very limited.

The following observations are made with regards the techniques used to address specific issues of GDP compilation:

- Government final expenditure is exclusive of incidental sales.
- Expenses of residents abroad are included in imports.
- Expenses of nonresidents in the economy are included in exports.
- Expenditures on items that are considered store of wealth (such as jewelry, works of art) are not included in the estimates of valuables, since the latter category is not distinguished from final consumption expenditure.

Volume measures of the expenditure components of GDP are not compiled.

Concerning the quarterly compilation techniques, the following should be noted:

- The Denton technique is followed to combine annual estimates with quarterly indicators.
- The quarterly compilation system derives quarterly series from seasonally unadjusted source data.
- There is no seasonal adjustment of the quarterly national accounts estimates.

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

The main shortcoming in the coverage of the annual national accounts concerns illegal activities. The DOS follows a case-by-case approach to estimate the informal activities. Surveys of the informal sector in construction and transport activities are conducted on a regular basis.

**3.3 Assessment and validation of source data**

*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*

For all annual and quarterly surveys, information is available about sampling and nonsampling errors. Nonresponse is monitored and carefully analyzed. Imputation procedures are documented and the national accounts staff are aware of the share of the imputed data. Nonresponse by enterprises leads to imputation on the basis of other enterprises in the same economic activity.

Field data checks are always made, a large part taking place in the field by the survey data collectors. Second validation of data is done when it is entered in the survey files. The annual economic statistics survey data is then assessed using the software tools of the relational database, mainly for misclassification, under coverage (the business register is also incorporated in the database), underreporting, and misreporting. The database provides a good opportunity to validate source data for temporal consistency and consistency between different data sources. High value transactions are identified and confirmed with respondents.

The administrative data from the MOF, Customs Department and the General Sales Tax Department are assessed for accuracy.

The administrative source data are generally consistent with national accounts requirements concerning definitions, classifications, and valuation. Adjustments are made for (i) the cash data of the central government for an accrual basis; and (ii) the balance of payments data of CBJ in order to be consistent with the 1993 SNA concepts.

The DOS analyzes the source data to identify any problems that may require further investigation.

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

#### **3.4.1     *Main intermediate data are validated against other information where applicable***

Intermediate data on major activities, mainly in industry, are assessed against related indicators, such as volume and price trends.

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

Assessments of potential discrepancies of major intermediate data are undertaken, and adjustments are made to remove the discrepancies. Particularly, growth rates are checked carefully.

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

There is no statistical discrepancy between GDP by the production and the expenditure approaches, since there is a residual item for GDP by expenditure. Supply and use tables were experimentally constructed for 1999, but are still not used to address discrepancies.

### **3.5     *Revision studies***

#### **3.5.1     *Studies and analyses of revisions are carried out routinely and used to describe statistical processes***

Detailed studies and analysis of the revised national accounts 1992–1999 series for the recent changes in the methodology (implementation of the 1993 SNA concepts and the change of base year) are undertaken, and comprehensive documentation is available.

The magnitude of revisions between preliminary and revised GDP data are investigated. Analysis of the revision of the preliminary GDP estimates are not available; they are usually made as part of the compilation process only.

## **4. Serviceability**

### **4.1. Relevance**

#### **4.1.1 *The relevance and practical utility of existing statistics in meeting users' needs are monitored***

In general, the DOS assesses whether the economic statistics adequately respond to the government's needs. Consultations are undertaken mainly with representatives of government agencies and the academia. Users' views are surveyed through the website of the DOS as well as by hardcopy questionnaires. However, there is no advisory group that systematically assesses the relevance of the existing national accounts data. No explicit external reviews have been conducted to assess the national accounts data across a wider audience.

The national accounts staff participate actively in the Arab League Sub-committee meetings on national accounts, in the ESCWA working group on national accounts meetings, and in the Eurostat meetings on national accounts.

### **4.2 Timeliness and periodicity**

#### **4.2.1 *Timeliness follows dissemination standards***

The annual GDP estimates at current and constant prices by the production approach meet the GDDS recommendations for timeliness. Quarterly GDP estimates at current and constant prices by the production approach are disseminated as encouraged in the GDDS and as prescribed by the SDDS. They also meet the SDDS requirements for timeliness—they are disseminated within three months after the end of the quarter.

#### **4.2.2 *Periodicity follows dissemination standards***

The dissemination of the annual GDP meets the GDDS recommendations. The quarterly GDP estimates also meet SDDS periodicity requirements.

### **4.3 Consistency**

#### **4.3.1 *Statistics are consistent within the dataset***

The quarterly GDP estimates are consistent with the annual data. The current price GDP estimates, the volume measures, and the deflators are consistent.

#### **4.3.2 *Statistics are consistent or reconcilable over a reasonable period of time***

Consistent time series data are available without break for the period 1992–99, while the previous series compiled according to the recommendations of the 1968 *SNA* are available

for 1976–92 without breaks. The DOS reconstructed historical series back to 1992, and is in the process of finalizing the reconstruction of the time series back to 1976. The dissemination of those series is expected to take place by the end of 2002. There is a documentation in the Arabic language describing the revisions made for the time series for 1992–99.

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

Since other macroeconomic data sets do not strictly follow 1993 SNA standards (the balance of payments data are compiled according to the fourth edition of the *Balance of Payments Manual*, and the government statistics data follows the 1986 *Government Finance Statistics Manual*), the DOS adjusts the data used for the compilation of national accounts estimates.

**4.4 Revision policy and practice**

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

The revision of the national accounts estimates for major changes in the methodology and base year is preannounced and made known to the public. There is adequate documentation on the revision but it is not published in the publication of the statistical series. A short summary of the revision documentation is available on the DOS website. The revision practice of the preliminary national accounts estimates is consistent over time, but no advance information is given to the public.

*4.4.2 Preliminary data are clearly identified*

Preliminary estimates are clearly identified in notes to tables. However, until the compilation of the final national accounts is completed, the estimates (both preliminary and revised) for a year are labeled “preliminary.”

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

The revision of the national accounts estimates for the base year and major changes in the methodology are studied comprehensively. A short summary of the study is disseminated on the DOS website. The revisions of the preliminary data are analyzed in the compilation process, but are not made known to the public.



## **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 national accounts estimates are disseminated at a very aggregated level. Estimates, growth rates, and shares are shown in the statistical yearbook by economic activity at the one digit level of ISIC Rev. 3, and by major expenditure category, with a breakdown by household consumption, government consumption, and capital formation.

#### *5.1.2 Dissemination media and formats are adequate*

Annual revised and final national accounts data are published in the statistical yearbook, on the website and in the CBJ bulletin. Longer-time series can be accessed through publications and through the DOS website. The annual preliminary and the quarterly national accounts data are not released in a publication nor on the website; they are disseminated through a press release to government, academia, and the media at large. They are available on a CD-ROM and on hardcopy upon request.

#### *5.1.3 Statistics are released on a preannounced schedule*

The annual and quarterly accounts follow a well-established practice of release.

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

The statistical series are released simultaneously to all users.

#### *5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request*

Nonconfidential data at detailed compilation level are available 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 internationally accepted standards, guidelines, or good practices are annotated*

Documentation on concepts, definitions, data sources and statistical techniques for compiling the revised 1992–99 national accounts estimates is available internally and upon request. A summary is available on the DOS website. Information on the response rate from the annual economic surveys is available to the public. All deviations from internationally accepted standards are documented. The GDDS metadata are not regularly reviewed or updated.

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

Summary methodological notes explaining the main national accounts aggregates are provided in the statistical yearbook, but more comprehensive sources and methods explanations are not available.

**5.3 Assistance to users**

*5.3.1 A contact person for each subject field is publicized*

Contact information for the national accounts data is publicized in hardcopy publications and on the website. The DOS catalog of publications and the website contain useful data for the users about the availability of national accounts statistics. The National Information Center (NIC) provides a hyperlink to the DOS website. The DOS participates in an Eurostat pilot project to enhance assistance to data users.

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

A list of publications is given in the DOS catalog of publications and on the website-Internet. The cost of the publications is stated, as well as information on how they may be obtained.

**Table 1. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR NATIONAL ACCOUNTS**  
(Compiling Agency: Department of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Pre-requisites of quality							
0.1 Legal and institutional environment		X					
0.2 Resources			X			Additional human and financial resources are needed.	
0.3 Quality Awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency			X			Government's internal access to data prior to public release is not made known to the public.	The DOS plans to inform the public about access given to government agencies prior to release (short-term).
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions		X					
2.2 Scope			X			Annual estimates of GDP by expenditure approach in constant prices are not available.	The DOS plans to compile annual constant price estimates of expenditure GDP (medium-term).
2.3 Classification/Sectorization		X					
2.4 Basis for recording		X					
3. Accuracy and reliability							
3.1 Source data		X					
3.2 Statistical techniques			X			Household final consumption expenditure is not derived independently. No adjustments for holding gains/losses.	Household final consumption expenditure will be derived independently for the 2002 annual GDP data (short-term).
3.3 Assessment and validation of source data		X					
3.4 Assessment and validation of intermediate data and statistical outputs			X			Supply and use tables are not used to address discrepancies in data.	Supply and use table will be compiled (medium term).

**Table 1. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR NATIONAL ACCOUNTS**  
(Compiling Agency: *Department of Statistics*)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment				Plans for Improvement and Target Dates
		O	LO	LNO	NO	
3.5 Revision studies			X			The DOS plans to carry out analysis of revisions (short-term).
<b>4. Serviceability</b>						
4.1 Relevance			X			The DOS plans to improve the process of assessing and monitoring user needs (short-term).
4.2 Timeliness and periodicity		X				
4.3 Consistency		X				
4.4 Revision policy and practice			X			The DOS plans to publish a preannounced schedule for the dissemination of GDP estimates (short term).
<b>5. Accessibility</b>						
5.1 Data accessibility			X			In the next two years, the DOS plans to issue publications on national accounts (short-term).
5.2 Metadata accessibility			X			The DOS will take measures to update regularly the GDDS metadata (short-term).
5.3 Assistance to users		X				

## II. PRICE STATISTICS (CONSUMER PRICE INDEX)

### 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 Department of Statistics is an independent government institution operating under the General Statistics Act No. 24 of 1950. This Act has been supplemented by Acts Nos. 46 and 61 in 1966. A new statistical law is being prepared with a view to paying special attention to the issue of data quality. The new law is expected to be enacted during 2002.

The General Statistics Act authorizes the DOS to collect, compile, and disseminate official statistical data about the socio-economic development of the Hashemite Kingdom of Jordan, as well as to conduct population and establishment censuses. Although prices statistics are not mentioned explicitly in the General Statistics Act, Article 2 of that Act makes it sufficiently clear that the DOS is the responsible agency for compiling the CPI, as well as the Producer Price Index (PPI).

##### 0.1.2 *Data sharing and coordination among data producing agencies are adequate*

Article 4 of the General Statistics Act stipulates that all government agencies are required to cooperate with the DOS in the collection and validation of statistical data. The coordination of statistical activities in all ministries and government departments is one of the duties of the General Director of the DOS.

##### 0.1.3 *Respondent's data are to be kept confidential and used for statistical purposes only*

Articles 10 and 11 of the General Statistics Act deals with the confidentiality of individual respondents data and the procedures for preventing disclosure of individual data. Article 10 states that the DOS is not allowed to disclose individual statistical information to any official or private authority, or to reveal or make public such information. Article 11 stipulates that staff who violate these provisions are liable to penalties, including imprisonment.

Special aggregation rules have been developed to ensure that indirect disclosure of individual data does not occur when aggregations of data are presented. The DOS staff review all data prepared for dissemination for possible indirect disclosure. Access to individual data is restricted to staff who require the information in the performance of their duties. There are safeguards against unauthorized access to confidential databases and hard copy files.

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

According to Articles 8, 9, and 13 of the General Statistics Act, the DOS is authorized to request the information that it deems necessary from all public and private institutions and organizations, as well as from individuals. All selected respondents must furnish the requested information accurately and in the format and time period determined by the DOS. The DOS is authorized to investigate the accuracy of the information furnished, and to request additional information if needed. The Statistics Act prescribes that noncompliance can result in imprisonment and a (nominal) fine.

In practice, this provision is seldom applied, since serious efforts are made to create goodwill among data providers. The DOS tries to encourage voluntary response. Most questionnaires contain a short introduction on the objectives of the survey.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs*

There are 10 CPI field price collectors and two compiling staff. All have university degrees in disciplines such as management, economics, accounting, or statistics. Since most of the CPI field staff are temporary contractual employees, there is some turnover as people find permanent placements elsewhere.

There are sufficient CPI staff to undertake the basic price collection, compilation and dissemination work. However, there are no discretionary resources available to undertake research, investigations, or special analyses since staff are fully occupied on the tasks associated with the monthly index production cycles.

Computing resources are modern and adequate. There are plans to acquire hand-held computers for the CPI price collectors in a few months. The available financial resources are adequate.

*0.2.2 Measures to ensure efficient use of resources are implemented*

The introduction of hand-held computers is expected to increase the efficiency and effectiveness of price collection.

The DOS management monitors resource allocations and usage and undertakes an annual review of its resources in the context of budgetary planning for the following year.

### **0.3     *Quality awareness***

#### *0.3.1   Processes are in place to focus on quality*

Management is sensitive to issues regarding the quality of statistics. The DOS website disseminates the mission statement of the organization, emphasizing quality. The Public Relations Unit of the DOS is working toward creating statistical awareness among the public. At present there is no specific plan for improving quality, but there is ongoing concern about the issue.

Before the CPI is released, rigorous output editing and credibility checks are undertaken, ensuring compatibility with the PPI for comparable components. The DOS management is closely involved in the clearance process.

#### *0.3.2   Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

There is no special body that provides guidance on the quality of statistics, but the DOS conducts major user surveys through its website designed to obtain feedback on data quality issues.

#### *0.3.3   Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

The management of the DOS is aware of tradeoffs between the dimensions of quality. Regular meetings are held with policymakers and other users about ways of improving the quality of the disseminated data. The management of the DOS is aware of the need to develop a work plan for improving data quality.

## **1.     Integrity**

### **1.1.   Professionalism**

#### *1.1.1   Statistics are compiled on an impartial basis*

The General Statistics Act seeks to ensure the professional independence of the DOS, and specifies the legal authority and obligations of the department. The DOS functions on an impartial basis.

The CPI is based on international standards and objective professional judgment, with no interference from outside. While staff are free to produce research papers, resource limitations inhibit opportunities (see 0.2.1 above).

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

Choices about data sources and statistical techniques are based on professional statistical considerations. The sample frames and weighting sources for the CPI are based on sound periodic censuses and surveys while the design of the consumer price collections takes into account statistical considerations such as efficiency, cost effectiveness, and respondent burden.

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

The DOS retains responsibility for its data and would take action to correct any misinterpretation.

**1.2 Transparency**

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

The conditions covering the collection and dissemination of statistics are set out in the General Statistics Act, which is disseminated on the DOS Internet website and summarized on the front page of questionnaires.

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

There is no DOS policy specifying advance release of the CPI to government agencies prior to its release to the general public. However, in practice the lack of (i) preannounced schedules for data release, and (ii) a set embargo time on the day of release, result in dissemination processes leading to selected government agencies obtaining access to statistics prior to other users. These processes are not made public. The approval processes for the publication of the CPI rest entirely with the DOS.

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

All DOS products are clearly identified as such by their name and logo. The CPI data published by the CBJ have the DOS identified as the source.

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

Advance public notice is given about forthcoming revisions to index weights, etc.



### **1.3 Ethical standard**

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

There are well understood requirements for government officials. All new DOS staff attend a course on ethical behavior and special courses are held for senior staff. Article 11 of the General Statistics Act stipulates penalties for any staff who violate the confidentiality of individual respondent's data. The DOS mission statement is provided on their Internet website.

## **2. Methodological Soundness**

### **2.1 Concepts and definitions**

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

International Labor Organization (ILO) guidelines are followed in the compilation of the CPI, which covers price change of goods and services consumed by all resident households. Expenditure weights are estimated using the results of the five-yearly Household Expenditure and Income Survey (HEIS). In the definition and specification of the goods and services for price measurement, product characteristics and transaction characteristics are both covered. The transaction prices are valued at purchasers' prices including trade and transport margins and taxes on products.

The current CPI has weights drawn from the 1997 HEIS that was based on the 1968 SNA. The CPI will be reweighed using the results of the 2002 HEIS, based on the 1993 SNA.

### **2.2 Scope**

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

The CPI covers all resident households, including all rural and urban centers and cities. Its population coverage relates to families of all sizes and income levels. It covers marketed goods and services for final consumption purchase including the final consumption purchase of unincorporated businesses.

Owner-occupied dwelling services are not currently included in the CPI.

## **2.3 Classification/sectorization**

### **2.3.1 *Classification/sectorization systems used are broadly consistent with international standards, guidelines, or good practices***

International standards are followed in classifying consumption activity. The structure of the current CPI is based on the Central Product Classification (CPC) that was used for the 1997 HEIS. With the introduction of new weights into the CPI from the 2002 HEIS, the index classification structure will be based on the Classification of Individual Consumption by Purpose (COICOP).

Product descriptions and standards conform to definitions that allow for the collection of prices for transactions in the same product from month-to-month from each sampled establishment. The descriptions of the products support their unambiguous categorization to a single CPC product class within the index hierarchical structure.

The International Standard Industrial Classification, Rev.3 (ISIC Rev.3) is used for the classification of retail establishments in the frame from which the sample of price reporting units is drawn.

## **2.4 Basis for recording**

### **2.4.1 *Market prices are used to value flows and stocks***

The CPI expenditure weights and price observations are based on actual market transaction prices, including any discounts, valued at purchasers' prices that include trade and transport margins and taxes on products. Product and transaction specifications are fully defined in terms of all price-determining characteristics in order to support pricing to constant quality.

### **2.4.2 *Recording is done on an accrual basis***

Prices for nearly all items are collected once a month. They relate to purchases during that month and are included in the index for that month. Fruit and vegetable prices, and gold prices, are collected weekly because of their volatility, while prices for a few items that change very infrequently are collected semi-annually (e.g., rents) or annually (e.g., education fees).

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

Not applicable since the CPI does not cover purchases of existing goods.

### **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 1997 HEIS was the data source for the derivation of the CPI index structure and weighting pattern, and the Establishments Census, 1999 provided the sampling frame for the monthly consumer price survey of retail establishments.

The HEIS is conducted five-yearly and supports the regular and timely update of the weights and market basket of the CPI. Subsequent to the 1997 survey, a HEIS is currently being conducted in respect of the year 2002. The sampling frame is based on the latest population census enumeration blocks, with explicit urban and rural stratification. The HEIS covers all households. Geographic coverage is high and separate results are produced for urban and rural Jordan, as well as for each of the 12 governates.

The HEIS sample design and estimation procedures are based on international expert advice. Scientific random sampling techniques are used and standard errors are derived for each domain. To control nonresponse bias, rigorous operating procedures are employed to minimize the number of replacement households. When necessary, the selection of replacements is undertaken randomly from predetermined lists. Replacements are not chosen in the field.

Household expenditure data valued at purchasers' prices and classified by detailed commodity, are produced from the survey.

The sample of retail establishments for the consumer price collection was selected using information from the Establishments Census, 1999 as the frame. For each CPI item, a sample of establishments was selected for each relevant retail industry (based on ISIC Rev.3), stratified by governate, using random sampling techniques.

Nearly all prices are collected monthly by personal visits. Food prices are collected during the first week of each month, footwear and clothing prices during the second week, and prices of services and housing are collected during the third week. Price validation is undertaken in the fourth week. Prices of fruit and vegetables, and gold, are collected weekly because of their volatility, while those of a few items (whose prices change infrequently) are collected once, or twice, a year.

Product specifications are fully defined in order to ensure consistency of pricing over time. 821 products are priced from about 2,100 outlets with an average of 10 price quotes being obtained for each item. Press reports are monitored as a supplementary source of price data.

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

HEIS data are consistent with the definitions, scope, classifications, valuation, and timing of recording of the CPI. The consumer prices collected match all the requirements for a CPI.

*3.1.3 Source data are timely*

Price quotes are normally obtained on a timely basis each month. HEIS data are available for CPI reweighing within two years of the survey reference period, which supports a five yearly reweighing cycle to keep the weights representative.

**3.2. Statistical techniques**

*3.2.1 Data compilation employs sound statistical techniques*

The estimates from the HEIS are compiled at a sufficiently detailed level for effective use as index weights. The CPI is built up from 821 individual products into 382 main index items, 38 subgroups and 4 major groups (food, clothing and footwear, housing, and other).

The weights for the current CPI were derived from the 1997 HEIS which was based on the 1968 SNA. The CPI will be reweighed after the results of the 2002 HEIS become available and the new index is linked onto the previous one to form a continuous time series. The 2002 HEIS is based on the 1993 SNA, which has a revised boundary of consumption. Different treatments under the new SNA include covering own-account production of goods and services, and the capitalization of householders' expenditure on valuables (such as "gold," which currently has a weight of nearly one percent of the All Groups CPI).

Elementary aggregate indexes are calculated by deriving weighted average prices for each of the 382 index items. Then, long-term price ratios, in terms of the reference base year (1997) are computed. These item indexes are then aggregated into subgroup and group indexes using the Laspeyres formula. The index weighting base period is also 1997, so no price adjustment to the HEIS values was necessary in the derivation of the weights.

Prices of an item that are not available are either repeated for two months or imputed on the basis of the price experience of similar items, depending on the price behavior of the particular index item. If prices are still not available after two months, then similar replacement items are found. Prices of out-of-season products are imputed using the aggregate price movements of the prices of the rest of the products included in the commodity.

As far as possible, adjustments are made for quality changes. Standard techniques are used.

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

The regular compilation of the CPI covers a high proportion of household final consumption purchases. No adjustments are made to the CPI to make it conform to the national accounts. Although the national accounts implicit price deflator for household final consumption expenditure has a broader coverage than the CPI, the CPI is recognized as the more appropriate indicator of price change for the household sector because it is a pure price index measuring price change to constant quality.

**3.3 Assessment and validation of source data**

*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*

The main source data are (i) the five yearly HEIS, which provides expenditure value data for the index structure and weighting pattern; (ii) the periodic Establishments Census, which provides the frame for the selection of a sample of establishments for the consumer price collection; and (iii) the monthly collection of consumer prices from a sample of retail establishments and other sources.

HEIS standard errors are reviewed. In particular, new HEIS data are compared with data from the previous survey, at a detailed commodity level, and adjustments made as necessary, especially if standard errors are high.

Potential HEIS nonresponse bias is controlled to keep it to an absolute minimum. Every effort is made to obtain interviews with the original sample of households. Replacement sample households are identified before the survey.

The HEIS data are consistent with CPI concepts in respect of definitions, valuation, reference periods and classifications.

The present price collection is from a stratified random sample of retail establishments using the Establishments Census, 1999 as the source of the frame. The product samples for pricing are selected using judgmental sampling. Therefore, information about sampling errors is not available. Nonresponse is not an issue due to the very high level of cooperation and the extensive use of personal price collection, and observation of prices for goods.

Price data are edited to identify outliers and respondents are queried to verify the information. Individual prices are checked against external sources where possible (e.g., fruit and vegetable prices are compared with those in central markets).

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

#### **3.4.1     *Main intermediate data are validated against other information where applicable***

Comparisons are made between index movements for relatable commodities in the CPI and the PPI as well as the intermediate Wholesale Price Index (WPI) that covers sales of final goods by wholesalers. The WPI is a valuable source of additional information about price transmission.

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

Large changes, and inconsistent movements between different series, are verified against external sources such as the ministry of agriculture, foreign trade section of the DOS, industry sources, etc. Efforts are made to rationalize such movements on economic grounds.

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

Statistical discrepancies are currently not an issue since the CPI is internally consistent with the All groups index being a single hierarchical Laspeyres aggregation of its components and subcomponents. That is, there is only one index structure. However, as there are plans to present separate indexes by region in the near future, the issue of discrepancies could potentially arise.

### **3.5     *Revision studies***

#### **3.5.1     *Studies and analyses of revisions are carried out routinely and used to inform statistical processes***

No revisions are made to index numbers as a result of either errors/misreporting or the introduction of new weights or methodology. When the weights or methodology are revised the index number series are not back-cast and revised, but rather the new series linked onto the previous series to form a continuous time series. During the process of updating the weights, a detailed analysis of the change in consumption pattern is undertaken and major shifts are explained.

## **4. Serviceability**

### **4.1. Relevance**

#### *4.1.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

There is ongoing contact with users to disseminate data. However, there is no CPI advisory group or specific consultation with users on their needs. There is no established process of review to assess whether the CPI program is meeting users' needs.

### **4.2 Timeliness and periodicity**

#### *4.2.1 Timeliness follows dissemination standards*

The CPI is released on the fifth day of the month following the reference month and, therefore, meets GDDS and SDDS dissemination standards.

#### *4.2.2 Periodicity follows dissemination standards*

The CPI is released monthly and, therefore, meets GDDS and SDDS dissemination standards.

### **4.3 Consistency**

#### *4.3.1 Statistics are consistent within the dataset*

The index is internally consistent as there is currently a single index structure (see 3.4.3 above).

#### *4.3.2 Statistics are consistent or reconcilable over a reasonable period of time*

As a result of linking new indexes, incorporating revised source data, methodology or weights to previous series, consistent monthly time series are available back to 1975 and annual series back to 1968. With the introduction of regional weights a year ago at the time of resampling retail establishments, the new series were linked onto the previous series that had Kingdom weights.

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

The CPI and PPI are constructed on a consistent basis, which supports the comparison of the price experience of relatable commodities between the two indices. PPI (and WPI) data are used selectively to assist in explaining and rationalizing CPI movements.

#### **4.4    *Revision policy and practice***

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

Initial monthly CPI estimates are not revised. Weight updates are undertaken on a regular five-yearly basis and the samples of retail establishments for price collection are updated as the results from the periodic Establishments Census become available. The index series are not back-cast and revised to reflect the new weights or samples. Rather, the new index is linked onto the previous one to form a continuous time series. These practices are well-established and known to users.

##### **4.4.2    *Preliminary data are clearly identified***

This is not applicable as the CPI index numbers are final when first released and are not revised.

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

This is not applicable (see also 3.5.1).

### **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)***

There is no monthly DOS CPI publication. Summary data are released through a short press release and subsequently on the DOS Internet website. Monthly and annual indexes are released for the major index groups and subgroups. The Central Bank of Jordan publishes summary CPI data in its *Monthly Statistical Bulletin*.

The DOS does not publish detailed index series, analyses, commentary, charts, etc.

##### **5.1.2    *Dissemination media and formats are adequate***

Detailed indices are not published but are available on request, free of charge. This service is not publicized. Reasonably detailed data become available on the DOS Internet website.

##### **5.1.3    *Statistics are release on a preannounced schedule***

There is no preannounced schedule for data release. However, the DOS is experimenting with an internal fixed-time release schedule with a view to making it public in the future. Release of the CPI is consistently on the fifth of the month following the reference month (unless the fifth falls on a weekend).



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

In practice, the CPI is not made available to all users at the same time because of a lack of (i) preannounced schedules for data release, and (ii) a set embargo time (e.g. 10.00 am) on the day of release. While the DOS supports the principle of simultaneous release to all users, the dissemination practices currently employed do not achieve this ideal.

#### *5.1.5 Nonpublished (but nonconfidential) sub aggregates are made available upon request*

Unpublished data are available on request. The availability of this service is not publicized.

### **5.2 Metadata accessibility**

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

Reasonably detailed documentation on the CPI concepts, methods, procedures, etc. is available on request (in Arabic) from the DOS. However, it is not published or publicized. GDDS metadata on the CPI are not regularly reviewed and updated.

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

A very brief statement accompanies the monthly press release of the CPI outlining key technical characteristics of the index.

### **5.3 Assistance to users**

#### *5.3.1 Contact person for each subject field is publicized*

A prompt and knowledgeable support service is available to users. Although contact details are not publicized, they are made available to the media and users' phone enquiries to the DOS are readily transferred to the designated expert.

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

Currently there is only an abbreviated catalogue of publications and other statistical services. The DOS hopes to develop a comprehensive catalogue of all products and services in the future.

**Table 2. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR CONSUMER PRICE INDEX**  
(Compiling Agency: Department of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Pre-requisites of quality							
0.1 Legal and institutional environment		X					
0.2 Resources			X			No resources are available to undertake research or investigations.	The DOS will endeavor to allocate additional resources to undertake research and investigations into prices statistics (medium-term).
0.3 Quality Awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency			X			Release arrangements for selected government agencies are not publicly identified.	The DOS will undertake a complete review of dissemination strategies and practices and publicize any resultant internal government access arrangements (see also 5.1 below) (short-term).
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions		X					
2.2 Scope			X			Owner-occupied dwelling services are not included in the CPI.	The DOS will investigate the treatment of owner-occupied dwelling services (short-term).
2.3 Classification/Sectorization		X					
2.4 Basis for recording		X					
3. Accuracy and reliability							
3.1 Source data		X					
3.2 Statistical techniques			X			CPI weights are derived from the 1997 HEIS, which is based on the 1993 SNA. The 1993 SNA has a revised boundary of consumption.	The DOS plans to reweigh the CPI when the results of the 2002 HEIS, based on the 1993 SNA, become available (medium-term).
3.3 Assessment and validation of source data		X					

**Table 2. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR CONSUMER PRICE INDEX**  
(Compiling Agency: Department of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria									
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates		
		O	LO	LNO	NO				
3.4 Assessment and validation of intermediate data and statistical outputs		X							
3.5 Revision studies		X							
<b>4. Serviceability</b>									
4.1 Relevance			X			There is no process of review to assess whether the CPI is meeting users' needs.	The DOS will undertake ongoing consultation with users on their needs (short-term).		
4.2 Timeliness and periodicity		X							
4.3 Consistency		X							
4.4 Revision policy and practice		X							
<b>5. Accessibility</b>									
5.1 Data accessibility				X		No analysis, commentary, charts, etc., are published. There is no preannounced schedule for data release. There is not a set embargo time on the day of release. The availability of unpublished data is not publicized.	The DOS will undertake a complete review of dissemination strategies and practices including consultation with users on their needs (short-term).		
5.2 Metadata accessibility				X		Reasonably detailed concepts, methods, etc., documentation is available but not published or publicized.	The DOS will publish and/or publicize the available concepts and methods documentation (short-term).		
5.3 Assistance to users		X							

### III. PRICE STATISTICS (PRODUCER PRICE INDEX)

#### 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 Department of Statistics is an independent government institution operating under the General Statistics Act No. 24 of 1950. This Act has been supplemented by Acts Nos. 46 and 61 in 1966. A new statistical law is being prepared with a view to paying special attention to the issue of data quality. The new law is expected to be enacted during 2002.

The General Statistics Act authorizes the DOS to collect, compile, and disseminate official statistical data about the socio-economic development of the Hashemite Kingdom of Jordan, as well as to conduct population and establishment censuses. Although prices statistics are not mentioned explicitly in the General Statistics Act, Article 2 of that Act makes it sufficiently clear that the DOS is the responsible agency for compiling the Producer Price Index (PPI), as well as the CPI.

##### 0.1.2 *Data sharing and coordination among data producing agencies are adequate*

Article 4 of the General Statistics Act stipulates that all government agencies are required to cooperate with the DOS in the collection and validation of statistical data. The coordination of statistical activities in all ministries and government departments is one of the duties of the General Director of the DOS.

##### 0.1.3 *Respondent's data are to be kept confidential and used for statistical purposes only*

Articles 10 and 11 of the General Statistics Act deals with the confidentiality of individual respondents data and the procedures for preventing disclosure of individual data. Article 10 states that the DOS is not allowed to disclose individual statistical information to any official or private authority, or to reveal or make public such information. Article 11 stipulates that staff who violate these provisions are liable to penalties, including imprisonment.

Special aggregation rules have been developed to ensure that indirect disclosure of individual data does not occur when aggregations of data are presented. The DOS staff review all data prepared for dissemination for possible indirect disclosure. Access to individual data is restricted to staff who require the information in the performance of their duties. There are safeguards against unauthorized access to confidential databases and hard copy files.

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

According to Articles 8, 9, and 13 of the General Statistics Act, the DOS is authorized to request the information that it deems necessary from all public and private institutions and organizations, as well as from individuals. All selected respondents must furnish the requested information accurately and in the format and time period determined by the DOS. The DOS is authorized to investigate the accuracy of the information furnished and to request additional information if needed. The Statistics Act prescribes that noncompliance can result in imprisonment and a (nominal) fine.

In practice, this provision is seldom applied, since serious efforts are made to create goodwill among data providers. The DOS tries to encourage voluntary response. Most questionnaires contain a short introduction on the objectives of the survey.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs*

There are four PPI staff. All have university degrees in disciplines such as management, economics, accounting, or statistics.

There are sufficient PPI staff to undertake the basic price collection, compilation and dissemination work. However, there are no discretionary resources available to undertake research, investigations, or special analyses since staff are fully occupied on the tasks associated with the monthly-index-production cycles.

Computing resources are modern and adequate, and there are sufficient financial resources.

*0.2.2 Measures to ensure efficient use of resources are implemented*

The DOS management monitors resource allocations and usage and undertakes an annual review of its resources in the context of budgetary planning for the following year.

**0.3 Quality awareness**

*0.3.1 Processes are in place to focus on quality*

Management is sensitive to issues regarding the quality of statistics. The website of the DOS disseminates the mission statement of the organization, emphasizing quality. The Public Relations Unit of the DOS is working toward creating statistical awareness among the public. There is at present no specific plan for improving quality, but there is ongoing concern about the issue.

Before the PPI is released, rigorous output editing and credibility checks are undertaken, thereby ensuring compatibility with the CPI for comparable components. The DOS management is closely involved in the clearance process.

*0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

There is no special body that provides guidance on the quality of statistics, but the DOS conducts user surveys through its website designed to obtain feedback on data quality issues.

*0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

The management of the DOS is aware of tradeoffs between the dimensions of quality. Regular meetings are held with policymakers and other users about ways to improve quality of the disseminated data. The management of the DOS is aware of the need to develop a work plan for improving data quality

**1. Integrity**

***1.1. Professionalism***

*1.1.1 Statistics are compiled on an impartial basis*

The General Statistics Act seeks to ensure the professional independence of the DOS, and specifies the legal authority and obligations of the department. The DOS functions on an impartial basis.

The PPI is based on international standards and objective professional judgment, with no interference from outside. While staff are free to produce research papers, resource limitations inhibit opportunities (see 0.2.1 above).

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

Choices about data sources and statistical techniques are based on professional statistical considerations. The sample frames and weighting sources for the PPI are based on sound periodic censuses and surveys, while the design of the producer price collections takes into account statistical considerations such as efficiency, cost effectiveness and respondent burden

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

The DOS retains responsibility for its data and would take action to correct any misinterpretation.

**1.2 Transparency**

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

The conditions covering the collection and dissemination of statistics are set out in the General Statistics Act, which is disseminated on the DOS website and summarized on the front page of questionnaires.

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

There is no DOS policy specifying advance release of the PPI to government agencies prior to its release to the general public. However, in practice the lack of (i) preannounced schedules for data release, and (ii) a set embargo time on the day of release, result in dissemination processes leading to selected government agencies obtaining access to statistics prior to other users. These processes are not made public. The approval processes for the publication of the PPI rest entirely with the DOS.

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

All DOS products are clearly identified as such by their name and logo. The PPI data published by the CBJ have the DOS identified as the source.

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

Advance public notice is given about forthcoming revisions to index weights, etc.

**1.3 Ethical standard**

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

There are well-understood requirements for government officials. All new DOS staff attend a course on ethical behavior and special courses are held for senior staff. Article 11 of the General Statistics Act stipulates penalties for any staff who violate the confidentiality of individual respondent's data. The DOS mission statement is provided on their Internet website.

## **2. Methodological Soundness**

### **2.1 Concepts and definitions**

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

The monthly PPI was first released in 2000, following a period of development with technical assistance from the Statistics Department of the IMF. The index was developed using 1993 SNA concepts for the recording and valuation of the producer prices and the value weights.

The PPI is an output price index, with weights based on 1998 industry gross output value data from the Establishments Census, 1999, valued at basic prices. The prices relate to market sales at basic prices, thus excluding trade and transport margins and taxes on products. They are transaction prices and include any applicable discounts. In the definition and specification of the products for monthly pricing, product characteristics and transaction characteristics are both covered.

### **2.2 Scope**

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

The scope of the current PPI is sufficient in that it relates to the output of the traditional industrial sector, i.e., mining, manufacturing, and electricity. While agriculture, construction, and business services are not currently covered, there are plans to broaden the scope of the PPI over the next few years by targeting the first two of these additional sectors for inclusion.

All resident market establishments are covered in the scope, consistent with the 1993 SNA.

### **2.3 Classification/sectorization**

#### *2.3.1 Classification/sectorization systems used are broadly consistent with international standards, guidelines, or good practices*

International standards are followed in classifying production activity. In particular, the classification of units and transactions conforms to the 1993 SNA. The ISIC Rev.3 is used for the classification of the economic activity of industries and establishments down to the four-digit industry level.

Product descriptions and standards conform to definitions that allow for the collection of prices for transactions in the same product from month-to-month from each sampled establishment. The descriptions of the products support their unambiguous categorization to a single ISIC Rev 3 industry class within the index hierarchical structure.



## **2.4 Basis for recording**

### **2.4.1 *Market prices are used to value flows and stocks***

In accordance with the 1993 SNA, the valuation basis of the index value weights and the prices of the PPI is basic prices. The PPI value weights and recorded prices are based on actual market transaction prices, including any discounts, valued at basic prices (thus excluding any trade and transport margins and taxes on products). Product and transaction specifications are fully defined in terms of all price-determining characteristics in order to support pricing to constant quality.

### **2.4.2 *Recording is done on an accrual basis***

The flows are recorded on an accruals basis with prices reported for the period in which they are sold. Prices are collected once a month and included, as far as possible, in the index for that month.

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

Transactions between establishments within the same enterprise are recorded on a gross basis. The DOS does not produce a stage of processing index, so netting is not applicable.

## **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 Establishments Census, 1999 provided the data source for the derivation of the current PPI index structure and weighting pattern (based on 1998 gross values) and the sampling frame for the monthly producer price survey of establishments for in-scope industries. Previous weights were based on 1994 gross value data from the five-yearly Census of Industry.

The Establishments Census is comprehensive and covers all establishments operating in all economic activities. Excluded are establishments relating to armed forces, public security and civil defense, and embassies and diplomatic consulates. Results are available for the Kingdom and each of the 12 governorates.

The weights of the PPI were recently updated from 1994 (based on data from the 1994 Census of Industry) to 1998, as the 1998 gross output value data from the Establishments

Census, 1999 became available. Weights were derived for each in-scope four digit ISIC Rev.3 industry, and for each of the establishments selected for the producer price collection.

The sample of industrial establishments for the producer price collection was selected using results from the Establishments Census, 1999 as the frame. For each four digit ISIC Rev.3 industry included in the PPI, a sample of establishments was selected for price reporting. A sampling strategy designed to maximize coverage was used. For the many industries in Jordan that are highly concentrated, the three largest establishments were selected for price reporting. For the less concentrated industries, specific business rules were applied to progressively increase the sample size as the concentration decreased.

A monthly, mail-based, producer price survey covers about 300 establishments operating in about 50 major industries (ISIC Rev.3 four-digit industries). Because of the generally high degree of industry concentration and the sampling strategy applied, high coverage has been achieved. Each establishment was visited to initialize a tailored price collection, centered around a small number of representative, volume selling product lines.

Price collection is spread over the first 20 days of the reference month for workload management reasons. Data are usually provided on a timely basis. Product specifications are fully defined in order to ensure consistency of pricing over time. Products are priced for approximately 700 products.

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

Establishments census data are consistent with the definitions, scope, classifications, valuation, and timing of recording of the PPI. The producer prices collected match all the requirements of a PPI.

*3.1.3 Source data are timely*

Price quotes are usually provided by the sample of establishment on a timely basis each month. Any prices that are not received in time for the current month's index release are incorporated in that month's index numbers in the release for the following month. The index numbers are shown as revisions as necessary.

Establishments Census and Census of Industry data become available within about a year after the end of the survey reference period, which supported the timely reweighing and resampling of the PPI.

### **3.2. Statistical techniques**

#### **3.2.1 Data compilation employs sound statistical techniques**

The estimates from the Establishments Census and Census of Industry are compiled at a sufficiently detailed level (the four digit ISIC Rev.3 industry) for effective use as index weights. The PPI is built up from approximately 700 individual products into 50 four-digit ISIC Rev.3 industries.

The weights for the current PPI were derived from the Establishments Census, 1999. The previous PPI had weights based on the 1994 Census of Industry. The new index was linked to the previous one to form a continuous time series.

Elementary aggregate indexes are calculated by deriving price ratios (in terms of the 1998 reference base) for each individual product specification and then computing weighted average price ratios at the establishment level. These establishment index numbers are then weighted to ISIC Rev.3 four-digit, three-digit, and two-digit (i.e., manufacturing, mining, and electricity) industry levels and finally the aggregate “general producer price index.” That is, the Laspeyres formula is consistently used at all levels in the index structure.

Since the index price reference period and weighting base period are both 1998, no price adjustments needed to be made to the Establishment Census value date in the derivation of the weights.

Missing prices are either repeated or imputed on the basis of the price experience of similar items, depending on the price behavior of the particular index item. Since the current month's index is preliminary, there is provision for the inclusion of late prices in the next month's release, as revisions. Price ratios for out-of-season products are imputed using the aggregate price movements of in-season products.

As far as possible, adjustments are made for quality changes. Standard techniques are used.

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

No adjustments to the PPI are necessary to make it conform to national accounts requirements for deflators for the industrial sector.

### **3.3     *Assessment and validation of source data***

#### **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***

The main source data are (i) the periodic economy-wide Establishments Census and the five-yearly Census of Industry (relating to the manufacturing, mining and electricity sectors) - which provide the gross output value data for the index structure and weighting pattern, as well as the frame for the selection of a sample of establishments for the producer price collection, and (ii) the monthly collection of producer prices from a sample of industrial establishments.

There are no standard errors in the Establishments Census. When the 1998 PPI weights were introduced, they were compared with the 1994 weights at a detailed industry level, and adjustments were made as necessary.

The Establishment Census and Census of Industry data are consistent with PPI concepts in respect of definitions, valuation, reference periods, and classifications.

The price collection is from a stratified sample of establishments classified to in-scope industry classes, with a sampling strategy employing well-defined business rules designed to maximize coverage. The product samples for pricing are selected using judgmental sampling, again focusing on coverage. Therefore, information about sampling errors for the price collection is not available. Nonresponse is not a significant issue due to the high level of cooperation, the use of personal interviews for initialization and for the low respondent burden.

Price data are edited to identify outliers, and respondents are queried to verify the information.

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

#### **3.4.1     *Main intermediate data are validated against other information where applicable***

Comparisons are made between index movements for relatable commodities in the PPI and the CPI as well as the Wholesale price index (WPI) that covers sales of final goods by wholesalers. The WPI is a valuable source of additional information about price transmission.

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

Large changes, and inconsistent movements between different series, are verified against external sources. Efforts are made to rationalize such movements on economic grounds.

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

Statistical discrepancies are not an issue since the PPI is internally consistent with the aggregate index being a single hierarchical Laspeyres aggregation of its industry and establishment components. That is, there is only one index structure.

## **3.5 Revision studies**

### *3.5.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes*

The current month's index numbers are designated as preliminary and minor revisions may be made in the release for the next month as a result of late returns. When the weights or methodology are revised, the index number series are not back-cast and revised, but rather the new series are linked onto the previous series to form a continuous time series. During the process of updating the weights, a detailed analysis of the change in structure is undertaken and major shifts are explained.

## **4. Serviceability**

### **4.1. Relevance**

#### *4.1.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

There is ongoing contact with users to disseminate data. However, there is no PPI advisory group or specific consultation with users on their needs. There is no established process of review to assess whether the PPI program is meeting users' needs.

### **4.2 Timeliness and periodicity**

#### *4.2.1 Timeliness follows dissemination standards*

The PPI is released between the tenth and fifteenth day of the second month following the reference month, and therefore meets GDDS recommendations.

#### *4.2.2 Periodicity follows dissemination standards*

The PPI is released monthly and therefore meets GDDS recommendations and SDDS dissemination standards.

### **4.3 Consistency**

#### *4.3.1 Statistics are consistent within the dataset*

The index is internally consistent as there is currently a single index structure.

#### *4.3.2 Statistics are consistent or reconcilable over a reasonable period of time*

As a result of linking new indexes, incorporating revised source data, methodology or weights, to previous series, consistent monthly time series are available back to 1998.

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

The PPI and CPI are constructed on a consistent basis, which supports the comparison of the price experience of relatable commodities between the two indexes. CPI (and WPI) data are used selectively to assist in explaining and rationalizing PPI movements.

### **4.4 Revision policy and practice**

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

Initial monthly PPI estimates are preliminary and may be subject to minor revision in the subsequent month's release on a well-established basis that is known to users. Weight updates are undertaken on a regular five-yearly basis and the samples of establishments for price reporting are updated as the results from the periodic Establishments Census or the five-yearly Census of Industry become available. The index series are not back-cast and revised to reflect the new weights or samples. Rather, the new index is linked onto the previous one to form a continuous time series. These practices are well-established and known to users.

#### *4.4.2 Preliminary data are clearly identified*

The current month's PPI index numbers are clearly designated as preliminary and subject to revision.

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

This is not applicable (see also 3.5.1).

## **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)*

There is no monthly DOS PPI publication. Summary data are released through a short press release and subsequently on the DOS Internet website. Monthly and annual indexes are released for the major index industry groups. The Central Bank of Jordan publishes summary PPI data in its *Monthly Statistical Bulletin*.

The DOS does not publish detailed index series, analyses, commentary, charts, etc.

#### *5.1.2 Dissemination media and formats are adequate*

Detailed indices are not published but are available on request, free of charge. This service is not publicized. Reasonably detailed data become available on the DOS Internet website.

#### *5.1.3 Statistics are release on a preannounced schedule*

There is no preannounced schedule for data release. However, the DOS is experimenting with an internal fixed-time release schedule with a view to making it public in the future. Release of the PPI occurs between the 10th and the 15th of the second month after the reference month.

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

In practice, the PPI is not made available to all users at the same time because of a lack of (i) preannounced schedules for data release and (ii) a set embargo time (e.g. 10.00 am) on the day of release. While the DOS supports the principle of simultaneous release to all users, the dissemination practices currently employed do not achieve this ideal.

#### *5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request*

Unpublished data are available on request. The availability of this service is not publicized.

## **5.2     *Metadata accessibility***

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

Reasonably detailed documentation on the PPI concepts, methods, procedures, etc. is available on request (in Arabic) from the DOS. However, it is not published nor publicized. GDDS meta data on the PPI are not regularly reviewed and updated.

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

A very brief statement accompanies the monthly press release of the PPI outlining key technical characteristics of the index.

## **5.3     *Assistance to users***

### **5.3.1     *Contact person for each subject field is publicized***

A prompt and knowledgeable support service is available to users. Although contact details are not publicized, they are made available to the media and phone enquiries to the DOS are readily transferred to the designated expert.

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

Currently there is only an abbreviated catalogue of publications and other statistical services. The DOS' hopes to develop a comprehensive catalogue of products and services in the future.



**Table 3. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR PRODUCER PRICE INDEX**  
(Compiling Agency: *Department of Statistics*)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Pre-requisites of quality							
0.1 Legal and institutional environment		X					
0.2 Resources			X			No resources are available to undertake research or investigations.	The DOS will endeavor to allocate additional resources to undertake research and investigations into prices statistics (medium-term)
0.3 Quality Awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency			X			Release arrangements for selected government agencies are not publicly identified.	The DOS will undertake a complete review of dissemination strategies and practices and publicize any resultant internal government access arrangements (see also 5.1 below) (short-term).
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions		X					
2.2 Scope		X					
2.3 Classification/Sectorization		X					
2.4 Basis for recording		X					
3. Accuracy and reliability							
3.1 Source data		X					
3.2 Statistical techniques		X					
3.3 Assessment and validation of source data		X					
3.4 Assessment and validation of intermediate data and statistical outputs		X					

**Table 3. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR PRODUCER PRICE INDEX**  
(Compiling Agency: Department of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3.5 Revision studies		X					
4. Serviceability							
4.1 Relevance			X			There is no process of review to assess whether the PPI is meeting users' needs.	The DOS will undertake ongoing consultation with users on their needs (short-term).
4.2 Timeliness and periodicity		X					
4.3 Consistency		X					
4.4 Revision policy and practice		X					
5. Accessibility							
5.1 Data accessibility				X		No analysis, commentary, charts, etc., are published. There is no preannounced schedule for data release. There is not a set embargo time on the day of release. The availability of unpublished data is not publicized.	The DOS will undertake a complete review of dissemination strategies and practices, including consultation with users on their needs (short-term).
5.2 Metadata accessibility				X		Reasonably detailed concepts, methods etc., documentation is available but not published or publicized.	The DOS will publish and/or publicize the available concepts and methods documentation (short-term).
5.3 Assistance to users		X					

## IV. 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*

While specific laws are in place for each unit of general government to compile data for budget management purposes, no specific legal responsibility has been granted to any agency or government unit to compile government finance statistics (GFS)<sup>2</sup> for the consolidated general government sector. Thus, no GFS for the consolidated general government are compiled for purposes of fiscal analysis.<sup>3</sup>

The Ministry of Finance (MOF) collects, processes and compiles revenue, expenditure, and financing data—covering the budgetary central government<sup>4</sup>—under the Financial By-law (Act 3 of 1994) and the Audit Bureau Law (Act 8 of 1952). Before 1999, these data were primarily used for budget management and reporting purposes, and for compiling data for publication in the IMF's *Government Finance Statistics Yearbook*. Since 1999, the MOF has been using these budgetary data to compile and disseminate, for analytical purposes, monthly and annual GFS in their *Government Finance Bulletin*, and on its website.

There is no dedicated division in the MOF responsible for the compilation of GFS. A GFS Committee is responsible for the compilation of these data and this task is in addition to their regular responsibilities. This Committee consists of two staff members each from the General Accounts and Public Debt Directorates, three advisors to the MOF, and the Secretary General of the Ministry of Finance (chairman).

The Central Bank of Jordan (CBJ) publishes the MOF GFS data in their *Monthly Statistical Bulletin* and *Annual Report*.

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<sup>2</sup> In this report, “GFS” refers to those fiscal data compiled and disseminated, for analytical purposes, according to internationally accepted standards or guidelines.

<sup>3</sup> In Jordan, the general government comprises the budgetary central government, 17 extrabudgetary funds, two social security funds (the Social Security Corporation and the Health Security Fund), and 100 local governments. Eight “autonomous agencies” are not regarded as part of general government —according to international standards— and are classified as (nonfinancial) public corporations.

<sup>4</sup> The budgetary central government expenditure comprises about 85 percent of the estimated consolidated general government expenditure in 2002. The budgetary data include transfers to, and from, extrabudgetary funds. No GFS are compiled for dissemination covering the gross operations of these extrabudgetary funds.

Thirty-five autonomous agencies with their own budget, comprising extrabudgetary funds and public corporations, report annual data on their operations to the MOF for budget management purposes under the Budget Organization Law (No. 39 of 1962).<sup>5</sup> No GFS are compiled from these data. Data on the trading account of the Ministry of Supply and Trade are not included in GFS.

The Social Security Corporation compiles and publishes data on their operations in their *Annual Report* under the Social Security Law (No. 19 of 2001). No GFS are compiled from these data.

The Ministry of Municipalities collects, processes, and compiles data on the operations of all local governments under the Municipalities Law (No. 29 of 1955), as amended. No GFS are compiled from these data.

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

Data sharing and coordination are adequate between the MOF and the CBJ, as well as between the MOF and the autonomous agencies, to compile data for budgetary central government.

A *Memorandum of Agreement* between the MOF and the CBJ was signed in July 2001 to promote a free flow of fiscal, monetary and balance of payments data between these two agencies. This process was further strengthened by the introduction of a new Public Debt Law in 2001 (No. 26 of 2001).

Under the Budget Organization Law, autonomous agencies—which include extrabudgetary funds and one social security fund<sup>6</sup>—report their (gross) data to the MOF for budgeting purposes, but no GFS are compiled from these data.

No data sharing or coordination arrangements exists between the MOF—as GFS compiler—and the Social Security Cooperation, or between the MOF and the local governments.

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

All tax records, as well as details of some expenditures, such as defense, are confidential and are treated as such.

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<sup>5</sup> Among these agencies, the following were created in late-2001 and early-2002: (i) Electricity Regulating Commission, (ii) Atomic Energy Commission, (iii) Transport Regulatory Commission, and (iv) Higher Council for Youth (previously Ministry of Youth)

<sup>6</sup> According to international standards, the Health Security Fund is sectorized as a Social Security Fund.

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

Both revenue and expenditure data are reported to the MOF under the Financial By-law. This law includes provisions to enforce timely reporting to the MOF.

Loan disbursements and repayments are collected and provided by the Public Debt Directorate under the Public Debt Law, while data on government bank accounts<sup>7</sup> are provided by the CBJ, on a daily basis, under the *General Instructions for Government Accounts* and the *Memorandum of Agreement* between the two agencies.

There is no legal mandate and/or measures to encourage reporting of data to the MOF to enable the compilation of GFS covering all general government units.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs of the agency*

GFS is compiled by a GFS Committee comprising of two staff members each from the General Accounts and Public Debt Directorates, three advisors to the MOF, and the Secretary General of the Ministry of Finance (chairman). GFS compilation is done in addition to their regular tasks.

All data collection and processing in the MOF have recently been computerized. Special efforts have been made to train staff in computer literacy, software, English, and economics. To date, about 90 percent of the MOF staff are computer literate. The MOF staff receive competitive remuneration compared with the rest of the public sector, but their remuneration is below equivalent staff in the private sector. The MOF does not experience a high staff turnover. Senior staff in the General Accounts Directorate, as well as their subordinates, are well qualified in either Accounting, or Economics, or both. The Head of the General Accounts Directorate attended the GFS course in Washington, D.C., in 1999, while another staff member attended the same course in 2001. A third staff member has been selected to attend the 2002 GFS course in Washington, D.C.

While existing resources are sufficient for current GFS compilation—i.e., covering the operations of the budgetary central government—these resources, especially with regard to staff dedicated to GFS compilation, would not be sufficient for the compilation of consolidated central government, or consolidated general government data.

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<sup>7</sup> These data are available for the budget accounts, decentralized agencies' accounts, public corporations and institutions' accounts, and "private funds."

### *0.2.2 Measures to ensure efficient use of resources are implemented*

There is no separate cost information on the compilation of GFS. The allocation of resources is part of the overall management process of the MOF.

## **0.3 Quality awareness**

### *0.3.1 Processes are in place to focus on quality*

Statistical production is an integral part of the agency operation. The focus is on the application of accounting rules on which the statistics are based.

### *0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

The quality of the collection, processing, and dissemination of GFS is ensured and monitored through various processes, such as (i) the computerization of the data compilation process, (ii) special efforts to minimize the statistical discrepancy between the deficit/surplus and total financing, and the (iii) auditing of the final accounts (annual data) against published accounting standards.

While no specific arrangements are in place to obtain feedback from users, contact details are provided on Jordan's GDDS website, as well as in the MOF's *Government Finance Bulletin*, and on its website.

### *0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

Although not specifically communicated to users, tradeoffs between quality and timeliness are implicitly acknowledged through the dissemination of quite detailed monthly GFS revenue and expenditure data four-six weeks after the end of the reference month.<sup>8</sup> Financing data are added quarterly, with the same timeliness. For these data, a discrepancy exists between the overall deficit/surplus and total financing. Efforts are ongoing to minimize this discrepancy, and for the final accounts data no such discrepancy exists.

There are no specific mechanisms addressing new and emerging data requirements, since there is no such requirement.

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<sup>8</sup> These data cover all budgetary central government units, which represent roughly 85 percent of general government.

## 1. Integrity

### 1.1 Professionalism

#### 1.1.1 *Statistics are compiled on an impartial basis*

Although the impartial compilation and dissemination of GFS for analytic purposes is not supported by specific laws, there is no evidence that such data are not compiled on an impartial basis.

Users can expect that the GFS in the MOF's *Government Finance Bulletin*, and on its website, are published within a stated timeframe (about four-six weeks after the end of the reference month). This timeframe is stated on Jordan's GDDS website, but not on the MOF's own website, nor in their *Government Finance Bulletin*. The MOF intends to add this information to its website and in the bulletin.

Over the last few years, the MOF has taken special steps to promote professionalism among its staff, such as establishing a Research and Studies Directorate, and sending staff on special training courses domestically and abroad. Senior management in the MOF expressed keen interest in learning more about the *GFS Manual 2001*.

Although there is no legislative backing for the analytical framework being used to compile GFS, the framework is based on what the IMF uses for its operational work.

There are no professional statistical staff in the MOF, but GFS compilers have an excellent knowledge of accounting and economics and a relatively good knowledge of (1986 and/or 2001) GFS methodology.

#### 1.1.2 *Choices of sources and statistical techniques are formed solely by statistical considerations*

There is no evidence of political interference in the choices of the sources and statistical techniques in the compilation of the GFS published in the MOF's monthly *Government Finance Bulletin* and on its website, as the GFS framework is based on what the IMF uses for its operational work.

Changes to the current analytical framework and methodology are not influenced by political considerations, but implementation of the new GFS analytic framework and methodology would require the support of the MOF and other political leaders.

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

GFS compilers are allowed to provide advice on technical aspects of the data, and public response to misinterpretation of the GFS data is permitted. They are, however, rarely asked

to do so. The GFS published in the MOF's monthly *Government Finance Bulletin* and on its website include detailed explanatory material on the specific month's data, as well as on the annual data at the end of each fiscal year. A glossary of definitions used in GFS also appears in the CBJ's *Monthly Statistics Bulletin*.

## **1.2 Transparency**

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

The compilation of existing GFS is implicitly governed by laws and regulations related to the budgeting and planning process (Financial By-law, No.3 of 1994). There are presently no laws or regulations mandating the MOF to disseminate GFS for analytic purposes, and this is done as a voluntary public service. The dissemination of GFS by the CBJ is done under the Central Bank Law.

Both the Financial By-law and the Central Bank Law are available (in Arabic and English) to the public upon request, as stated on Jordan's GDDS website. The terms and conditions under which GFS are compiled and disseminated are not publicized.

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

There is no government access (outside the MOF) to, or ministerial commentary on, GFS before their release. This is stated on Jordan's GDDS website, but not in other dissemination media.

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

GFS disseminated in the MOF's *Government Finance Bulletin*, on its website, as well as by the CBJ, are clearly identified as being compiled by the MOF. Where other agencies or sources are used, they are clearly acknowledged in footnotes.

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

The MOF has been using the same methodology, source data, and statistical techniques to compile GFS for many years. No specific changes are planned in the foreseeable future, unless advised by the IMF. In the past, major changes in methodology had been noted in the relevant publications after implementation. The need for advance notice of such changes is acknowledged.



### **1.3 Ethical standards**

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

All civil servants' conduct are guided by the Civil Servants By-law, No. 1 of 1998, and copies of this law are readily available to all staff.

## **2. Methodological Soundness<sup>9</sup>**

### **2.1 Concepts and definitions**

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

Compilation of both monthly and annual GFS follows the analytic framework used by the IMF for its operational work. This framework is largely based on the methodology prescribed in *A Manual on Government Finance Statistics, 1986 (GFS Manual 1986)*. However, in some aspects the analytic framework resembles the methodology of the *Government Statistics Manual 2001 (GFS Manual 2001)*:

- Current expenditure include interest payments on a commitments basis.
- Sales of equity other than shares (privatization) are recorded below the line as a disposal of a financial asset.
- Grants-in-kind, and the equivalent disbursements thereof, are included in revenue (as grants) and current or capital expenditure, respectively.<sup>10</sup>

Several balancing items are calculated on a commitments basis, as well as on a cash basis. Financing data are on a cash basis, and should correspond to the overall cash deficit/surplus.

The definition of government debt is not in line with internationally accepted standards, because it includes debt guaranteed by government (about 5 percent of total outstanding

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<sup>9</sup> An interim period is provided for countries that have yet to adopt *GFS Manual 2001* during which such countries will be assessed against the *1986 GFS Manual* recommendations outlined in the GFS DQAF. Assessments for countries that have largely adopted the *2001 GFS Manual (GFS Manual 2001)* would be based on the indicators in the generic GFS DQAF. After the interim period, assessment of methodological soundness for all countries will be based on *GFS Manual 2001*.

<sup>10</sup> The true value of the Iraqi grant is undervalued in the fiscal accounts, while the oil surplus is overstated by the same amount. Japanese and US grants-in-kind are not recorded.

debt). According to international standards, outstanding government debt is identified separately from debt guaranteed by government.<sup>11</sup>

There are no plans to migrate to the GFS 2001 framework. The authorities are, however, keen to improving the existing framework and classification, and presenting the existing cash GFS data in the GFS 2001 framework is an option to explore further.

## **2.2 Scope**

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

According to both the *GFS Manual 1986* and *GFS Manual 2001*, GFS should be compiled for the general government sector, and its sub sectors. The GDDS standard is to compile GFS for all the units of the consolidated central government sector, i.e., the budgetary central government, extrabudgetary funds, and social security fund(s). In Jordan, GFS cover the budgetary central government only, but these data represent about 90 percent of the consolidated central government, and about 85 percent of the consolidated general government's operations; thus, the data are broadly adequate for fiscal analysis.

## **2.3 Classification/sectorization**

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

Since data are only compiled for the budgetary central government subsector, the MOF does not do an institutional classification of general government units. However, the MOF's definition of autonomous agencies include public corporations.<sup>12</sup>

Revenue and grants, expenditure, lending minus repayments, and financing are broadly classified using the methodology set out in the *GFS Manual 1986*.

**Revenue and grants:** At an aggregate level, all transactions are appropriately classified as revenue and grants according to international standards. A distinction is made between tax revenue and nontax revenue. Tax revenue are classified by whether they are (i) taxes on income and profits; (ii) taxes on domestic transactions; (iii) taxes on foreign trade; or (iv) additional taxes. Although slightly different terms are used in the *GFS Manual 1986*,

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<sup>11</sup> Guaranteed debt are only included in outstanding government debt once the guarantor defaults and government assumes such debt.

<sup>12</sup> The following autonomous agencies are public corporations according to international standards: Water Authority, Railway Corporation, Post Savings Fund, Ports Corporation, Hijazi Railway Line, Radio and TV Corporation, Public Transportation Corporation, and the Civil Consumer Corporation.

these main tax categories are almost fully consistent with GFS methodology, except for the category “additional taxes,”<sup>13</sup> which comprise taxes that should be classified as *taxes on goods and services*. Nontax revenues are defined according to the 1986 GFS methodology, with two exceptions: (i) vehicle drivers licenses should be classified as *taxes on goods and services*; and (ii) revenue stamps as *other taxes*. The non-tax revenue “oil surplus”, however, is an implicit excise tax on petroleum products and should, therefore, be classified as tax revenue.<sup>14</sup> About half of total nontax revenue is classified as other miscellaneous revenue (2001 budget). Although more details are available in the source data, the MOF’s *Government Finance Bulletin* and its website provide details for only about 15 percent (2001 budget) of these other miscellaneous revenues.

**Expenditure:** At an aggregate level, all transactions are appropriately classified as expenditures according to international standards. The classification of expenditures broadly follows the economic classification of expenditures according to the GFS Manual 1986, but includes, as separate items, “defense and security” and “other expenditures.”<sup>15</sup> As a result, the economic categories wages and salaries, goods and services, and possibly current transfers do not accurately reflect the economic composition of total expenditure of the budgetary central government. For capital expenditures, a distinction is only made between those financed by the treasury, and those financed through external grants and loans. No details of capital expenditure by type of nonfinancial asset are provided. A classification of expenditures by function of government (COFOG) is not available.

**Lending minus repayments:** Lending minus repayments are appropriately classified, and data for government lending are provided separately from repayments of loans previously extended by the government. Proceeds from privatization are classified below the line as financing. While this is not in line with the *1986 GFSM* methodology, recording of sales of equity other than shares (privatization) below-the-line—as the disposal of financial assets—is in accordance with the *GFS Manual 2001*.

**Financing:** Only total net domestic and total net foreign financing are published. International standards or guidelines require that detailed financing data are published by type of debt instrument, and/or by type of debt holder. Proceeds from privatization are classified as part of financing, which is in accordance with the *GFS Manual 2001*.

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<sup>13</sup> This tax category consists of additional taxes on electricity, services provided by the Land Survey Department, vehicle driver licenses, and insurance contracts.

<sup>14</sup> The “oil surplus” is the difference between the costs of the state-controlled refinery (including statutory profits) at its sales at government-determined prices.

<sup>15</sup> Other expenditures comprise mainly expenditures that cannot be classified in a specific economic category at the time of the budget (such as contingencies), or expenditures that are approved during a fiscal year.

**Government debt:** Data on government debt are classified, in accordance with international standards, by type of debt instrument and by type of debt holder, and domestic debt are shown separately from foreign debt.

## **2.4 Basis for recording**

### *2.4.1 Prices used to value flows and stocks reflect actual or expected cash payments*

Generally only cash transactions, reflecting actual prices, are recorded in government finance data. Where transactions are recorded on a commitments basis (see below), market valuation, or the nearest proxy, is used.

In accordance with the *GFS Manual 1986*, debt liabilities are recorded at face value (i.e., the amount to be repaid at the end of the contract), rather than market value. Amounts denominated in foreign currency are converted to Jordanian Dinars using the exchange rate at the end of each month, as provided by the CBJ.

### *2.4.2 Recording is done on a cash basis*

All budgetary central government revenues, expenditures and lending minus repayments transactions are valued on a checks received or checks issued basis—a close proxy for cash receipts and payments according to the *GFS Manual 1986*. An exception is interest payments, which are shown on a commitments basis. The latter is closer to the methodology of the *GFS Manual 2001*.

All financing data are recorded on a cash basis, according to the *GFS Manual 1986*, except for foreign loans which are shown, in line with interest, on a commitments basis. The latter is closer in line with the methodology of the *GFS Manual 2001*.

As a result of the difference between the recording of the above- and below-the-line data, a statistical discrepancy exists between the overall deficit/surplus and total financing data.

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

Government finance transactions are correctly shown on a gross basis. Tax refunds are generally correctly classified as (negative) revenue transactions—the exception being “after year-end refunds”, which are shown as expenditures. Although these amounts are usually insignificant, such treatment is not in line with internationally accepted standards because refunds should always be netted against the appropriate taxes.

### **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*

Timely and comprehensive budget revenue and expenditure data are available on a monthly basis from the budget management system in the General Accounts Directorate of the MOF. For financing, timely and comprehensive domestic financing data are available (i) for government accounts at the CBJ (daily); (ii) government accounts at other banks (monthly basis from the CBJ); and (iii) domestic borrowing data (monthly basis from the Debt Management Directorate of the MOF).

Annual data are collected from the autonomous agencies for budgetary purposes only. Although available on an annual basis, no data are collected from the Social Security Corporation, or local governments to compile GFS for the consolidated general government in Jordan.

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

The general budget classification for revenue and expenditure—the source data—broadly aligns with the 1986 GFS definitions, classifications, time of recording, and valuation. With regard to the time of recording of interest payments and the classification of proceeds from privatization, the methodology of the *GFS Manual 2001* is followed. The source data for compiling financing data—particularly on an annual basis—are mostly in accordance with the 1986 GFS definitions, classifications, valuation, and time of recording. As with interest, the recording of foreign loans is on a commitments basis, which is in line with the *GFS Manual 2001*.

Data published on the outcome of the budget (i.e., under financial accountability arrangements) are easily reconcilable with the GFS data disseminated in the MOF's *Government Finance Bulletin*, and on its website.

##### *3.1.3 Source data are timely*

Timely source data for the budgetary central government are available on a monthly basis.

Monthly budgetary central government source, except on foreign financing, are timely (with a lag four-six weeks after the end of the reference month; but up to two months for December, the last month of the fiscal year). Reliable foreign financing data are available quarterly (also with a lag of four-six weeks after the end of the reference period).

The complete, audited final accounts of the budgetary central government are available about six months after the end of the reference year.

These data are available with the following timeliness: extrabudgetary funds, six-nine months; Social Security Corporation, six-nine months, and local governments, about one year after the end of the reference period.

### **3.2 Statistical technique**

#### **3.2.1 Data compilation employs sound statistical techniques**

The “reestimate” for the full fiscal year’s outcome is based on the actual data for the first nine or ten months of the fiscal year. Accepted statistical techniques, including extrapolation, are applied to do this estimation. Otherwise, no statistical techniques are applied to compile GFS covering the budgetary central government.

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

Other statistical procedures are not employed in compiling government finance data.

### **3.3 Assessment and validation of source data**

#### **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**

An appropriate tradeoff is made between accuracy and timeliness. Above-the-line data are published monthly, and financing data are published quarterly. A statistical discrepancy exists between the overall deficit/surplus and total financing, and special efforts are made to keep this discrepancy to a minimum. Every year, these preliminary data are replaced by actual, audited data one month after the final accounts are available (i.e., about seven months after the fiscal year-end).

The main validation of all government finance data is via the benchmarking of preliminary data to audited data for all budgetary agencies. Deviations between preliminary and final data are explained in the *Government Finance Bulletin* and on the MOF’s website.

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

#### **3.4.1 Main intermediate data are validated against other information where applicable**

No validations of intermediate government finance data are carried out.

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

Not applicable.

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

Statistical discrepancies between the deficit/surplus and financing, and between financing and changes in gross debt, are investigated and resolved as far as possible. However, no reconciliation is done between GFS and monetary or balance of payments statistics.

## **3.5 Revision studies**

### *3.5.1 Studies and analysis of revisions are carried out routinely and used to inform statistical processes*

For annual data, revisions mainly result from the routine replacement of preliminary data by final, audited data. No analyses are made of the revisions resulting from this process, but significant deviations between preliminary and final data are explained.

When actual historical data were revised in 1999 to reflect a new methodology used to compile GFS, such revisions were explained in Annexes to the General Budget Law, in the *Government Finance Bulletin*, and on the MOF's website.

## **4. Serviceability**

### **4.1 Relevance**

#### *4.1.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

Monthly and annual GFS, covering the budgetary central government, are used by both the MOF and IMF in the process of determining, monitoring, and evaluating central government fiscal policy.

Both monthly and annual GFS are compiled on a timely basis—within four-six weeks after the end of the reference month for monthly data, and within seven months after the end of the fiscal year for the final accounts (annual data).

While sufficient details are published for analytical purposes (GFS), more details are available from the final accounts, which are also available (in Arabic) on the MOF's website. The GFS classification and framework published in the MOF's *Government Finance Bulletin*, and on its website, do not differ much from the budget framework.

In August 1999, the MOF included a paragraph in the *Government Finance Bulletin* seeking users' opinions and ways to improve the usefulness of the publication. Otherwise, feedback from users is only sought on an informal basis.

## **4.2 Timeliness and periodicity**

### *4.2.1 Timeliness follows dissemination standards*

The timeliness of GFS meets, or exceeds, GDDS standards (see also *Methodological Soundness: Scope* in section 2.2 above):

- Detailed monthly budgetary central government operations are disseminated within one month after the end of the reference month. Financing data are disseminated quarterly, within one month after the end of the reference period. (GDDS recommendation: quarterly central government aggregates within one quarter after the end of the reference period.);
- Detailed monthly central government debt data are disseminated within four–six weeks after the end of the reference period (GDDS recommendation: annual central government debt data within one-two quarters after the end of the reference period); and
- Annual budgetary central government data is disseminated seven months after the end of the reference period (GDDS recommendation: comprehensive annual central government data within six-nine months after the end of the reference period).

### *4.2.2 Periodicity follows dissemination standards*

The periodicity of GFS meets, or exceeds, GDDS standards (see also *Methodological Soundness: Scope* in section 2.2 above):

- budgetary central government aggregates are disseminated monthly and annually (GDDS recommendation: quarterly and annual central government aggregates);
- central government debt statistics (including, not separately identified, government guaranteed debt) are disseminated monthly and annually (GDDS recommendation: annual central government debt data, with quarterly data encouraged. The GDDS recommends also the dissemination of annual data on government guaranteed debt separately from outstanding government debt.)



### **4.3 Consistency**

#### *4.3.1 Statistics are consistent with the dataset*

GFS data are internally consistent, with the exception of the overall sub annual deficit/surplus and financing data.

The overall deficit/surplus can differ from financing for mainly two reasons. First, revenue and expenditure are recorded on a checks received and checks issued basis, respectively. Financing data relating to these operations, on the other hand, reflect the actual cash receipts and payments, thus resulting in a “float.” The second main reason for the difference between the deficit/surplus and financing relates to the difficulties in obtaining accurate information on expenditure financed through project loans and grants. While financing data reflects the actual cash disbursements, the above-the-line data contain “best-estimates.”

Government domestic and foreign borrowing and amortization data are derived from the system (“DMFAS”) used by the MOF to manage debt. All debt contracts made by public sector agencies are recorded, and all transactions (borrowing, amortization, interest, fees, and charges) associated with those contracts are tracked. Data on budgetary central government financial assets are derived from CBJ records of cash holdings.

Preliminary annual data are compiled by adding monthly data, while final annual data reflect the audited data.

#### *4.3.2 Statistics are consistent or reconcilable over a reasonable period of time*

The MOF has compiled a consistent GFS time series covering the period from 1992 onward. The MOF is aware that they will need to document and explain changes to the time series that will result from any possible changes in the methodology.

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

There are no GFS covering the operations of the general government in Jordan. The Department of Statistics (DOS) compiles general government data for the national accounts by collecting data directly from the various general government units: from the MOF for central government data, from the Social Security Corporation, and from the Ministry of Municipalities for local governments data.

Domestic debt statistics are consistent with banking statistics. Foreign financing and debt statistics are used in the compilation of balance of payments statistics.

GFS are not reconciled with either monetary or balance of payments statistics.

#### **4.4    *Revision policy and practice***

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

The dissemination of GFS follows a regular and well-understood schedule whereby initial data are preliminary, and are subsequently replaced by final data.

##### **4.4.2    *Preliminary data are clearly identified***

Preliminary data are clearly identified in either the table headings or a footnote to the table.

##### **4.4.3    *Studies and analyses of revisions are made public***

Since only one month's data are published in the MOF's *Government Finance Bulletin*, and on its website, revisions to monthly data would not be clearly visible, should such revisions be made. Preliminary figures are usually close to final figures, and can be relied upon for analytical purposes. Deviations between preliminary and final data for a specific year are explained in the MOF's *Government Finance Bulletin*, and on its website.

### **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)***

GFS are available in a variety of dissemination formats, but do not provide the equivalent coverage, and not always the detail, to that set out in the *GFS Manual 1986*.

Tables are clearly laid out, and annotated by footnotes. Explanations and charts accompany the data.

##### **5.1.2    *Dissemination media and formats are adequate***

Since 1999, the MOF publishes GFS in their monthly *Government Finance Bulletin*, and on its website, in both Arabic and English. The same data are also published in the CBJ's *Monthly Statistics Bulletin*.

##### **5.1.3    *Statistics are released on a preannounced schedule***

Although there is no preannounced release schedule for the release of GFS, it is now a well-established practice that GFS are disseminated about one month after the end of the reference month.

The MOF acknowledged that by including this release information in their *Government Finance Bulletin*, and on its website, would further enhance data accessibility to users.

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

GFS are made available to all users simultaneously, and without preferential treatment for selected users.

#### *5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request*

With permission from management, nonpublished (but nonconfidential) subaggregates are available free upon request. Although this service is not specifically stated in any of the MOF's publications, contact details are provided on both Jordan's GDDS website, as well as in the MOF's *Government Finance Bulletin*, and on its website.

### **5.2 Metadata accessibility**

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

Detailed documentation of concepts, scope, classifications, basis of recording, data sources, and statistical techniques do not exist. Information in this regard are only available—in summary format—on the IMF's *Data Standards Bulletin Board (DSBB)*. The MOF intends to provide a hyperlink on its website to the DSBB website to improve accessibility to these summary GFS metadata.

A few definitions of the main aggregates and balancing items are given in the *Government Finance Bulletin* and in the CBJ's *Monthly Statistics Bulletin*.

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

Detailed technical descriptions on concepts, sources, and methods sufficient to allow expert users to assess the strengths and weaknesses of GFS do not exist. Less detailed information on concepts, sources, and methods to allow general users to understand the basic framework under which the statistics are produced are only available on Jordan's GDDS website. A few definitions of the main aggregates and balancing items are given in the *Government Finance Bulletin* and in the CBJ's *Monthly Statistics Bulletin*.

### **5.3 Assistance to users**

#### *5.3.1 Contact person for each subject field is publicized*

The contact person for GFS is publicized, including telephone and facsimile numbers and e-mail addresses, on Jordan's GDDS website. The *Government Finance Bulletin* and the MOF's website include their general telephone and facsimile numbers.

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

Catalogues of publications containing government finance statistics are not available.

**Table 4. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR GOVERNMENT FINANCE STATISTICS**  
(*Compiling Agency: Ministry of Finance*)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria									
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates		
		O	LO	LNO	NO				
0. Pre-requisites of quality									
0.1 Legal and institutional environment			X			No formal or informal arrangements for compilation of GFS covering all central or general government units; no division/agency responsible for GFS compilation.	The MOF plans to establish a GFS division, with a formal mandate and sufficient resources, to compile comprehensive GFS (short-term).		
0.2 Resources			X			Resources adequate for existing GFS compilation, but not for expansion of GFS coverage.			
0.3 Quality Awareness		X				-	-		
1. Integrity									
1.1 Professionalism		X				-	-		
1.2 Transparency			X			Specific terms of conditions under which GFS are compiled, as well as approval process for publication, are not made public.	The MOF plans to publicize the terms and conditions under which GFS are compiled, as well as the approval process for publication, in its dissemination media (short-term).		
1.3 Ethical standards		X				-	-		
2. Methodological soundness									
2.1 Concepts and definitions		X				-	-		
2.2 Scope			X			Data cover only budgetary central government (±85 percent of general government).	The MOF plans to compile annual GFS covering all units of central government (short-term), covering all general government units (medium-term).		
2.3 Classification/Sectorization				X		Classifications broadly according to <i>GFS Manual 1986</i> , except: no detail of domestic and foreign financing, some minor misclassifications in revenue, a few nonstandard (but significant) items in economic classification of expenditure, no detail of capital expenditure, and no functional classification of expenditure.	The MOF plans to provide detail of quarterly domestic and foreign financing, to improve the classification of revenue and economic classification of expenditure (short-term), to add a functional classification of expenditure (medium-term), and to explore the implementation of <i>GFS Manual 2001</i> classification system (medium-term).		
2.4 Basis for recording		X				-	-		

**Table 4. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR GOVERNMENT FINANCE STATISTICS**  
(Compiling Agency: Ministry of Finance)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3. Accuracy and reliability							
3.1 Source data		X				-	-
3.2 Statistical techniques		X				-	-
3.3 Assessment and validation of source data		X				-	-
3.4 Assessment and validation of intermediate data and statistical outputs		X				-	-
3.5 Revision studies	X					Revisions only result from replacement of preliminary data by final audited data.	-
4. Serviceability							
4.1 Relevance			X			Only ad hoc feedback on irregular basis is sought from users on usefulness and relevance of GFS.	The MOF plans to seek regular feedback from users on usefulness and relevance of GFS on formal basis (short-term).
4.2 Timeliness and periodicity		X				-	-
4.3 Consistency			X			Only budgetary GFS and related monetary data are reconciled on regular basis; GFS internally consistent, except for sub annual deficit/surplus and total financing data.	The MOF and the CBJ plan to do regular consistency checks between GFS, monetary, and balance of payments data, and to continue efforts to minimize the discrepancy between the sub annual deficit/surplus and financing data (short-term).
4.4 Revision policy and practice			X			Lack of awareness concerning revisions policy and practices	The MOF plans to make known to the public its revisions policy and practices.
5. Accessibility							
5.1 Data accessibility			X			GFS data are easily available for budgetary sector, but are not released on a preannounced schedule.	The MOF plans to publish a release schedule for GFS on its website (short-term).
5.2 Metadata accessibility				X		Summary GDDS metadata on concepts, scope, classifications, etc., are not sufficient; GDDS metadata not regularly updated.	The MOF plans to expand and regularly update GDDS metadata (short-term), and to develop and disseminate detailed documentation on GFS methodology used (medium-term).
5.3 Assistance to users		X				-	-

## V. MONETARY 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 CBJ is the sole official agency in charge of collecting, compiling, and disseminating monetary statistics. The authority of the CBJ to request any information and data directly from licensed banks and specialized credit institutions is stated in Article 45 of the Law on the CBJ of 1971 (Law No.23 and amendments), which also provides that the CBJ may publish aggregated statistical information. Although the responsibility for producing monetary statistics is not explicitly mentioned in the CBJ Law, the CBJ has compiled and disseminated monetary statistics since its establishment in 1964. This long established practice is covered implicitly by the legislation since the CBJ requires timely and accurate financial information of the banking system to accomplish one of its objective, that is to maintain monetary stability in Jordan (Article 4).

The Banking Supervision Department of the CBJ is in charge of collecting source data on licensed banks. The accounting data on the CBJ are produced by the Administrative and Finance Department. The Research Department is responsible for compiling and disseminating the monetary survey, which consolidates de accounts of the CBJ and 21 licensed banks operating in the country. The Research Department also compiles and disseminates statistics on specialized credit institutions and on international reserves. The Open Market Operations Department compiles interbank market rates. Data on reserve requirements and weighted average deposit and lending rates are calculated by the Banking Supervision Department.

##### 0.1.2 *Data sharing and coordination among data producing agencies are adequate*

There are arrangements within the CBJ to ensure the smooth flow of information between the departments that collect, process, and disseminate data. Licensed banks submit monthly balance sheet data with additional detailed schedules on diskettes to the Banking Supervision Department. The specialized credit institutions send their monthly balance sheets with additional schedules to the Research Department. The reporting forms are used for supervisory and monetary statistical purposes only. The Banking Supervision Department, in turn, forwards the banks' aggregated monthly data to the Monetary Affairs Division and Statistics and Publications Division of the Research Department to be used for monetary statistics. The Administrative and Finance Department forwards the central bank's monthly data to both divisions. The Research Department has no access to the banks' individual data and the accounting database of the CBJ.

The Monetary Affairs Division and the Statistics and Publications Division jointly compile the analytical accounts of the monetary authorities, analytical accounts of banks, monetary survey, and monetary and credit aggregates. The Monetary Affairs Division focuses on the economical analysis of the data whereas the Statistics and Publications Division prepares the data for publication (e.g., in *Monthly Statistical Bulletin* and CBJ website).

Data sharing arrangements exist between the CBJ and the MOF for compiling data for central government. In preparing and disseminating the metadata for GDDS, the Research Department's Statistics and Publications Division cooperates with the MOF and the DOS. Meetings are held between the various agencies when necessary.

*0.1.3 Respondent's data are to be kept confidential and used for statistical purposes only*

Jordan's monetary statistics do not disclose data on individual institutions or transactions. Article 45 of the CBJ Law forbids the publication or disclosure by the central bank of respondents' information to any individual or institution, except in the form of aggregated statistical statements. According to Article 60 of the Banking Law of 2000 (Law No. 28), the CBJ "may publish in full or in part and at the times it decides, statements and information furnished to it by banks, provided that such publication does not disclose operations of a bank unless the central bank has obtained a prior written consent thereof." For preventing individual disclosure, procedures are in place so that data are consolidated and aggregated. It is a long established practice by the CBJ that it only uses the source data on banks for supervisory and statistical purposes.

Monetary statistics are produced mainly from balance sheet data provided by the licensed banks in the monthly returns. Only authorized staff members of the Banking Supervision Department have access to data of individual banks before they are aggregated and sent to the Research Department. Access to the internal database, which is controlled and approved by Information Technology auditors, is limited to authorized staff. Differentiated degrees of authorization give differential degrees of access to the data. Computers are password protected.

Article 23 of the CBJ Law requires the staff of the central bank to take an oath to observe the secrecy of matters pertaining to the CBJ and to deny access of confidential decisions and transactions related to the operations of the CBJ to any unauthorized person. This obligation continues to be binding even after staff members leave the CBJ. Staff members of the CBJ are subject to the regulations for CBJ employees and face penalties if they breach the rules. In addition, the Banking Law provides in Article 29 that a bank may not employ a former employee of the central bank within two years of the termination of his service without obtaining the prior written approval of the Governor of the CBJ.



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

Article 45 of the CBJ Law provides the legal basis for the collection of statistical information that supports the compilation of monetary statistics. The CBJ is also authorized to investigate and supervise the accuracy of the statistical information provided by the interested parties, and to request additional information and documents (Banking Law, Article 70). The CBJ has determined in a memorandum to the banks that monthly reporting forms are required to be submitted to the CBJ within seven days after the end of the reference month. According to Article 46 of the CBJ Law, the CBJ may reduce or suspend credit facilities and, in the event of repeated nonresponse, even revoke a bank's license.

Banks operating in Jordan are also required to submit their annual balance sheets and income statements to the CBJ (Article 68 of the Banking Law). In addition, Article 69 imposes an obligation on banks to comply with the orders of the CBJ to furnish the CBJ with, among other things, a statement of the bank's financial position, liquidity, solvency, earnings, and end of period balance accounts and financial position reports of the bank's subsidiaries. According to Article 88 of the Banking Law, the CBJ Governor may enforce one or more penalties, such as imposing a fine not exceeding JD100,000 or even revoking the license of the bank.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs*

The Research Department has a total of 40 staff, 11 of whom are professionals exclusively devoted to the compilation of monetary statistics. Eight professionals focus on statistical concepts and methodology and the improvement of coverage and accuracy of monetary data.

Employment in the Research Department is competitive, and the number of staff with university degrees in economics or statistics is high. In addition to on-the-job training, staff are given the opportunity to participate in courses conducted by international organizations, such as the IMF, Arab Monetary Fund, and in seminars offered by central banks, such as the Bank of England, Deutsche Bundesbank, and Federal Reserve. Qualified staff have opportunities to attend postgraduate courses overseas.

Computer resources utilized in the collection and compilation of monetary statistics are adequate. All reporting banks submit their returns directly to the CBJ in diskettes. There are currently no budgetary constraints impeding data collection and compilation activities.

*0.2.2 Measures to ensure efficient use of resources are implemented*

An internal budgeting process is in place. The departments first identify their budget needs, and the Administrative and Finance Department then prepares an aggregated annual budget

for the entire CBJ. The budget is monitored and reviewed on a monthly basis. Resources allocated to the Research Department for the compilation of monetary statistics are adequate.

### **0.3     *Quality awareness***

#### *0.3.1   Processes are in place to focus on quality*

The Banking Supervision Department, in collaboration with the Research Department, verifies that data reporting practices followed by the banks are consistent with the guidelines established by the CBJ, and checks inputted data for accuracy. Validation procedures for assessing the plausibility or reasonableness of reported data are undertaken on a bank-by-bank basis using computer software. The Banking Supervision Department consults with the reporting institutions to verify the data for possible misclassifications.

Article 63 of the CBJ Law stipulates that the Council of Ministers shall appoint, on the recommendation of the MOF, external auditors to audit the accounts of the CBJ and to certify its annual balance sheet and profit and loss statement, and shall determine the remuneration to be paid to such auditors. The IMF Treasurer's Department recommended that the CBJ establish a policy for periodic rotation of the external audit firm.

#### *0.3.2   Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

In terms of the collection and processing of monetary statistics, built-in processes exist to monitor the accuracy of information received from the licensed banks. For problems in collection, reporting institutions are informed and guided by the staff of the Banking Supervision Department.

Internal users of the monetary statistics comment on the accuracy, timeliness, and comprehensiveness of the data, as well as on possible discrepancies before the official release of the data. The Research Department monitors new regulations and developments in the area of monetary and financial statistics. There is no other body outside the Research Department that provides guidance on the quality of monetary statistics, and on strategies for improving data production.

At present, the Research Department does not utilize periodic user surveys to obtain feedback from users on data quality issues.

#### *0.3.3   Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

Although there is wide recognition of the tradeoffs among the dimensions of data quality, no formal mechanisms exist to address quality considerations, and to seek user feedback that would guide planning for emerging data needs.

## **1. Integrity**

### **1.1. Professionalism**

#### *1.1.1 Statistics are compiled on an impartial basis*

The statutory provisions under which the CBJ compiles monetary statistics are adequate to support its independence in conducting this function. In this regard, Article 3 of the CBJ Law stipulates that the central bank is an autonomous corporate body carrying out its functions in accordance with the CBJ Law. Internal regulations ensure that staff in each department that is involved in the collection, processing, and dissemination of monetary statistics are responsible for professional conduct to the executive director of their department. Appointments for staff positions are made after the applications are considered by the human resources committee. Appointments of department directors are made by the Board of Directors.

Professionalism of the staff in charge of the compilation of monetary statistics is promoted by encouraging participation in lectures, conferences, and meetings with other professional compilers, other central banks, and international organizations. As part of staff development, the Research Department's staff are encouraged to conduct research and publish research studies.

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

Only accounting/balance sheet records are used for compiling monetary statistics. Data sources, statistical methods and definitions are based solely on methodological considerations, and are based on internationally-accepted statistical methodologies.

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

The Research Department staff survey the media on a routine basis and identify instances of misinterpretation by the media of the data compiled and disseminated by the department. The CBJ comments on erroneous interpretation of its statistics if deemed to be significant.

The Research Department seeks to prevent misinterpretation or misuse of monetary statistics by providing explanatory materials. Methodological notes are included in the *Monthly Statistical Bulletin* and explanatory notes are appended to the tables.

## **1.2 Transparency**

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

The public has access to the CBJ Law and Banking Law that contain very broad legal provisions concerning data collection, dissemination, and data confidentiality. Comprehensive terms and conditions under which the CBJ collects, compiles, and disseminates data are not available. The CBJ directives or regulations on data collection issued to banks are also not available to the public.

The *Monthly Statistical Bulletin* provides postal and e-mail addresses as well as telephone and fax numbers of the Research Department to which inquiries concerning the published data could be sent. The *Monthly Statistical Bulletin* also identifies the website of the CBJ.

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

In principle, no official agency outside the CBJ has access to data prior to publication. However, in the role of the fiscal agent for the government, the CBJ provides data on central government deposits and borrowing from the banking system to the MOF prior to publication. This procedure is not publicly identified.

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

The Research Department is identified as the source of the monetary statistics published in the *Monthly Statistical Bulletin*. The CBJ explicitly requests attribution when its statistics are used or reproduced.

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

Changes in methodology, source data, and statistical techniques are not announced in advance, but are introduced simultaneously with the release of the data. The CBJ provides only brief notes explaining the methodological change that affects the published table.

## **1.3 Ethical standard**

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

The CBJ Law requires that every new staff of the central bank take an oath “to devote all [the employee’s] abilities to the discharge of the duties entrusted to [the employee] with the utmost loyalty, sincerity, honesty, accuracy and faithfulness; to observe the secrecy of confidential decisions and transactions related to the operations of the Central Bank ...” (CBJ Law, Appendix I and Appendix II). Employees who violate the data confidentiality rules face penalties. Internal CBJ regulations for employees provide detailed ethical guidelines for the

employees and specify where conflicts of interest are outlawed. The CBJ plans to edit a booklet containing these guidelines, which it intends to distribute to all employees. Every new CBJ staff participates in a two-week training program on the fundamental duties and powers of the CBJ and of each department. New staff members are informed about the guidelines.

## **2. Methodological Soundness**

### **2.1 Concepts and definitions**

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

The analytical framework used by the CBJ in compiling analytical accounts of the central bank and licensed banks reflect concepts and principles that are, in general, based on the IMF's draft *Guide to Money and Banking Statistics in International Financial Statistics* (December 1984). The monetary survey is derived by consolidating the accounts of the CBJ and licensed banks (banking system), and provides an analytical presentation of the intermediation role of the central bank and licensed banks. The monetary and credit aggregates identified in the monetary survey are: (i) money supply—M1 (currency in circulation plus demand deposits in Jordanian dinar of the resident private sector, public nonfinancial institutions, the social security corporation, municipalities and local councils, and nonbank financial institutions held with licensed banks plus demand deposits of other banking institutions in Jordanian dinar with the CBJ); (ii) quasi-money (demand deposits in foreign currencies plus time and saving deposits in Jordanian dinar and foreign currencies with the banking system of all the sectors mentioned in the definition of M1); and (iii) M2 (M1 plus quasi-money). Other aggregates identified in the monetary survey are: (i) net foreign assets; (ii) net domestic assets (disaggregated by net claims on public sector, claims on resident private sector, claims on nonbank financial institutions); and (iii) other items (net). Private sector (nonresident) deposits in Jordanian dinar and foreign currencies are published as memorandum items.

Following the publication in September 2000 of the IMF's *Monetary and Financial Statistics Manual (MFSM)*, the CBJ intends to adjust its procedures and formats for collection, compilation, and dissemination of monetary statistics to the new guidelines. This section compares present data compilation practices with those recommended in the *MFSM*. Hence, it indicates areas where the CBJ has yet to make changes to comply with the new methodological standard.

## 2.2 *Scope*

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

The banking system (or depository corporations sector) of Jordan comprises the CBJ and 21 licensed banks, of which nine are commercial banks, two Islamic banks, five investment banks, and five branches of foreign banks. According to the Banking Law of 2000, “bank” refers to any company licensed to engage in banking activities, in accordance with the provisions of the Law, including branches of foreign banks licensed to operate in Jordan. “Banking activities,” according to the Banking Law refer to accepting deposits from the public and using these deposits in full or in part to grant credit, or for any other activities designated by the CBJ as banking activities. The institutional coverage of monetary statistics includes the banks’ domestic headquarters and their domestic branches, and domestic branches of foreign banks operating in Jordan. Jordanian banks’ branches operating in the Palestinian Territories are nonresident entities and thus not included in the monetary survey; their data are collected, processed, and disseminated in separate accounts.

Jordan’s financial system (or financial corporations sector) also encompasses a number of other financial corporations whose liabilities are not included in the national definition of broad money and, thus, are not part of the money-creating sector: five specialized credit institutions, 74 money exchange companies, a credit and saving company, two representative offices of foreign banks, a loan guarantee company, a mortgage refinance company, 27 insurance companies, and the Amman Stock Exchange. The specialized credit institutions comprise mainly industrial and agricultural development banks that were established under special legislation, are registered with the Ministry of Industry and Trade, and are not supervised by the CBJ. Their deposit-liabilities to the private sector constitute an insignificant share of all deposits of the private sector held with licensed banks. The CBJ compiles separately the accounts of the specialized credit institutions and publishes a consolidated balance sheet of these institutions in the *Monthly Statistical Bulletin*. Money exchange companies buy and sell foreign exchange in retail markets and do not hold any deposits. The credit and saving company does not offer predetermined interest on financial transactions, but accepts deposits in the form of profit and loss sharing certificates. Similar to the specialized credit institutions its total deposits are insignificant in relation to deposits held with banks. The data on money exchange companies and the credit and saving company are collected and compiled by the CBJ, but not disseminated. Data on the Amman Stock Exchange are disseminated on the *Monthly Statistical Bulletin*, and data on Insurance Companies are disseminated on the *Annual Report*.

For analytical purposes, the new *MFSM* defines the Other Depository Corporations (ODCs) subsector, which consists of all resident financial corporations (except the central bank) and quasi-corporations mainly engaged in financial intermediation, whose liabilities consist of deposits or financial instruments that are included in the definition of broad money. The national definition of broad money is thus fundamental to the methodology of the *MFSM*, in that it determines which units in the financial corporations sector are classified as ODCs.

Licensed banks are the only deposit-taking financial institutions fulfilling both criteria to classify them as ODCs—that is, Jordan’s licensed banks are mainly engaged in financial intermediation and issue deposit liabilities that are included in Jordan’s broad money M2. Thus, the ODC survey—which is, in accordance with the *MFSM*, the major framework for compiling monetary statistics—for Jordan would have the same coverage as the currently compiled and published Consolidated Balance Sheet of the Licensed Banks. The specialized credit institutions, money exchange companies, and the credit and saving company currently represent Other Financial Intermediaries. Their balance sheet data would be included in a Financial Corporations Survey that would extend the coverage beyond the central bank and ODCs covered in the depository corporations survey (or monetary survey).

The definition of residency in monetary statistics is consistent with the *BPM5* and *1993 SNA*. Branches of foreign banks in Jordan are regarded as residents, whereas branches of domestic banks abroad are classified as nonresidents.

## **2.3 Classification/sectorization**

### **2.3.1 *Classification/sectorization systems used are broadly consistent with international standards, guidelines, or good practices***

The CBJ uses the residency criterion to distinguish between domestic and external accounts for the compilation of monetary statistics. The delineation between resident and nonresident institutional units is broadly consistent with the criteria in the *BPM5*, *1993 SNA*, and *MFSM*.

The sectorization of the domestic economy by the CBJ is basically in line with the *MFSM*. The sectoral classification of resident units recommended in the *MFSM*, for the purpose of compiling monetary statistics, refers mainly to the following sub sectors: (i) central bank; (ii) other depository corporations; (iii) other financial corporations; (iv) central government; (v) state and local government; (vi) public nonfinancial corporations; (vii) other nonfinancial corporations; and (viii) other resident sectors.

In the monetary statistics compiled by the CBJ, the following sectoral groupings of institutional units are distinguished: (i) central government (general budget and own budget); (ii) municipalities and local councils; (iii) public nonfinancial institutions; (iv) social security corporation; (v) central bank; (vi) licensed banks; (vii) other financial institutions; (viii) nonbank financial institutions; (ix) resident private sector; and (x) nonresidents. The current treatment of institutional units deviates from the recommendations of the *MFSM* in two cases: (i) private nonfinancial corporations are not separately identified in the sectoral accounts of the monetary survey; these institutional units are indistinguishably included in “private sector (resident);” and (ii) one nonbank financial institutions is incorrectly classified as other banking institutions.

The principles underlying the classification of financial instruments in Jordan’s monetary statistics are broadly consistent with international standards and, notwithstanding differences in terminology, generally consistent with the *MFSM* recommendations. At present, financial

derivatives are identified in the banks' returns as off-balance-sheet accounts and are not included in monetary statistics. The *MFSM* recommends that financial derivatives be presented as a separate category in the sectoral balance sheets of the depository corporations, disaggregated according to counterparts/sectors.

The CBJ occasionally conducts repurchase agreements (repos) with licensed banks to absorb excess liquidity in the economy. The CBJ sells treasury bills to the banks with the commitment to repurchase the bills at a fixed price after seven days. These transactions are reflected in the balance sheets of the CBJ and licensed banks as outright sales of securities to the banks. The *MFSM* recommends, however, that repos be treated as collateralized loans. This means that the treasury bills should remain on the balance sheet of the CBJ, and a new financial asset—i.e., a loan—should be recorded as an asset of the cash provider (i.e., the licensed banks), and a liability of the cash taker (i.e., the CBJ).

During the period April–September 2001, the “other assets” and “other liabilities” constituted about one percent on average of the total assets of the CBJ, and 11 and 17 percent, respectively, of the total assets of licensed banks. The relatively high numbers for the banks are acceptable because other assets/liabilities include unconsolidated claims on and liabilities to other banks.

## **2.4 Basis for recording**

### **2.4.1 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 based on market prices or market-price equivalents (fair values). The valuation of loans is an exception to this principle in that 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. Stocks and flows denominated in foreign currency should be converted to national currency values at the market exchange rate prevailing at the time they are recorded. The midpoint between the buying and selling rate of exchange should be used so that any service charge is excluded. Holding gains and losses arising from changes in market values (or fair values) of financial assets and of outstanding liabilities should be recorded separately in a revaluation account.

Contrary to the recommendations of the *MFSM*, investment securities acquired by the CBJ and banks and held to maturity are valued at purchase price (acquisition cost) and are not revalued through redemption. Consistent with the recommendations of the *MFSM*, the loan portfolio and deposits are valued at book value. However, contrary to the *MFSM*, the book value of banks' loan portfolios in Jordan's monetary statistics comprise only the outstanding principal amount, excluding any accrued interest (see Section 2.4.2). In line with the recommendations of the *MFSM*, loan valuation is not adjusted for expected loan losses. Provisions for loan losses are recorded in separate accounts under “capital accounts and allowances,” a practice that deviates from the *MFSM*, which recommends the inclusion of



such provisions under “other liabilities.” Assets and liabilities denominated in foreign currencies are converted into Jordanian dinars at the market exchange rate prevailing at the end of the month, as called for in the *MFSM*.

Since January 2001, banks operating in Jordan are required to value their financial assets and liabilities for the semi-annual and annual statements according to fair values, as recommended in *IAS 39 (Financial Instruments: Recognition and Measurement)*.<sup>16</sup> This new standard recommends the use of fair values and is in line with the *MFSM* recommendations on valuation of financial assets and liabilities.<sup>17</sup> Although the CBJ requires that banks use fair values for processing semi-annual and annual financial statements only, the banks gradually apply fair values also to the monthly statements and reporting forms for supervisory and statistical purposes. The CBJ intends to formally request from banks monthly statements based on fair values as soon as the computer software of the Banking Supervision Department, which processes and stores the banks’ balance sheet data, has been adjusted to the new valuation principle.

The *MFSM* recommends that data be compiled on stocks and on each of the three flow components: transactions, revaluations, and other changes in the volume of assets. In Jordan, banks do not provide financial information on flows, and the CBJ does not derive transactions from stock data for monetary statistics purposes.

#### *2.4.2 Recording is done on an accrual basis*

The *MFSM* recommends the compilation of monetary statistics on an accrual basis. Revenues and expenses should be recognized in the period in which they arise, regardless of when the corresponding cash flow actually occurs. In accordance with these principle, the *MFSM* recommends that interest due but not paid on financial instruments be incorporated into the outstanding amount of the financial asset or liability, rather than being treated as part of other accounts receivable/payable.

Prior to January 2001, the financial statements of the CBJ had been prepared on a modified cash basis. As of January 2001, the CBJ’s financial statements are being compiled on an accrual basis; however, interest accruing on deposits, loans, and securities other than shares are not, as recommended by the *MFSM*, incorporated into the outstanding amount of the financial asset or liability.

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<sup>16</sup> *IAS 39* establishes standards for recognizing, measuring, and disclosing information about an enterprise’s financial assets and financial liabilities. It is operative for financial statements covering financial years beginning on or after January 1, 2001.

<sup>17</sup> Among other things, *IAS 39* requires the use of fair value for (i) derivative assets and liabilities; (ii) debt securities, equity shares, and other financial assets held for trading and, if available for sale, not held for trading; (iii) fixed-maturity investments not designated as “held to maturity;” and (iv) purchased loans and receivables not designated as “held to maturity.”

Licensed banks recognize interest income in the income statements as it accrues, except in the case of nonperforming debt. Past due interest on nonperforming loans is credited to a suspense account. Dividend income is recorded as income only when received. Interest due, but not paid is recorded in arrears. Interest accruing on deposits, loans, and securities other than shares are also not incorporated into the outstanding amount of the financial asset or liability.

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

In line with the general principle of the *MFSM*, assets and liabilities of the CBJ and licensed banks are collected and compiled on a gross basis. In line with the *MFSM*, claims on particular transactors are in principle not netted against liabilities to those transactors. However, one exception is made in the consolidated balance sheet of the CBJ where the overdrawn treasury account balance is offset against the government accounts held in local currency. (This procedure is made known to the public in the CBJ's *Annual Report*.)

For the compilation of the consolidated balance sheets of the CBJ and licensed banks, the data on financial assets and liabilities are aggregated into major categories (e.g., claims classified by debtors and deposits classified by creditors). The monetary survey is obtained by canceling out all outstanding claims and liabilities between the CBJ and banks and among the banks.

### **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 source data for compiling the analytical accounts for the central bank are the accounting records of the CBJ prepared by the Administration and Finance Department. The basic data sources for the licensed banks are their individual monthly returns. Items in these returns are derived from the banks' accounting records. The incoming data are continuously reviewed by the Banking Supervision Department to ensure full institutional coverage. The reporting forms (comprising the banks' balance sheets, income statements, off-balance-sheet items, and various other supplementary forms) capture in principle the full range of financial instruments and economic sectors. They provide sufficient detail to enable the classification of all financial instruments and economic sectors, as defined in the *MFSM*, and permit in-depth analyses and crosschecks.

The financial press is monitored for information on developments in financial markets that may be of relevance to the compilation of monetary statistics. Meetings with financial market

participants and the business community to identify new developments that need to be taken into account in the compilation system of monetary statistics are not common.

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

Reported source data provide a reasonably good approximation to the concepts, definitions, scope, classifications, and recording principles for compiling sound monetary statistics. One apparent deviation from the guidelines of the *MFSM* and *1993 SNA* concerns end-month data on “Private sector (resident),” which combines positions of the banking system with households, nonprofit institutions serving households, and private nonfinancial enterprises. To follow the *MFSM* guidelines on sectorization of domestic institutional units, more detailed data are needed from licensed banks to separately identify their claims on and liabilities to private nonfinancial enterprises.

Transactions of the CBJ and banks with counter parties that cannot be reasonably approximated or allocated to specific instruments or sectors are recorded in “other assets” and “other liabilities.”

*3.1.3 Source data are timely*

The data collection system allows the timely compilation of monetary statistics, which are released in the CBJ’s *Monthly Statistical Bulletin*. The accounting records of the CBJ are available on a daily and weekly basis for the preparation of the central bank balance sheet (Table No. 10 of *Monthly Statistical Bulletin*). Banks have to provide the reporting forms to the Banking Supervision Department at the latest on the seventh day following the reference month. Preliminary aggregated data of the licensed banks are submitted to the Research Department within 10–15 days of the reference months to permit a first analysis of the developments in the banking system. Final aggregated data are made available for the preparation of the “Consolidated balance sheet of the licensed banks” (Table No. 13 of *Monthly Statistical Bulletin*) within 20–25 days.

The Banking Supervision Department contacts late respondents via telephone in order to collect information to meet publication deadlines.

**3.2. Statistical techniques**

*3.2.1 Data compilation employs sound statistical techniques*

The banks’ reporting forms are standardized and easy to complete (using Excel format), and the forms include several checks within the tables. In addition, supplementary notes and guidelines provide guidance for completing the report forms. Data are reported on diskette and entered into an electronic database of the Banking Supervision Department.

The statistical techniques used to compile monetary statistics include computerized checks to identify coding and other discrepancies (such as excessive balances variations, and logical and tabulating errors) in the source data. Computerized checks are built between balance sheet items and supplementary reports' data, which contain detailed information on certain positions (deposits, outstanding loans, securities, etc.).

At present, the Research Department receives, in hardcopy only, the CBJ's accounting data and aggregated source data on licensed banks from the Administrative and Finance Department and Banking Supervision Department, although both datasets are available in electronic format. Thus, the Research Department has to manually enter these data into its database for the compilation of the monetary survey. This procedure can be a source of error and does not support sound statistical techniques.

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

The final monthly surveys do not include estimates or adjusted data. The CBJ calculates seasonally adjusted monetary data and estimations only for internal purposes.

**3.3 Assessment and validation of source data**

*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*

The quality of the source data is monitored throughout the compilation process, which is fully automated. Queries regarding the balance sheet data of the CBJ are resolved between the Administration and Finance Department and Research Department. The Banking Supervision Department reviews the data and discusses any questionable data directly with the responding bank.

The reporting forms used by the licensed banks were revised in December 1993 reflecting methodological changes, which had been proposed by an IMF Statistics Department mission. At present, revisions of the reporting forms are made only as the need arises.

The Research Department monitors developments and changes in financial markets (e.g., the development of financial derivative transactions in Jordan), which may affect the compilation of monetary statistics.

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

#### **3.4.1   *Main intermediate data are validated against other information where applicable***

The Research Department does not routinely validate its data against other internal or external sources. In general, most queries concerning monetary statistics are resolved by the Banking Supervision Department directly with the banks.

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

Comprehensive secondary data sources that could be used for regular verification of monetary statistics do not exist. The Research Department investigates statistical discrepancies when they occur and determines major contributing factors.

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

Large fluctuations in monetary or credit aggregates are rare, and likely to occur only after a significant change in statistical methodology. In those circumstances, following the release of monetary statistics, the Research Department is likely to receive inquiries from data users and handles them directly. In the case of large and unexplained fluctuations in data series, the Research Department investigates possible classification/sectorization errors by individual respondents.

The Banking Supervision Department has procedures in place to investigate classification and/or sectorization errors or omissions as a source of fluctuations or discrepancies. A main source of discrepancies is wrong sector classification that occurs particularly when public nonfinancial corporations are reclassified as private entities, because of change in effective ownership.

### **3.5     *Revision studies***

#### **3.5.1   *Studies and analyses of revisions are carried out routinely and used to inform statistical processes***

There is no mechanism in place to conduct routine revision studies; the CBJ believes that they are not relevant for monetary statistics. However, deviations, omissions, and other potential sources of problems in the data (e.g., erroneous sectorization of institutional units) are identified and investigated. The results of these ad hoc studies are not made available to the users.

## **4. Serviceability**

### **4.1. Relevance**

#### **4.1.1 *The relevance and practical utility of existing statistics in meeting users' needs are monitored***

The Banking Supervision Department meets regularly with banks to discuss practical issues related to the methodology and collection of balance sheet data. Also, the Research Department addresses data issues to the MOF when necessary. There is no established process of consultation with representatives from the private sector, including academia, and no exchange of regular users' surveys that could facilitate addressing issues of concern to users other than banks and ministries.

The Research Department assesses on an ongoing basis the analytical relevance of the reported data and statistical compilation methods for appropriately capturing macroeconomic, institutional, and financial sector developments. Making the monetary statistics compatible with international statistical standards is an important aspect in the Research Department's review work.

### **4.2 Timeliness and periodicity**

#### **4.2.1 *Timeliness follows dissemination standards***

Monthly data on the central bank and licensed banks are disseminated within six weeks after the end of the reference period, consistent with the recommendations of the GDDS. The monetary survey is computed after data on the banking system have been made available to the Research Department and is compiled within six weeks after the end of the reference period.

#### **4.2.2 *Periodicity follows dissemination standards***

The balance sheet of the central bank and the consolidated balance sheet of the licensed banks are disseminated on a monthly basis, which meets the recommended monthly periodicity of the GDDS.

### **4.3 Consistency**

#### **4.3.1 *Statistics are consistent within the dataset***

Overall, the monetary statistics are internally consistent. The central bank's and commercial banks' records for claims on, and liabilities to each other show only small discrepancies, because of differences in the time of recording financial transactions. Credits/liabilities of licensed banks to specialized credit institutions are consistent with liabilities/credits to the licensed banks in the balance sheet of the specialized credit institutions. A reconciliation of

stock and flow data is not possible, because flow data are not compiled for monetary statistics.

#### *4.3.2 Statistics are consistent or reconcilable over a reasonable period of time*

Consistent time series data are available for the periods of 1964–93, 1993–99 and from 1999 onwards. Methodological notes identify and explain the main breaks and adjustments made to maintain consistency over time. For example, a note in the *Monthly Statistical Bulletin* informs the users in table “Balance Sheet of the Central Bank of Jordan” that as of January 2001, the CBJ balance sheet is being reported according to accrual accounting, instead of a cash basis.

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

The Monetary Division of the CBJ’s Research Department provides data on transactions in net foreign assets to the balance of payments compiling External Economic Division. The Monetary Division also provides central government’s records on the government deposits in, and government borrowing from the banking system to the MOF. Due to differences in the central government institutional coverage—government finance statistics includes public nonfinancial institutions to “central government”—and the use of an accrual basis in monetary statistics versus cash basis in fiscal statistics, it is difficult to reconcile the net domestic borrowing of the central government reported in the fiscal accounts. At present, such consistency checks between government finance statistics and monetary statistics are not conducted on a regular basis.

### **4.4 Revision policy and practice**

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

There is no formal revisions policy. Revisions are infrequent and are made when needed, based on the availability of more accurate data. Revised data are identified as such in the publications. Users are not informed that the CBJ does not conduct routine data revisions.

#### *4.4.2 Preliminary data are clearly identified*

Monetary data are considered final when first released. Since it is highly unlikely that data will be revised, CBJ’s publications do not include notes on the status of the data (preliminary or final). Revised data are identified in the publications, but users are not informed of the causes of the revisions.

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

Given the sporadic nature of the revisions to monetary data, no studies and analyses are carried out routinely. However, errors and data shortcomings in the data reported by banks are the focus of internal analysis.

### **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 monetary statistics by the CBJ facilitates the interpretation of the data. The *Monthly Statistical Bulletin*, prepared by the Research Department, covers developments in consolidated balance sheets of banks, balance sheets of the CBJ, reserve money, money supply, and credits and deposits. Charts and tables are also included in the bulletin.

The consolidated balance sheet of the CBJ, as currently presented in the *Monthly Statistical Bulletin*, provides no guidance for users regarding Jordan's use of IMF credit. The inclusion of such information (e.g., in a separate off-balance-sheet memorandum line) would ensure public disclosure of Jordan's financial relationship with the IMF, since the MOF does not prepare financial statements.

Estimates and seasonally adjusted time series are produced only for internal analytical purposes, and are not disseminated.

##### *5.1.2 Dissemination media and formats are adequate*

Monetary data are disseminated in hardcopy and in electronic formats to meet the needs of data users. The entire *Monthly Statistical Bulletin* is posted on the CBJ's website. Recently released data can be accessed through the CBJ's website.

##### *5.1.3 Statistics are release on a preannounced schedule*

There is no publicly announced advance release calendar for the *Monthly Statistical Bulletin*, but the Research Department strictly follows an internal publication schedule, according to which the bulletin is to be published six weeks after the end of the reference month. The users are aware of this schedule and expect the publication of the bulletin on this date.

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

The publication of the *Monthly Statistical Bulletin* and the posting of monetary data on the Internet are simultaneous.



*5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request*

Unpublished and nonconfidential data are made available upon request free of charge with the approval of senior staff of the Research Department.

**5.2 Metadata accessibility**

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

The CBJ publishes in its *Monthly Statistical Bulletin* a “Guide to methodology and statistical concepts,” which explains in detail all terms (sectors, instruments, monetary and credit aggregates, and net positions) used in the tables for monetary statistics. The guide does not provide users with information on the framework for the compilation and presentation of Jordan’s monetary statistics and important metadata details, such as concepts, scope of the data, accounting conventions, nature of the data sources, and compilation practices. This information is provided on the GDDS website. Users have easy access to Jordan’s metadata via a hyperlink on the CBJ website. No documentation on differences from internationally accepted standards and good practices is available.

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

The CBJ infrequently publishes brochures with general statistics of Jordan, including monetary statistics, for external users. For example, the CBJ published in May 1996 a special issue of *Jordan’s Economy in Figures* on the occasion of the 50<sup>th</sup> anniversary of Jordan’s independence to inform external users.

**5.3 Assistance to users**

*5.3.1 Contact person for each subject field is publicized*

The contact person for monetary statistics in the CBJ is publicized in the GDDS website for Jordan’s monetary data. However, in the *Monthly Statistical Publication* contact persons are not identified. Prompt and knowledgeable service and support is provided to statistics users. User survey results have been produced for the first time in January 2002.

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

Publications, documents, and other services are free of charge. A catalogue of publications is not available. Periodic publications are disseminated on the website of the CBJ.

**Table 5. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR MONETARY STATISTICS**  
(Compiling Agency: Central Bank of Jordan)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Not Observed; NO = Practice Largely Not Observed; SDDS = Complies with SDDS Criteria								
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates	
		O	LO	LNO	NO			
0. Pre-requisites of quality								
0.1 Legal and institutional environment		X						
0.2 Resources		X						
0.3 Quality Awareness			X			CBJ's external audit firm has not been changed since 1964. Periodic users' surveys or other processes do not exist to obtain feedback from users on data quality issues. No mechanisms exist to address new and emerging data requirements.	The CBJ plans to establish a policy for periodic rotation of the external audit firm (short-term). The CBJ plans to initiate users' feedback on monetary statistics (short-term). The CBJ plans to convene periodical meetings with policymakers and other data users to review existing monetary statistics, and to identify any emerging data requirements (short-term).	
1. Integrity								
1.1 Professionalism		X						
1.2 Transparency			X			Terms and conditions (other than the CBJ Law and Banking Law) under which monetary statistics are collected, compiled, and disseminated are not made available to the public. Users of statistics are not made aware in advance of major changes in methodology, sources, and statistical techniques.	The CBJ will place detailed material about the terms and conditions under which monetary statistics are collected, compiled, and disseminated on its website (short-term).  The CBJ plans to inform users of statistics in advance of major changes in methodology, source data, and statistical techniques (short-term).	
1.3 Ethical standards		X						
2. Methodological soundness								
2.1 Concepts and definitions		X						
2.2 Scope		X						

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



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Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
4.1 Relevance			X			No established process of consultations or exchange of user's surveys with private sector and academia to monitor users' needs.	The CBJ plans to undertake specific action to ensure that monetary statistics address issues of concern to users (short-term).
4.2 Timeliness and periodicity		X					
4.3 Consistency			X			Consistency checks with government finance statistics is not conducted on a regular basis.	The CBJ plans to conduct regular consistency checks between monetary and government finance statistics (short-term).
4.4 Revision policy and practice			X			Users are not aware that monetary data are not routinely revised.	The CBJ plans to inform users of its revision policy (short-term).
<b>5. Accessibility</b>							
5.1 Data accessibility			X			No information on Jordan's use of IMF credit in the <i>Monthly Statistical Bulletin</i> .	The CBJ will introduce in the <i>Monthly Statistical Bulletin</i> additional information on Jordan's financial relationship with the IMF (short-term).
5.2 Metadata accessibility		X					
5.3 Assistance to users		X					

## VI. 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 CBJ has been compiling and disseminating the balance of payments statistics for Jordan since its establishment in 1964. This reflects a well-established practice, since no government agency has been assigned the legal authority to compile balance of payments statistics. Specifically, the External Sector Division has been compiling the data and the Statistics Division has been disseminating the data through the *Monthly Statistical Bulletin*, the *Annual Yearbook*, and the CBJ website.

Data on external public debt are compiled by the Ministry of Finance (MOF) under the terms of the General External Debt Law of 1971 and, subsequently, the Public Debt Law No. 26 of 2001. The data are disseminated by the MOF and the CBJ. No government agency is responsible for compiling outstanding private external debt data.

##### 0.1.2 *Data sharing and coordination among data producing agencies are adequate*

Adequate working arrangements exist among the agencies providing data for balance of payments compilation and within the CBJ. The CBJ obtains primary data from various sources, including the commercial banks, the Department of Statistics, the MOF, the Amman Stock Exchange, the Ministry of Industry and Trade, other government agencies, and various departments within the CBJ. Furthermore, a *Memorandum of Agreement* between the CBJ and the MOF was signed in July 2001 to promote a free flow of balance of payments, monetary, and fiscal data between these two agencies.

Contacts with the data-producing agencies are maintained regularly to ensure proper understanding of data requirements. In this connection, the Department of Statistics started providing trade data electronically to the CBJ since early 2000 and the two institutions meet regularly.

##### 0.1.3 *Respondent's data are to be kept confidential and used for statistical purposes only*

The confidentiality of individual respondents' data collected by the CBJ is guaranteed by the CBJ Law of 1971 (Law No. 23, Article 45.c), which stipulates that all disaggregated data and statements reported to the CBJ be considered confidential and not disclosed to any individual or institution, except in the form of aggregated statistical statements published by the CBJ. In addition, Article 23 of the CBJ Law requires that every employee of the CBJ take an oath to protect the confidentiality of the CBJ operations. This compromise continues to be binding even after employees leave the CBJ.

Furthermore, Article 15 of, the Code of Conduct for CBJ staff (the CBJ By Law No. 62) requires that employees maintain absolute confidentiality about their activities at the CBJ and Article 17 prohibits that employees show any document to outsiders, and Article 69 establishes penalties for noncompliance with the Code of Conduct, which range from a warning to the employee's dismissal.

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

The CBJ Law of 1971 (Law No. 23) provides the legal basis for mandatory reporting of data to the CBJ by banks. Article 45(a) of the law requires that banks provide any information or statistics that the CBJ requests and article 46 stipulates penalties for noncompliance.

The legal authority to collect data from nonbank entities is derived from the CBJ Law, particularly the blanket provision of Article 4(i), backed by a well-established and uncontested administrative customary practice. The Law, however, is not sufficiently specific regarding mandatory reporting of data to the CBJ by entities other than banks, which could result in a low response rate and untimely data from enterprise surveys that will need to be introduced in the future. Amendments to the CBJ Law may be required to clearly indicate the authority and responsibility of the CBJ to collect data from any entity for compiling balance of payments data.

**0.2 Resources**

*0.2.1 Staff, financial, and computing resources are commensurate with statistical programs*

Staffing is clearly inadequate to perform the existing tasks, improve the methodological soundness, and compile international investment position data, even after the increase of three staff that took place during the CBJ reorganization at the beginning of February 2002. Since then, the External Sector Division comprises only seven economists who evaluate, improve, and develop the numerous and complex data sources used for compiling balance of payments and the international investment position; extract, assess, adjust, and validate data from collections; compile the balance of payments and the international investment position; undertake methodological improvements; analyze external sector developments; and maintain relations, reporting requirements, and agreements with international organizations.

Regarding experience with balance of payments concepts and compilation methods, three staff have two or more years of experience, one has one year of experience, and the rest have none. Two of the staff participated in IMF balance of payments courses. In general, the staff are not very familiar with enterprise surveys because the main sources of balance of payments data are the International Transactions Reporting System of banks and the public sector records. The qualifications of the staff are adequate: one has a PhD in Economics, three have a Masters' degree in economics, and three have a bachelor's degree in economics, although one is in the process of obtaining his Master's degree.

The External Sector Division was equipped with only three personal computers prior to the CBJ reorganization, but since then three additional computers have been assigned to the division and an additional one is expected in the short-term, so that every economist will have a personal computer. Thus, the computing resources are adequate now, although they were not in the past. Excel datasheets are the main software used for compiling and analyzing the statistical series.

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

Available resources for the compilation of balance of payments statistics and the international investment position are limited and, thus, there is limited room for shifting resources to start new programs. Consequently, additional resources would be required to compile balance of payments statistics and the international investment position in accordance with the fifth edition of the IMF's *Balance of Payments Manual (BPM5)*.

No program exists to compare the resource usage of the balance of payments compilation system with other statistical systems. There are training programs and periodic reviews of work procedures. The new computers expected in the External Sector Division would enhance efficiency in the operational work.

### **0.3 Quality awareness**

#### *0.3.1 Processes are in place to focus on quality*

Managers and staff of the CBJ are conscious that quality is the cornerstone of statistical work. They are sensitive to all five dimensions of data quality and conduct their work accordingly. Subject to resource constraints, data are checked for misreporting, and the CBJ reverts to the reporting institution when necessary. Also, staff of the External Sector Division visit reporting institutions as often as possible to review the process of data provision, discuss methodological issues, and verify the intersectoral consistency of the accounts. No systematic measures are undertaken to focus on quality overall. An external company audits the CBJ balance sheet on an annual basis.

#### *0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics*

There is no body distinct from the External Sector Division that provides guidance on the quality of the balance of payments statistics and on strategies for improving data production. The Balance of Payments Committee at the CBJ, that was created in 1996 to design the International Transactions Reporting System forms, ceased its operations after finalizing this task in 1997.

Constrained by limited human resources, the quality of the collection, processing, and dissemination of the statistics is monitored only to a certain extent through crosschecks,

studies undertaken by the Research Department of the CBJ to review methodological issues, data analysis undertaken by the management of the CBJ, and discussions with IMF missions. Although no formal surveys of users are undertaken, users can contact the CBJ through their website or by mail, and responses are provided to all requests and questions.

*0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs*

Although there is recognition of the tradeoffs between the dimensions of data quality, no formal mechanism exist to address quality considerations and seek users feedback that would guide planning for existing and emerging data needs. Nonetheless, timeliness is regarded as one of the most important dimension of data quality, in line with the GDDS and the need to publish the *Monthly Statistical Bulletin* of the CBJ. Currently, there are more than 1,200 subscribers to the CBJ bulletin. Other users access the data posted on the CBJ website, which is updated on the same day that the bulletin is ready for publication.

**1. Integrity**

***1.1. Professionalism***

*1.1.1 Statistics are compiled on an impartial basis*

Article 3 (a) of the CBJ Law of 1971 mandate that the CBJ be an autonomous corporate body, which supports the terms and conditions under which the balance of payments statistics are produced and promote the professional independence of the CBJ. Responsibility for, and decisions about, the methodology to be used for balance of payments compilation lie entirely within the Research Department of the CBJ.

Professional competence plays a key role in recruitment and promotion policies. Staff participate actively in regional and international meetings and conferences. Occasionally, lectures are organized in which outside experts are invited to participate. Also, analysis undertaken by the data producing agency for publication is subject to internal interview.

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

The choice of source data and statistical techniques for balance of payments compilation is based solely on statistical considerations made by the External Sector Division staff in consultation with the head of the Research Department and management of the CBJ. Staff include methodological notes in the balance of payments tables published in the *Monthly Statistical Bulletin*, the *Annual Yearbook*, and in the CBJ website.



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

The CBJ regularly monitors national press coverage of its statistical products and where there is an erroneous interpretation, the CBJ provides comments and clarification to the media.

**1.2 Transparency**

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

Although the CBJ has a well-established practice for compiling and disseminating balance of payments statistics, the terms and conditions under which the data are compiled are not readily available. Thus, even though the confidentiality of individual respondents' data collected by the CBJ is guaranteed by the CBJ Law of 1971 (Law No. 23, Article 45.c), this information is not readily available to the public through CBJ publications or its website.

The CBJ's *Monthly Statistical Bulletin* and the CBJ website, which is updated monthly, provide a centralized telephone number, two fax numbers, and an electronic mail address for the Research Department of the CBJ where users can obtain additional information or direct their questions on any of the statistics published, including balance of payments data.

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

As indicated in Jordan's balance of payments metadata on the IMF's Dissemination Standards Bulletin Board, there is no internal governmental access to the statistics before they are released to the public. All data disseminated by the CBJ are simultaneously released to the public in its *Monthly Statistical Bulletin* and website. Thus, no one outside the CBJ has access to the balance of payments data before their release to the public.

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

The CBJ statistical publications are clearly identified as products of the CBJ and all the tables contained therein provide the name of other statistical agencies whose data are being reproduced in the CBJ publications. However, the division within the Research Department of the CBJ responsible for the information shown on CBJ publications is not currently identified. Thus, the External Sector Division is not identified in the CBJ's *Monthly Statistical Bulletin* or the CBJ website as being the unit responsible for compiling the balance of payments statistics.

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

The CBJ's *Monthly Statistical Bulletin* contains a methodological section providing definitions for each of the balance of payments components and some of the statistical tables

published in the bulletin include footnotes, alerting readers to revisions in historical series or changes in methodology. In the future, the CBJ plans to provide users of statistics with advance notice of major changes in methodology, source data, and statistical techniques.

### **1.3 Ethical standard**

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

The CBJ Law No. 23 and the CBJ By Law No. 62, which is the Code of Conduct, provide broad ethical guidelines for staff of the CBJ. The CBJ By-law regulates recruitment of personnel, their rights, duties and responsibilities, as well as disciplinary actions. In addition, there is internal documentation describing the area of work and responsibilities of each department and division of the CBJ. These guidelines are fully available to staff. When new staff join the CBJ, they participate in an orientation course that thoroughly covers these guidelines.

## **2. Methodological Soundness**

### **2.1 Concepts and definitions**

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

Balance of payments statistics follow the conceptual framework of the fourth edition of the IMF's *Balance of Payments Manual (BPM4)* only to a limited extent. While the Data Quality Assessment Framework for the balance of payments statistics calls for the use of the *BPM5* as a general framework, the elements related to the Methodological Soundness in Jordan's balance of payments were assessed against *BPM4* because the CBJ's methodology is based on *BPM4*. In this regard, some differences from concepts and definitions specified in *BPM4* and Jordan's methodological framework have been identified by the External Sector Division on the GDDS website maintained by the IMF. Major differences relate to definitions, data coverage, classification, and sectorization of some current account components and all capital account components.

Certain balance of payments components, however, are already being compiled on the basis of the *BPM5*, such as investment income debits, which according to the CBJ's *Monthly Statistical Bulletin* are compiled on an accrual basis. Also, efforts are being undertaken to compile some of the additional service and financial account categories that were introduced by *BPM5*. In general, work toward adopting the recommendations set forth in *BPM5* have been limited since compilation efforts have relied on available banking data and not on the introduction of new surveys, which would require additional resources.

## **2.2 Scope**

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

Although the residency criteria is in conformity with *BPM5* and the economic territory of the country has been defined to include free trade zones and bonded warehouses, the coverage of the balance of payments data is incomplete mainly because the international transactions of households, individuals, corporations, and quasi-corporations (e.g., branches of foreign direct investors) are only partially recorded. The coverage of the data is particularly deficient for investment income and for all financial account components, since there are no surveys in place to capture foreign direct investment, portfolio investment, and other financial account transactions, such as trade credits. The authorities are aware of the need to introduce new surveys, but would need considerable additional resources for this purpose.

## **2.3 Classification/sectorization**

### **2.3.1** *Classification/sectorization systems used are broadly consistent with international standards, guidelines, or good practices*

Although the Data Quality Assessment Framework for the balance of payments statistics calls for the use of the *BPM5* as a general framework, the assessment of Jordan's classification and sectorization of accounts is made against *BPM4*, since this is the framework being used for compiling the balance of payments statistics. In this regard, while many accounts in *BPM4* classify the resident units of the economy into a resident official sector, deposit money banks, and other sectors, Jordan's balance of payments statistics sectorization of relevant accounts is limited to the public and private sectors. The External Sector Division indicated that the institutional coverage for the public sector is consistent with the one used in the monetary and fiscal accounts, and comprises the central government (budget and owned-budget institutions), the Social Security Corporation, the municipalities, and the nonfinancial public enterprises. Implementation of *BPM5* would lead to an improved sectorization of the accounts that would enhance economic analysis.

Jordan's classification of accounts in the balance of payments compared with the suggested classification of accounts in *BPM4* indicate that there are important deviations in both the current and the capital account. These include misclassifications in the current account and a very limited classification of capital account components (subsequently redefined as the capital and financial account in *BPM5*). Nevertheless, the CBJ provides annual balance of payments data for publication in the IMF's *Balance of Payments Statistics Yearbook* that are in broad compliance with the classification recommended in *BPM5*. The main deviations in Jordan's classification of accounts from *BPM4* include the following:

*Goods*: imports are compiled on a c.i.f. rather than a f.o.b. basis, as recommended by *BPM4*. Estimates are made of the insurance and freight components of c.i.f. imports, which are used in IMF publications, but not in the CBJ publications.

*Services*: include workers' remittances, which *BPM4* recommends be classified under private unrequited transfers, and also include investment income, which *BPM4* recommends to classify as a separate component of the current account. In line with *BPM5*, workers' remittances and income should be classified as separate components in the current account. Credits and debits entries on services are disseminated for three components, namely, travel services, transportation services, and government n.i.e., and the remaining service transactions are aggregated under "other services." Although data are compiled for the following *BPM5* components or subcomponents, these data are not disseminated: (i) the transportation subcomponents: passenger, freight, and other; (ii) insurance services; and (iii) other business services. These detailed data are, however, reported to the Fund for publication in the *Balance of Payments Statistics Yearbook*. Insurance transactions are recorded on a net basis (premiums minus claims), which is not in conformity with *BPM5*.

*Income*: is currently classified as part of services, instead of being a separate category of the current account. Although *BPM4* recommends that investment income be broken down into direct investment (further broken down into reinvested and distributed earnings) and other income, Jordan's BOP only shows credits and debits for "other investment income." The CBJ's *Monthly Statistical Bulletin* indicates that while the credit entries comprise interest received on the banking system's investments abroad and direct investment earnings, debit entries include interest accrued on Jordan's external debt and interest paid on nonresident investments.

*Capital account*: classified into (i) public sector transactions comprising disbursement of loans, amortization of loans, and the cost of debt restructuring; and (ii) private sector transactions, of which only migrants' transfers (denominated "transfers of worker's savings") are published, although data for foreign direct investment, portfolio investment, and other financial transactions are also compiled. This classification is not in line with the standard classification of the capital account under *BPM4*, which suggests the following components: (i) direct investment abroad and in the reporting economy covering equity capital, reinvested earnings, other long-term capital, and short-term capital; (ii) portfolio investment covering investment in long-term bonds and corporate equities, further broken down into assets and liabilities; and (iii) other capital covering long-term capital, short-term capital, and other capital, further broken down into resident official sector, deposit money banks, and other sectors, which are further broken down into other categories.

Private sector transactions seem to cover some long-term direct investment in the form of equity and long-term loans. Thus, the foreign direct investment data do not include trade credits or short-term loans with affiliated entities. Surveys are needed to develop a system to measure reinvested earnings on outward and inward direct investment. Also, data are not available to record direct investment on a directional basis (i.e., netting of asset and liability transactions between entities in a direct investment relationship).

*Reserves of the CBJ*: comprise monetary gold, SDR holdings, foreign exchange, foreign currency deposits abroad, bonds and treasury bills, and other assets in foreign currencies,

which comprise foreign currency claims on nonresidents. Net international reserves are calculated by deducting foreign currency liabilities with nonresidents from gross reserves.

## **2.4 Basis for recording**

### **2.4.1 Market prices are used to value flows and stocks**

Jordan's balance of payments statistics are compiled in millions of Jordanian dinars. Goods are valued at market prices by the Customs Department. While export data are recorded on an f.o.b. basis, imports are recorded on a c.i.f. basis. Other transactions in foreign currencies are converted into Jordanian dinars at the exchange rate announced by the CBJ at the time of the transaction. In the case of reserves, the effect of changes in prices and valuation are removed from the transactions data.

### **2.4.2 Recording is done on an accrual basis**

Balance of payments accounting, where possible, is done on an accrual basis. However, most balance of payments transactions for sectors other than the government are still recorded on a cash basis, since the CBJ relies on the International Transactions Reporting System to capture a large part of the transactions related to services, income, and the capital and financial account. Thus, while income related to government operations are recorded on an accrual basis, the remaining transactions on interest, dividend, and profits are recorded on a cash basis. Data on reinvested earnings are not compiled, except for net profits/losses. Services are recorded when paid not when provided. Also, except for government transactions, other transactions in the financial account are recorded when foreign exchange is paid or received.

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

While most of the goods and services components are recorded on a gross basis, transfers and most financial account transactions are recorded on a net basis, the latter separately for asset and liability components.

## **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 data collection system is not comprehensive and most deficiencies in the coverage and classification of the balance of payments statistics reflect gaps in the data sources. The major areas where the existing data sources are deficient are (i) service transactions; (ii) compensation of employees; (iii) direct investment— income, equity capital, reinvested

earnings, and other capital transactions; (iv) portfolio investment; and (v) other investment—trade credits and loan transactions for other sectors of the economy.

The primary data sources being employed for compiling balance of payments data by the External Sector Division are (i) custom's declaration forms; (ii) the International Transactions Reporting System for data from the banking system; (iii) administrative records of the government; and (iv) information provided by various departments within the CBJ. These primary source data are supplemented with information from several secondary data sources, namely, transport services obtained directly from the major transport enterprises, travel services based on travel surveys undertaken by the Department of Statistics and departure/arrival data obtained from the Ministry of the Interior, workers' remittances based partly on information provided by the Ministry of Labor, and data on nonresident sales and purchases of domestic securities compiled by the Amman Stock Exchange. Currently, the use of enterprise surveys is limited, and comprise mainly those sent to the transportation and fertilizer companies.

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

Most of the problems regarding the definitions, scope, and classification of balance of payments statistics in Jordan directly reflect the limitations of the source data. Given the insufficiency of resources available to the External Sector Division, limited procedures are in place to improve the coverage, classification, valuation, and timing of the information received for compiling balance of payments statistics.

While the International Transactions Reporting System cover the foreign exchange transactions of all licensed banks, the system does not capture domestic currency transactions of residents involving nonresident bank accounts at domestic banks, does not provide proper classification for financial account transactions, and does not require that the reporting institutions reconcile changes in their foreign currency positions with the reported transactions system (i.e., closed reporting system). The Banking Supervision Department at the CBJ, however, reconciles the monthly data from the International Transactions Reporting System with daily data reported by banks on total foreign exchange currency bought and sold, which is aggregated for monthly comparisons. Nonetheless, there is also no reporting mechanism to systematically record noncash transactions that are not being captured through the International Transactions Reporting System, such as trade credits or loans involving trade finance, intercompany transactions, reinvested earnings, stock dividends, and debt-to-equity conversions.

In addition to revising the International Transactions Reporting System, source data need to be enhanced by introducing surveys to cover mainly foreign direct investment transactions, portfolio investment transactions (including financial derivatives), other investment, insurance services provided by 27 resident insurance companies, construction activities, communication services, computer and information services, and transactions of foreign embassies and international organizations to compile data on compensation of employees.

### *3.1.3 Source data are timely*

The data collection system provides for the timely receipt of data. Thus, monthly data from the International Transactions Reporting System and data from the Ministry of Finance are received three weeks after the end of the month. Information provided by the Ministry of Labor is received one week after the end of the reference month. Data from the Ministry of Industry and the Amman Stock Exchange are received two weeks after the end of the reference month. Survey data from transportation and fertilizer companies are received one month after the end of the reference month. The timeliness of the trade data improved since early 2001, when the data started to be received by electronic mail. These data are now received around eight weeks after the end of the reference month.

## *3.2. Statistical techniques*

### *3.2.1 Data compilation employs sound statistical techniques*

Current data compilation procedures minimize to a certain extent processing errors, but there is scope for improvement. In this regard, while trade data have been received electronically, thereby reducing, entry errors since early 2001, International Transactions Reporting System data are transmitted in hard copies. Also, errors would be minimized if the detailed data compilation procedures of the staff responsible for the balance of payments statistics would be updated; the existing procedures manual was written in the 1980s.

The External Sector Division considers that the forms for the International Transactions Reporting System and enterprise surveys have been designed in a way that makes them easy to complete and appropriate for computer processing. Currently, enterprise surveys are sent mainly to transportation and fertilizer companies.

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

In general, data adjustments and transformations are limited. Certain classification and coverage adjustments are made to the trade statistics to exclude goods transactions undertaken by foreign embassies and military missions. A survey was conducted by the Department of Statistics in 2001 to estimate the component of freight and insurance in imports, which are recorded and published on a c.i.f. basis in CBJ publications. So far, imports recorded on a c.i.f. basis have been converted to an f.o.b. basis through the application of a factor that was determined many years ago for the use of IMF publications and missions.

Also, coverage adjustments are made to include large transactions, such as direct investment acquisitions, that have been identified in the media. In these instances, the relevant enterprises are approached to determine the nature, timing, and amount of the cross-border transaction.

### **3.3     *Assessment and validation of source data***

#### **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***

The verification of reported statistics is limited and involve the following: (i) trend analysis to isolate data outliers; (ii) verification of relations between component and totals; and (iii) price/value analysis of some merchandise trade data. High-value or other unusual transactions identified in primary or secondary data sources are queried with transactors or with the agency responsible for the data.

Regarding International Transactions Reporting System data, the forms have not been reviewed since their introduction in around 1997 to improve the coverage and classification of the data. Financial account components are reported in the International Transactions Reporting System in a very aggregated form that is not in line with either *BPM4* or *BPM5*. While banks are not required to reconcile changes in their foreign currency positions with the reported transactions data (i.e., closed reporting system), the Banking Supervision Department at the CBJ reconciles the monthly International Transactions Reporting System data with the daily values reported by banks on total foreign exchange currency bought and sold, which is aggregated for monthly comparisons.

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

#### **3.4.1     *Main intermediate data are validated against other information where applicable***

The External Sector Division does not routinely validate its data against other internal or external sources due largely to resource constraints. However, the media is closely monitored for information on international transactions, especially for financial account transactions such as grants, loans, direct investment, and portfolio investment.

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

The behavior of a series is only occasionally crosschecked with related series or indicators, reflecting mainly resource constraints in the division responsible for compiling balance of payments data.

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

Staff involved in producing balance of payments data monitor developments in the size and sign of the errors and omissions item and seek to understand them. For this purpose, crosschecks between entries in the current, capital, and financial accounts are analyzed.



### **3.5 Revision studies**

#### **3.5.1 *Studies and analyses of revisions are carried out routinely and used to inform statistical processes***

Studies on fluctuations in the data, including the source of errors and omissions, are not carried out routinely. Revision studies are conducted occasionally and the public is informed of the results through explanatory notes in the methodological section of the CBJ's *Monthly Statistical Bulletin* and its website or through footnotes provided in the statistical tables.

## **4. Serviceability**

### **4.1. Relevance**

#### **4.1.1 *The relevance and practical utility of existing statistics in meeting users' needs are monitored***

There is no established process of consultation with a user group that includes representatives from the private sector, the government sector, and other users. The CBJ participates in international balance of payments statistics courses, meetings, and seminars organized by international and regional organizations.

### **4.2 Timeliness and periodicity**

#### **4.2.1 *Timeliness follows dissemination standards***

The timeliness of the balance of payments statistics exceeds the GDDS requirements. Jordan's preliminary quarterly and annual balance of payments statistics are disseminated 14 weeks after the end of the reference period. Monthly merchandise trade data are disseminated 12 weeks after the end of the reference period and, thus, meet the timeliness requirement of 8–12 weeks established by the GDDS. Trade data are received from the Department of Statistics around two months after the end of the reference period, processed in a few days at the CBJ, and published three weeks later in the CBJ's *Monthly Statistical Bulletin* and on the CBJ website.

#### **4.2.2 *Periodicity follows dissemination standards***

Jordan disseminates quarterly and annual balance of payments statistics, thereby exceeding the annual periodicity requirement of the GDDS. Also, the monthly periodicity for merchandise trade data is being met. Data on international reserves are also compiled on a monthly basis.

### **4.3 Consistency**

#### *4.3.1 Statistics are consistent within the dataset*

Concepts, definitions, and classifications for producing quarterly and annual balance of payments statistics are the same. Annual data are derived from quarterly data and, are thus consistent. The net errors and omissions item, however, has been large and unstable, reflecting mainly the existing data gaps.

#### *4.3.2 Statistics are consistent or reconcilable over a reasonable period of time*

When changes in source data, methodology, or techniques are introduced, historical series are reconstructed as far as possible depending on the available information. Major changes in methodology are explained at the time of the publication of data in explanatory notes or in the methodological section of the CBJ's *Monthly Statistical Bulletin*.

Major changes in economic trends are explained in notes in the CBJ's *Monthly Statistical Bulletin* and a more comprehensive analysis is provided in the CBJ's *Annual Report*.

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

In principle, balance of payments statistics are consistent with merchandise trade data provided by the Department of Statistics, monetary statistics provided by the Monetary Division of the CBJ, and fiscal and external public debt data provided by the MOF, because data are taken as provided by the data-producing institutions. Also, the definition of nonfinancial public sector is consistent with that used in the fiscal and monetary accounts.

### **4.4 Revision policy and practice**

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

There is no predetermined revision cycle of balance of payments statistics. When revisions take place, there are not properly documented in the CBJ publications or website and explanations are provided mainly through footnotes to the statistical tables.

#### *4.4.2 Preliminary data are clearly identified*

All the statistical tables related to the balance of payments that are published in the CBJ's *Monthly Statistical Bulletin* have a footnote indicating that the data are preliminary, even though data are shown since 1996. Thus, the public has no way of knowing what data are preliminary and what data are final.

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

Major revisions to balance of payments statistics, which are done only occasionally, are announced in the CBJ's publications and website.

**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)*

Although the balance of payments statistics are presented in a clear manner that facilitates interpretation, the classification and sectorization of the accounts do not conform to international standards and show few details, especially in the financial account. Thus, the data do not facilitate economic analysis. The availability of detailed data on request is not publicized in the CBJ publications or website. Analysis of current period developments is included in the CBJ's *Annual Report*, but not in the monthly CBJ publications or on the website.

*5.1.2 Dissemination media and formats are adequate*

The dissemination formats are adequate. Balance of payments data are released to all interested parties in the *Monthly Statistical Bulletin*, *Annual Report*, and website of the CBJ. Detailed and summary data on the major components of the balance of payment are available in the CBJ's publication and website.

*5.1.3 Statistics are release on a preannounced schedule*

Statistics are not released on a preannounced schedule, but the public is aware that the CBJ's *Monthly Statistical Bulletin* is available around the middle of each month and that the CBJ website is updated on the same day that the bulletin is published.

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

Balance of payments data are released simultaneously to all interested parties by posting them on the CBJ website. Data are not made available to officials outside the CBJ before they are released to the public.

*5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request*

Nonpublished but nonconfidential sub aggregated data are made available 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 internationally accepted standards, guidelines, or good practices are annotated***

The description of Jordan's balance of payments methodology and data sources are posted with enough detail on the IMF's General Data Dissemination Standards website and the IMF's *Balance of Payments Statistics Yearbook*. These publications also identify some of the deviations from internationally accepted standards. Users have access to Jordan's metadata via a hyperlink to the General Data Dissemination Standards website provided on the CBJ website. However, the CBJ's *Monthly Statistical Bulletin* and website do not disseminate a comprehensive description of the methodology followed for compiling balance of payments statistics..

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

Unpublished but nonconfidential series or tabulations can be provided upon request, although this is not publicized.

## **5.3    *Assistance to users***

### **5.3.1    *Contact person for each subject field is publicized***

A contact telephone, facsimile, e-mail and address are identified in the CBJ's *Monthly Statistical Bulletin* and website, as well as on the IMF's Dissemination Standards Bulletin Board, where in addition contact names are provided for each subject field. Assistance to users of statistics is available upon request, but is not publicized. No periodic surveys of users are in place.

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

No catalogue of publications is available, but users have access to information provided on the CBJ website. Also, the *Monthly Statistical Bulletin* and *Annual Report* of the CBJ are free of charge.

**Table 6. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR BALANCE OF PAYMENTS DATA**  
**(Compiling Agency: Central Bank of Jordan)**

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Pre-requisites of quality							
0.1 Legal and institutional environment			X			Despite no legal authority, the CBJ's responsibility is well established, but good response rate to new surveys might require specific legal authority.	
0.2 Resources				X		Insufficient resources, despite increase of three staff and computers after the CBJ reorganization in February 2002.	The CBJ will: (i) increase resources further; and (ii) divide the tasks of the External Sector Division between two divisions, with one division tasked with the primary responsibility of compiling external sector statistics (short-term).
0.3 Quality Awareness			X			No systematic measures to monitor data quality.	The CBJ will create a Balance of Payments Committee to strengthen and monitor strategies to improve data quality (short-term).
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency			X			The confidentiality of individual respondents' data is not known to the public. The CBJ publications and website do not indicate which unit compiled the data.	
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions				X		Balance of payments follow the <i>BPM4</i> framework only to a limited extent. Most concepts and definitions do not follow internationally accepted standards.	The CBJ will develop plans to compile balance of payments and international investment position based on <i>BPM5</i> (medium-term).

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Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment				Plans for Improvement and Target Dates
		O	LO	LNO	NO	
2.2 Scope				X		The CBJ will expand the coverage of international transactions for households, individuals, corporations, and quasi-corporations (medium-term).
2.3 Classification/Sectorization				X		The CBJ will reclassify workers' remittances and income in the current account (short-term). The CBJ will: (i) obtain additional data from the Customs Department to record goods as classified in <i>BPM5</i> , including imports on a f.o.b. basis; and (ii) improve the classification and sectorization of all accounts, especially the financial account (medium-term).
2.4 Basis for recording			X			The CBJ will adopt fully the <i>BPM5</i> recommendations for recording international transactions (medium-term).
<b>3. Accuracy and reliability</b>						
3.1 Source data				X		The CBJ will review and expand data sources by: (i) reviewing ITRS forms, (ii) reviewing existing surveys, and (iii) introducing new surveys to compile mainly financial accounts (transactions and stocks) and international services (medium-term).
3.2 Statistical techniques			X			
3.3 Assessment and validation of source data			X			
3.4 Assessment and validation of intermediate data and statistical outputs			X			

**Table 6. JORDAN—DATA QUALITY ASSESSMENT FRAMEWORK: SUMMARY OF RESULTS FOR BALANCE OF PAYMENTS DATA**  
(Compiling Agency: Central Bank of Jordan)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3.5 Revision studies			X			Studies on fluctuations in the data, including the source of errors and omissions, are not carried out routinely.	
<b>4. Serviceability</b>							
4.1 Relevance			X			No established processes of consultation with users is in place.	
4.2 Timeliness and periodicity		X					
4.3 Consistency		X					
4.4 Revision policy and practice			X			Revisions do not follow a regular schedule and are announced to the public with insufficient detail in CBJ publications and website. Preliminary and final data are indistinguishable in CBJ publications and website, since all data are identified as preliminary.	
<b>5. Accessibility</b>							
5.1 Data accessibility			X			Analysis of current-period developments is not included in monthly publications. Published financial account data are very aggregated. Availability of detailed data on request is not publicized.	
5.2 Metadata accessibility			X			CBJ publications and website do not include a comprehensive description of the methodology used for compiling balance of payments data.	
5.3 Assistance to users		X					

# **Jordan: Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension and Plans for Improvement**

REAL SECTOR					
Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
COMPREHENSIVE FRAMEWORK					
National Accounts					
Producing and disseminating the full range of national accounts aggregates and balancing items in nominal and real terms, yielding gross domestic product, gross national income, gross disposable income, consumption, savings, capital formation and net lending/ borrowing. Producing and disseminating sectoral accounts and national and sectoral balance sheets as relevant.	Coverage as recommended. <i>SNA 93</i> mostly implemented in compiling estimates for 1992 through 1999, with 1994 as the base year. Illegal activities not covered. Transactions recorded on an accrual basis.	Annual	Quarterly, Annual	10–14 months	Prelim. Annual: 3–4 months  Revised Annual: 10–12 months  Final annual: 24 months  Quarterly: 3 months
DATA CATEGORIES AND INDICATORS					
National Accounts Aggregates					
GDP (nominal and real)	Coverage as recommended. GDP compiled by production approach	Annual (quarterly encouraged)	Quarterly, Annual	6-9 months	Same as above
Gross national income, capital formation, saving	Same coverage as encouraged.	Annual	Quarterly, Annual	6-9 months	Annual: Prel: 10-12 Months Final: 24 Months
Production Index/Indices					
Manufacturing or industrial	Industrial Production Index covers all mining and manufacturing activities, identified in the Censuses of Industry, the last one taking place in 1994.	Monthly	Monthly, Annual	6 weeks	Within 35 days
Primary commodity, agricultural, or other as relevant	Not available	As relevant	Not applicable	3 months for all indices	Not applicable
Price Indices					
Consumer price index	CPI is calculated on the basis of price changes for goods and services consumed by all households in the country. 1997 is the base year for weights and the reference period.	Monthly	Monthly	1 or 2 months	5 days
Producer price index	Same coverage as encouraged. PPI is based on prices collected from 300 establishments with 1998 as the base year for weights and the reference period.	Monthly	Monthly	1 or 2 months	5-6 weeks



<b>Labor Market Indicators</b>					
Employment	Based on data collected through quarterly Employment/ Unemployment Survey of population of 15 years of age and over. ILO concepts and definitions are used.	Annual	Quarterly	6-9 months	2 months
Unemployment	Same as above.	Annual	Quarterly	6-9 months	2 months
Wages/earnings	Based on data collected through Employment Survey of Establishments conducted annually. The most recent survey was in 1999.	Annual	Annual	6-9 months	18 months

<b>FISCAL SECTOR</b>					
<b>Coverage</b>		<b>Periodicity</b>		<b>Timeliness</b>	
<b>GDDS</b>	<b>Current Practice</b>	<b>GDDS</b>	<b>Current Practice</b>	<b>GDDS</b>	<b>Current Practice</b>
<b>COMPREHENSIVE FRAMEWORK</b>					
<b>Central Government Operations</b>					
Producing and disseminating comprehensive data on central government transactions emphasizing: (1) coverage of all central government units; (2) use of appropriate analytical framework; and (3) development of a full range of detailed classifications (tax and nontax revenue, current and capital expenditure, domestic and foreign financing) as relevant.	Broadly same coverage as recommended in the IMF's <i>A Manual on Government Finance Statistics</i> , except that interest and amortization payments are on a commitment basis in the monthly data, but on a cash basis in the annual data. Also, grants-in-kind is shown as part of grants and as current or capital expenditures.	Annual	Monthly, Annual	6-9 months	Monthly: 4-6 weeks  Annual: 2 months  Annual final account: 6-9 months
<i>General government or public sector operations data, strongly encouraged where sub national levels of government or public enterprise operations are of analytical or policy importance</i>	<i>Not available.</i>	<i>Annual</i>	<i>Not applicable</i>	<i>6-9 months</i>	<i>Not applicable</i>
<b>Central Government Debt</b>					
Producing and disseminating comprehensive data on central government domestic and foreign debt, with breakdowns (debt holder, instrument, currency, etc. as relevant).	Public domestic and foreign debt including, inseparably, government guaranteed debt, with a breakdown by currency, type of holder and instrument for domestic debt, and type of holder for foreign debt.	Annual	Monthly, Annual	6-9 months	Monthly: 6-9 weeks  Annual: 4 months

DATA CATEGORIES AND INDICATORS					
Central Government Budgetary Aggregates					
Revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency), as relevant	Revenue, expenditure, balance, and financing with breakdown by currency.	Quarterly	Rev., exp. & balance: Monthly, Annual Financing: Quarterly, Annual	1 quarter	Monthly: 4-6 weeks  Quarterly: 4-6 weeks  Annual: 2 months
<i>Interest payments</i>	<i>As encouraged.</i>	<i>Quarterly</i>	<i>As above</i>	<i>1 quarter</i>	<i>As above</i>
Central Government Debt					
Domestic debt and foreign debt, as relevant, with appropriate breakdowns (currency, maturity, debt holder, instrument), as relevant	Public domestic and foreign debt including, inseparably, government guaranteed debt, with a breakdown by currency, type of holder and instrument for domestic debt, and type of holder for foreign debt.	Annual (Quarterly encouraged)	Monthly	1-2 quarters	Monthly: 6-9 weeks  Annual: 4 months
<i>Government guaranteed debt</i>	<i>Included in government debt.</i>	<i>Annual</i>	<i>Monthly, Annual</i>	<i>1-2 quarters</i>	<i>Monthly: 4-6 weeks  Annual: 4 months</i>

FINANCIAL SECTOR					
Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
COMPREHENSIVE FRAMEWORK					
Broad Money Survey					
Producing and disseminating comprehensive data emphasizing: (1) coverage of all depository corporations (banking institutions), (2) use of an appropriate analytical framework; and (3) development of classifications of external assets and liabilities, domestic credit by sector, and components of money (liquidity) and nonmonetary liabilities.	Depository corporations survey includes CBJ and 21 licensed banks (nine local commercial banks, five investment banks, five branches of foreign banks, and two Islamic banks). Nonbank financial institutions (e.g., insurance companies and money exchange companies) and other banking institutions (mainly development banks) are not covered by the monetary survey. The methodology for producing the monetary survey follows the IMF's guide for compilation of <i>International Financial Statistics</i> .	Monthly	Monthly	2-3 months	6 weeks

DATA CATEGORIES AND INDICATORS					
<b>Broad Money and Credit Aggregates</b>					
Net external position, domestic credit, broad or narrow money	<p><i>Net foreign assets</i>: total foreign assets less total foreign liabilities of the CBJ and deposit money banks. Domestic assets (net). Sum of net claims on central government (general budget and own budget), claims on public entities, claims on private sector (resident), claims on financial institutions, and other items (net)</p> <p><i>National definitions of money</i>. <i>M1</i>: currency outside banks plus demand deposits in Jordanian dinar with the banking system held by the private sector (resident), public entities, nonbank financial institutions plus demand deposits of other banking institutions in Jordanian Dinar with the CBJ only; <i>Quasi-money</i>: demand deposits in foreign currencies plus time and saving deposits in Jordanian Dinar and foreign currencies with the banking system held by all the sectors mentioned in definition of M1; and <i>M2</i>: M1 plus quasi-money.</p>	Monthly	Monthly	1-3 months	6 weeks
<b>Central bank aggregates</b>					
Reserve money	Currency issued plus licensed banks' excess and obligatory reserves in Jordanian Dinar with the CBJ.	Monthly	Monthly	1-2 months	6 weeks
<b>Interest rates</b>					
Short and long-term government security rates, policy variable rate	Dissemination of interest rates on short-term (3 and 6 months treasury bills); medium-term (2-7 years treasury bonds); and long-term securities (10 years development bonds). CBJ policy variable rates are disseminated on (1) rediscount loans to licensed banks; (2) advances to specialized credit institutions; (3) export promotion facilities; (4) certificates of deposits (CDs); and (5) repurchase agreements in CDs. Interest rates on local currency CDs issued by the CBJ are also disseminated by maturity.	Monthly	Monthly	Dissemination as part of a high-frequency (e.g. monthly) publication	Daily 6 weeks (see 2 and 4)

<i>Money or interbank market rates and a range of deposit and lending rates</i>	CBJ disseminates interbank market rates and deposit and lending rates with licensed banks.	<i>Monthly</i>	<i>Monthly</i>	<i>Dissemination as part of a high-frequency (e.g. monthly) publication</i>	<i>6 weeks (deposit and lending rates) Daily</i>
<b>Stock market</b>					
<i>Share price index, as relevant</i>	<i>The Amman Stock Exchange (ASE) Capitalization Weighted Index covers 60 companies and represents 90 percent of equities of these companies.</i>	<i>Monthly</i>	<i>Daily (Share Prices Bulletin, newspapers and REUTERS); Monthly (in ASE's News Letter and CBJ's Monthly Statistical Bulletin)</i>	<i>Dissemination as part of a high-frequency (e.g. monthly) publication</i>	<i>Daily</i>

<b>EXTERNAL SECTOR</b>					
<b>Coverage</b>		<b>Periodicity</b>		<b>Timeliness</b>	
<b>GDDS</b>	<b>Current Practice</b>	<b>GDDS</b>	<b>Current Practice</b>	<b>GDDS</b>	<b>Current Practice</b>
<b>COMPREHENSIVE FRAMEWORK</b>					
<b>Balance of Payments</b>					
Producing and disseminating comprehensive data on the main aggregates and balancing items of the balance of payments, including e.g. imports and exports of goods and services, trade balance, income and transfers, current account balance, reserves and other financial transactions, and overall balance, with detailed components as relevant.	The coverage is deficient, especially in the financial account. The conceptual framework of the fourth edition of the IMF's <i>Balance of Payments Manual</i> is partially followed.	Annual	Quarterly, Annual	6-9 months	3 months (annual & quarterly)
<i>International Investment Position (IIP)</i>	<i>CBJ has compiled partial IIP data for 1996-2000.</i>	<i>Annual</i>	<i>Annual</i>	<i>6-9 months</i>	<i>12 months</i>

DATA CATEGORIES AND INDICATORS					
<b>Balance of payments aggregates</b>					
Imports and exports of goods and services, current account balance, reserves, overall balance	The coverage is deficient and the classification is not detailed enough, specially in the financial account. Workers' remittances and income are shown as part of services, which is not a standard classification.	Annual (Quarterly encouraged)	Quarterly, Annual	6 months	3 months (annual & quarterly)
<b>External debt and debt service<sup>18</sup></b>					
Public and publicly guaranteed debt outstanding (with maturity breakdown) and debt service schedule	Covers central government debt. Data are disseminated in Jordanian Dinars and are classified by creditor, instrument, and maturity. Guaranteed debts are inseparably included.	Quarterly	Monthly	1-2 quarters	5-6 weeks
Public and publicly guaranteed debt service schedule	Included inseparably in the central government debt	Twice yearly	As above	3-6 months	As above
Private external debt not publicly guaranteed	Not available.	Annual	Not applicable	6-9 months	Not applicable
<b>International reserves</b>					
Gross official reserves denominated in U.S. dollars	Broadly same coverage as recommended.	Monthly	Monthly	1-4 weeks	8 weeks
Reserve-related liabilities.	Not available.	Monthly	Not applicable	1-4 weeks	Not applicable
<b>Merchandise trade</b>					
Total exports and total imports	Data are compiled by the Department of Statistics (DOS) and disseminated by both the DOS and the CBJ. Data are classified according to the Standard International Trade Classification (SITC).	Monthly	Monthly	2-3 months	3 months
Major commodity breakdowns with longer time lapse	Same coverage as encouraged.	Monthly	Same as above	2-3 months	Same as above
<b>Exchange rates</b>					
Spot rates	The exchange rate of the Jordanian Dinar (JD)/US dollar remains fixed since October 1995. The exchange rates of JD against other currencies are based on international market cross rates.	Daily	Daily	Dissemination as part of a high-frequency (e.g., monthly) publication	Same day

<sup>18</sup> The external debt data category reflects the decision of the Executive Board of the IMF in March 2000 to enhance the GDDS. Individual country presentations will be revised to reflect the enhancements as they are updated over time. Provisional information on external debt data, if available, is shown with the metadata for balance of payments and central government debt.

### Plans for Improvement

DEPARTMENT OF STATISTICS		
	Time frame	Technical Assistance, Financing Needs, Other Prerequisites
<b>General Plans for Improvement</b>		
The results from improvements and extensions in data collection activities will be used to improve various statistics.	Medium-term	
Undertake ongoing consultation with users on their needs.	Short-term	
Undertake a complete review of dissemination strategies and practices.	Short-term	
Publish and/or publicize the available concepts and methods documentation.	Short-term	
Allocate additional resources to undertake research and investigations into all statistical areas.	Short-term	
<b>National Accounts Aggregates</b>		
Improve estimates of GDP using the expenditure approach.	Short-term	
Compile supply-use tables	Medium-term	
Compile accounts by institutional sectors and financial accounts over the next five-year period	Medium-term	
<b>Production Index</b>		
Update the sample of establishments for the IPI using the results of the 1999 Census of Establishments.	Short-term	
<b>Price indices</b>		
Publicize internal government access conditions	Short-term	
Reweigh the CPI when the results of the 2002 HEIS, based on the 1993 SNA, become available.	Medium-term	
Investigate the treatment of owner-occupied dwelling services as part of the CPI reweigh.	Short-term	
<b>Labor Market Indicators</b>		
Improve timeliness by disseminating the results of the survey within six-nine months of the survey.	Short-term	

CENTRAL BANK OF JORDAN		
	Timeframe	Technical Assistance, Financing Needs, Other Prerequisites
<b>General Plans for Improvement</b>		
Establish an interdepartmental working group on monetary statistics comprising representatives of the Administrative and Finance, Banking Supervision, and Research Departments to adopt the guidelines of the IMF <i>Monetary and Financial Statistics Manual (MFSM)</i> .	Medium-term	
Seek consistency between monetary statistics with the comparable data in government finance statistics on a regular basis.	Short-term	
Inform users of monetary statistics in advance of major changes in methodology, source data, and statistical techniques.	Short-term	
Convene periodical meetings with policy makers and other data users to review existing monetary statistics, and to identify any emerging data requirements.	Short-term	
Place material about the terms and conditions under which monetary statistics are collected, compiled, and disseminated on CBJ's website (e.g., the Law on the CBJ, banks' reporting forms and accompanying guidelines, and CBJ regulations concerning monetary statistics).	Short-term	
<b>Broad Money Survey</b>		
Adopt guidelines of the <i>MFSM</i> on (i) valuation of financial assets and liabilities; (ii) statistical treatment of financial derivatives; and (iii) accrual accounting for the compilation of monetary statistics.	Medium-term	Technical assistance is advised.
Compile separate data on nonfinancial private corporations for the compilation of the monetary survey.	Medium-term	
Initiate steps for the calculation of flows (transactions and revaluations arising from price and exchange rate changes, and other changes in the volume of assets) for monetary statistics.	Medium-term	
<b>Central Bank Aggregates</b>		
Adopt an internationally recognized accounting framework, such as <i>International Accounting Standards</i> , for CBJ's financial statements.	Short-term	
Revalue regularly the IMF Securities Account according to the recommendations of the IMF Treasurer's Department.	Short-term	
Publish in <i>Monthly Statistical Bulletin</i> additional information (e.g., in a memorandum item attached to table 'Balance Sheet of the CBJ') on Jordan's relationship with the IMF.	Short-term	
<b>Balance of Payments Aggregates</b>		
Compile balance of payments and international investment position data on the basis of the fifth edition of the IMF's <i>Balance of Payments Manual (BPM5)</i> .	Medium-term	Technical assistance is advised.
Increase staff, financial, and computing resources to	Short-term	

CENTRAL BANK OF JORDAN		
	Timeframe	Technical Assistance, Financing Needs, Other Prerequisites
improve performance of existing tasks and support plans to adopt <i>BPM5</i> .		
Divide the tasks of the External Sector Division between two divisions, with one division tasked with the primary responsibility of compiling external sector statistics.	Short-term	
Create a Balance of Payments Committee to develop and monitor plans to improve data quality and adopt <i>BPM5</i> .	Short-term	
Review ITRS forms, existing surveys, and introduce new surveys to compile mainly financial accounts (transactions and stocks) and international services.	Medium-term	
Reclassify workers' remittances and income.	Short-term	
Improve classification and sectorization of all accounts, especially the financial account.	Medium-term	
Arrange for the electronic transmission of ITRS data to minimize processing errors.	Medium-term	In cooperation with the Banking Supervision Department at the CBJ.
<b>Merchandise trade</b>		
Obtain additional data from the Customs Department to record goods as classified in <i>BPM5</i> , including imports on a f.o.b. basis.	Medium-term	In cooperation with the DOS and the MOF.

MINISTRY OF FINANCE		
	Timeframe	Technical Assistance, Financing Needs, Other Prerequisites
<b>General Plans for Improvement</b>		
Develop and disseminate detailed technical descriptions of concepts, sources, and methodology sufficient to allow expert users to assess GFS.	Medium-term	
Consider migration to <i>GFS Manual 2001</i> methodology	Medium-term	Additional technical assistance necessary, if to be implemented
<b>Central Government Operations</b>		
Expand coverage of annual GFS to cover all central government units	Short-term	Establishment of separate division in Ministry of Finance GFS compilation as it primary responsibility
<b>Central Government Budgetary Aggregates</b>		
Publish details of quarterly and annual domestic and foreign financing	Short-term	
Improve classification of revenue and expenditure to bring them closer in line with GFS methodology.	Short-term	
Disseminate expenditure data classified by the functions of government.	Medium-term	
<b>Central Government Debt</b>		
Publish government guaranteed debt separately from outstanding government debt	Short-term	



### Jordan: Data Dissemination Practices against the Special Data Dissemination Standard

Coverage		Periodicity		Timeliness	
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice
<b>REAL SECTOR</b>					
<b>GDP</b>					
GDP by major expenditure category and/or by productive sector.	Coverage as recommended. GDP compiled at current and constant prices.	Quarterly	Quarterly <sup>19</sup>	1 Quarter	1 Quarter
<b>Production Index</b>					
Industrial, primary commodity, or sector, as relevant.	Industrial Production Index covers all mining and manufacturing activities, identified in the Censuses of Industry, the last one taking place in 1994.	Monthly	Monthly	6 weeks	8 weeks
<b>Labor Market: Employment</b>					
	Based on data collected through quarterly Employment/Unemployment Survey of population of 15 years of age and over. ILO concepts and definitions are used.	Quarterly	Quarterly	1 Quarter	1 Quarter
<b>Labor Market: Unemployment</b>					
	Same as above.	Quarterly	Quarterly	1 Quarter	1 Quarter
<b>Labor Market: Wages/Earnings</b>					
	Based on data collected through Employment Survey of Establishments conducted annually. The most recent survey was in 2000.	Quarterly	Annual	1 Quarter	18 Months
<b>Consumer Price Index</b>					
	CPI is calculated on the basis of price changes for goods and services consumed by all households in the country. 1997 is the base year for weights and the reference period.	Monthly	Monthly	1 Month	5 days

<sup>19</sup> Production approach only (nominal and real prices). Expenditure approach is only compiled annually and in nominal prices. Work plan in place to fully meet SDDS requirements in one-two years. Technical assistance from the Fund may be required.

Coverage		Periodicity		Timeliness	
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice
<b>Producer Price Index</b>					
	Same coverage as encouraged. PPI is based on prices collected from 300 establishments with 1998 as the base year for weights and the reference period.	Monthly	Monthly	1 Month	5-6 weeks <sup>20</sup>
<b>FISCAL SECTOR</b>					
<b>General Government Operations</b>					
Revenue, expenditure, balance, and domestic (bank and nonbank), and foreign financing.	Not available <sup>21</sup> .	Annual	Not applicable	2 Quarters	Not applicable
<b>Central Government Operations</b>					
Budgetary accounts: revenue, expenditure, balance, and domestic (bank and nonbank) and foreign financing.	Budgetary accounts: revenue, expenditure, balance, and domestic and foreign financing with no details on financing.	Monthly	Monthly for revenue, expenditure, balance; Quarterly for financing	1 Month	Monthly: 4-6 weeks (Quarterly financing: 4-6 weeks)
<b>Central Government Debt</b>					
Domestic and foreign, as relevant, with a break-down by currency (including indexed), as relevant, and a break-down by maturity; debt guaranteed by central government, as relevant.	Public domestic and foreign debt including, inseparably, government guaranteed debt, with a breakdown by currency, type of holder and instrument for domestic debt, and type of holder for foreign debt.	Quarterly	Monthly	1 Quarter	4-6 weeks
<b>FINANCIAL SECTOR</b>					
<b>Accounts of the Banking Sector</b>					
Money aggregates, domestic credit by public and private sector, external position.	Same coverage as recommended; compilation based on the IMF's <i>A Guide to Money and Banking Statistics in IFS</i> .	Monthly	Monthly	1 Month	6 weeks <sup>22</sup>

<sup>20</sup> Will need to be reduced to one month to meet SDDS requirements.

<sup>21</sup> No GFS covering all general government units are compiled. However, annual data for all general government units are available within 6-9 months for such GFS compilation.

<sup>22</sup> Data are available within three weeks, but disseminated only in the CBJ's *Monthly Statistical Bulletin*, with a six-week lag. Dissemination should be within 1 month to meet SDDS requirements.

Coverage		Periodicity		Timeliness	
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice
<b>Analytic Accounts of the Central Bank</b>					
Reserve money, domestic claims on public and private sector, external position.	Same coverage as recommended.	Monthly	Monthly	2 Weeks	6 weeks
<b>Interest rates</b>					
Short-term and long-term government security rates, policy variable rate, deposit rate, lending rate.	Same coverage as recommended.	Daily	Daily	Daily	Daily <sup>23</sup>
<b>Stock Market</b>					
Share price index, as relevant.	The share price index, called the Amman Stock Exchange Capitalization Weighted Index, covers 60 companies and represents 90 percent of equities of these companies.	Daily	Daily	Daily	Daily
<b>EXTERNAL SECTOR</b>					
Coverage		Periodicity		Timeliness	
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice
<b>Balance of Payments</b> <sup>24</sup>					
Goods and services, net income flows, net current transfers, selected capital (or capital and financial) account items (including reserves).	The coverage is deficient. The conceptual framework of the fourth edition of the IMF's <i>Balance of Payments Manual</i> is partially followed.	Quarterly	Quarterly	1 Quarter	1 Quarter

<sup>23</sup> CBJ and MOF rates only (on daily newspapers). Lending and deposit rates are only disseminated in the CBJ's *Monthly Statistical Bulletin*, with a two-month lag. Representative lending and deposit rates should be disseminated on a daily basis to meet SDDS requirements.

<sup>24</sup> *BPM5* methodology will need to be adopted to subscribe to the SDDS. According to the current work plan, full adoption of the *BPM5* methodology may require up to two years. Additional human and technological resources, as well as long-term technical assistance, will be needed for this.

Coverage		Periodicity		Timeliness	
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice
<b>International Reserves</b>					
Total official reserve assets (gold, foreign exchange, SDRs, and Fund position); other foreign currency assets; predetermined short-term drains on foreign currency assets; contingent short-term drains on foreign currency assets; and related items. <sup>25</sup>	Broadly same coverage as recommended.	Monthly	Monthly	7 days	6 weeks <sup>26</sup>
<b>Merchandise Trade</b>					
Exports and imports.	Data are compiled by the Department of Statistics (DOS) and disseminated by both the DOS and the CBJ. Data are classified according to the Standard International Trade Classification (SITC).	Monthly	Monthly	2 months	3 months
<b>International Investment Position (IIP)</b> <sup>27</sup>					
	CBJ has compiled partial IIP data for 1996-2000.	Annually	Not available	2 Quarters	Not available
<b>Exchange rates</b>					
Spot rates and 3- and 6-month forward market rates, as relevant.	The exchange rate of the Jordanian Dinar (JD)/ U.S. dollar remains fixed since October 1995. The exchange rates of JD against other currencies are based on international market cross rates.	Daily	Daily <sup>28</sup>		

<sup>25</sup> See the *Data Template on International Reserves and Foreign Currency* ([www.dsbb.imf.org/appendix.pdf](http://www.dsbb.imf.org/appendix.pdf)) and *Operational Guidelines* ([www.dsbb.imf.org/guide.htm](http://www.dsbb.imf.org/guide.htm)). The data on total official reserve assets identified in Section I, item A of the data template are prescribed with monthly periodicity and weekly timeliness. The other data specified in the data template are prescribed with monthly periodicity and monthly timeliness, unless otherwise indicated in that template.

<sup>26</sup> Data are available daily but disseminated only in the CBJ's *Monthly Statistics Bulletin* with a six-week lag. Dissemination will need to be within seven days to meet the SDDS requirement.

<sup>27</sup> Compilation of complete IIP is required to subscribe to the SDDS, which may require up to two years. Additional human resources and technical assistant will be needed.

<sup>28</sup> Disseminated in the daily journals, and on the CBJ's website

## **Main Features of the General Data Dissemination System and the Special Data Dissemination Standard**

This section contains highly condensed descriptions of the General Data Dissemination System (GDDS) and the Special Data Dissemination Standard (SDDS). More details on the GDDS and SDDS can be found on the IMF's Dissemination Standards Bulletin Board (DSBB) on the Internet at <http://dsbb.imf.org>.

### **General Data Dissemination System (GDDS)**

- ***Data Coverage, Periodicity, and Timeliness:*** Dissemination of reliable, comprehensive, and timely economic, financial, and socio-demographic data is essential to the transparency of macroeconomic performance and policy. The GDDS contains specific recommendations concerning coverage, periodicity, and timeliness for both comprehensive frameworks as well as data categories and indicators (see Table 2.1).
- ***Quality:*** Data quality must have a high priority. Data users must be provided with information to assess quality and quality improvements. The GDDS recommends:
  - Dissemination of documentation on methodology and sources used in preparing statistics.
  - Dissemination of component detail, reconciliation with related data, and statistical frameworks that support statistical cross-checks and provide assurance of reasonableness.
- ***Integrity:*** To fulfill the purpose of providing the public with information, official statistics must have the confidence of their users. In turn, confidence in the statistics ultimately becomes a matter of confidence in the objectivity and professionalism of the agency producing the statistics. Transparency of practices and procedures is a key factor in creating this confidence. The GDDS, therefore, recommends:
  - Dissemination of the terms and conditions under which official statistics are produced, including those relating to the confidentiality of individually identifiable information.
  - Identification of internal government access to data before release.
  - Identification of ministerial commentary on the occasion of statistical releases.
  - Provision of information about revisions and advance notice of major changes in methodology.
- ***Access by the public:*** Dissemination of official statistics is an essential feature of statistics as a public good. Ready and equal access by the public are principal requirements. The GDDS recommends:

- Dissemination of advance release calendars.
- Simultaneous release to all interested parties.
- ***Plans for improvement:*** The GDDS recommends that plans for improvement be developed for all areas in which shortcomings exist and that these plans be disseminated.

The GDDS also recommends that any needs for assistance be identified in the metadata. This may also be helpful for donors and technical assistance providers to prioritize their activities.

For each participating member country, the GDDS metadata provide descriptions of the dimensions listed above together with plans for improvement and needs for assistance. This information is posted on the DSBB; participating countries are encouraged to also post the metadata on their national websites.

### **Special Data Dissemination Standard (SDDS)**

#### ***Data dimension (coverage, periodicity and timeliness)***

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

#### ***Access dimension***

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

#### ***Integrity dimension***

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

#### ***Quality dimension***

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

SDDS subscribers are required to:

- post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail are also disseminated on the DSBB.
- 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 IMF's 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 IMF Executive Board's 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 beginning of July 2000, and is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

**Data Quality Assessment Framework—Generic Framework**  
(July 2001)

Quality Dimensions	Elements	Indicators
<b>Prerequisites of quality</b> <sup>29</sup>	<p><b>0.1 Legal and institutional environment</b> – <i>The environment is supportive of statistics.</i></p> <p><b>0.2 Resources</b> – <i>Resources are commensurate with needs of statistical programs.</i></p> <p><b>0.3 Quality awareness</b> – <i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data producing agencies are adequate.</p> <p>0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, financial, and computing resources are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 Processes are in place to focus on quality.</p> <p>0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics.</p> <p>0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs.</p>
<p><b>1. Integrity</b></p> <p><i>Firm adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics.</i></p>	<p><b>1.1 Professionalism</b> – <i>Statistical policies and practices are guided by professional principles.</i></p> <p><b>1.2 Transparency</b> – <i>Statistical policies and practices are transparent.</i></p> <p><b>1.3 Ethical standards</b> – <i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are compiled on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

<sup>29</sup> The elements and indicators included here bring together the “pointers to quality” that are applicable across the five identified dimensions of data quality.



Quality Dimensions	Elements	Indicators
<p><b>2. Methodological soundness</b></p> <p><i>The conceptual basis for the statistics follows international standards, guidelines, and agreed practices.</i></p>	<p><b>2.1 Concepts and definitions –</b> <i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p><b>2.2 Scope –</b> <i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p><b>2.3 Classification/sectorization –</b> <i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p><b>2.4 Basis for recording –</b> <i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>2.4.1 Market prices are used to value flows and stocks. 2.4.2 Recording is done on an accrual basis. 2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>

Quality Dimensions	Elements	Indicators
<b>3. Accuracy and reliability</b>  <i>Source data and compilation techniques are sound, and disseminated data sufficiently portray reality.</i>	<p><b>3.1 Source data</b> – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p><b>3.2 Statistical techniques</b> – <i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p><b>3.3 Assessment and validation of source data</b>–<i>Source data are regularly assessed and validated.</i></p> <p><b>3.4 Assessment and validation of intermediate data and statistical outputs.</b>–<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p><b>3.5 Revision studies</b> – <i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are collected from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Data compilation employs sound statistical techniques.</p> <p>3.2.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.3.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and non-sampling error; the results of the assessments are monitored and made available to guide planning.</p> <p>3.4.1 Main intermediate data are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.</p> <p>3. 5.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes.</p>

Quality Dimensions	Elements	Indicators
<b>4. Serviceability</b>  <i>Statistics are relevant, timely, consistent, and follow a predictable revisions policy.</i>	<b>4.1 Relevance</b> – <i>Statistics cover relevant information on the subject field.</i>  <b>4.2 Timeliness and periodicity</b> – <i>Timeliness and periodicity follow internationally accepted dissemination standards.</i>  <b>4.3 Consistency</b> – <i>Statistics are consistent within the dataset, over time, and with major datasets.</i>  <b>4.4 Revision policy and practice</b> – <i>Data revisions follow a regular and publicized procedure.</i>	4.1.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.  4.2.1 Timeliness follows dissemination standards. 4.2.2 Periodicity follows dissemination standards  4.3.1 Statistics are consistent within the dataset (e.g., accounting identities observed). 4.3.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.3.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.  4.4.1 Revisions follow a regular, well-established and transparent schedule. 4.4.2 Preliminary data are clearly identified. 4.4.3 Studies and analyses of revisions are made public.

Quality Dimensions	Elements	Indicators
<b>5. Accessibility</b>  <i>Clear data and metadata are easily available and assistance to users is adequate.</i>	<p><b>5.1 Data accessibility</b> – <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p><b>5.2 Metadata accessibility</b> – <i>Up-to-date and pertinent metadata are made available.</i></p> <p><b>5.3 Assistance to users</b> – <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).</p> <p>5.1.2 Dissemination media and formats are adequate.</p> <p>5.1.3 Statistics are released on the preannounced schedule.</p> <p>5.1.4 Statistics are made available to all users at the same time.</p> <p>5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines or good practices are annotated.</p> <p>5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact person for each subject field is publicized.</p> <p>5.3.2 Catalogues of publications, documents, and other services, including information on any charges, are widely available.</p>

## Sectorization of the Jordanian Economy<sup>30</sup>

### 1. General Government

- 1.1. Central Government
  - 1.1.1. Central Government Units covered by the General Budget <sup>31</sup>
  - 1.1.2. Central Government Units with their Own Budget (16) <sup>14</sup>
  - 1.1.3. Social Security Funds
    - 1.1.3.1. Health Security Fund
    - 1.1.3.2. Social Security Corporation
- 1.2. Local Governments (100 municipalities)

### 2. Financial Corporations

- 2.1. Depository Corporations
  - 2.1.1. Central Bank of Jordan
  - 2.1.2. Other Depository Corporations (21) <sup>14</sup>
- 2.2. Other Financial Corporations
  - 2.2.1. Specialized Credit Institutions (5) <sup>14</sup>
  - 2.2.2. Beit Al-Mal Savings and Investment for Housing Company
  - 2.2.3. Jordan Mortgage Refinance Company
  - 2.2.4. Insurance Companies (27)
- 2.3. Financial Auxiliaries
  - 2.3.1. Money Changers (76)
  - 2.3.2. Amman Stock Exchange
  - 2.3.3. Jordan Loan Guarantee Corporation
  - 2.3.4. Representative Offices (Credit Lyonnaise & Society General)

### 3. Nonfinancial Corporations

- 3.1. Public (9) <sup>14</sup>
- 3.2. Private

### 4. Households

### 5. Nonprofit Institutions Serving Households

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<sup>30</sup> According to the *System of National Accounts, 1993*. For analytical purposes (i) Public Nonfinancial Corporations are sometimes included with the General Government in the so-called Nonfinancial Public Sector; and (ii) Nonfinancial Private Corporations (3.2.) are sometimes grouped with Households (4.) and Nonprofit Institutions Serving Households (5.) into a sub-sector called "Private Sector", "Other Resident Sectors," or "Rest of the Economy".

<sup>31</sup> See detailed listing in the following table "Institutional Units."

### **Institutional Units**

#### **Central Government Units covered by the General Budget (12)**

- Administrative Inspection and Control Bureau
- Audit Bureau
- Cabinet and Prime Minister's office
- Civil Service Commission
- Jordanian Judicial Institute
- Ministries
- Palestinian Affairs Department
- Parliament
- Royal Hashemite Court
- Royal Jordanian Geographic Center
- Royal Medical Services
- Shari's Department

#### **Central Government Units with their Own Budget (16)**

- Investment corporation
- Vocational Training Organization
- Institute for Public Management
- Education Fund ("knowledge tax fund")
- Telecommunications Regulation Secretariat
- Jordan Cooperation
- Housing and Development Cooperation
- Freezone Corporation
- Awqaf Ministry
- Arab Language Academy
- National Aid Fund
- Environment Protection Agency
- Petra Zone Committee
- Kidney Failure Fund
- Development and Employment Fund
- Investment Promotion Corporation

#### **Other Depository Corporations (21)**

##### ***Commercial Banks (9)***

- Arab Bank PLC
- Jordan National Bank PLC
- Bank of Jordan PLC
- Cairo Amman Bank
- Housing Bank for Trade and Finance
- Jordan Kuwait Bank
- Jordan Gulf Bank
- Arab Banking Corporation (Jordan)
- Export and Finance Bank

***Islamic Banks (2)***

Jordan Islamic Bank for Finance and Investment  
Islamic International Arab Bank PLC

***Investment Banks (5)***

Arab Jordan Investment Bank  
Jordan Investment and Finance Bank  
Union Bank for Savings and Investment  
Philadelphia Investment Bank  
Middle East Investment Bank

***Foreign Banks (5)***

HSBC Bank Middle East  
Egyptian Arab Land Bank  
Rafidain Bank  
Standard Chartered Grindlays Bank LTD  
Citibank NA

**Specialized Credit Institutions (5)**

***Public Ownership (3)***

Agricultural Credit Corporation  
Housing and Urban Development Corporation  
Cities and Villages Development Bank

***Joint Ownership (2)***

Industrial Development Bank  
Jordan Cooperative Corporation

**Nonfinancial Public Corporations (9)**

Civil Consumer Corporation  
Hijazi Railway Line  
Ports Corporation  
Post Savings Fund (now closed)  
Public Transportation Corporation  
Radio and Television Corporation  
Railway Corporation  
Standards and Measurements Corporation  
Water Authority

### **The National Information System**

Information is regarded as a key element of the socio-economic development process in Jordan. The organization and management of information would not only empower the citizens of Jordan, but also increase the country's competitiveness in the regional and global economy. To enhance and support this process of socio-economic development, the Jordanian authorities identified the need to provide a comprehensive information base for the community. This information base would not only utilize existing information and communication technologies, but also develop yet untapped sources, to provide effective and efficient means to cater for the needs of the users.

Against this background, the **National Information Center (NIC)** was established in 1993 to develop and manage an integrated **National Information System (NIS)**.<sup>32</sup> To achieve its objective of promoting and developing the information sector in Jordan through the NIS, the NIC—in its role as a catalyst, organizer and coordinator—is entrusted with tasks ranging from the development of information sources in cooperation with concerned national institutions, setting-up unified procedures and standards, providing access to timely information, networking related information sources, and manpower development. This is done within the national information policy framework.

The basic concept of the NIS is to link information collecting and generating centers in the public and private sectors, through the Internet, to ensure the efficient and effective flow of information to users in both these sectors of the Jordanian economy. The NIS is a nationally distributed system, with well established linkages, and is based on a completely decentralized approach. The basic component of the NIS is the **national network**. Information is classified into **sectors** at the national level. **Information sources** are identified in each sector where data is collected, generated, and processed. Information sources within each sector are grouped in one **cluster**, with one information source acting as a **focal point**. Detailed information remains at the sources, while aggregate information is kept at the focal points. Connectivity among sources of one cluster constitutes a **sub-network** as part of the national network.

NIC went on-line in 1996 with few information sources that had the capacity and capability to participate. Since 1996, the NIC has established a **national network** where 126 institutions, mainly from the public sector, are linked, including all public universities. Seventy-six of them are linked via leased or fiber optics lines and the rest via dial-up telephone lines. Internet connectivity is being provided to those institutions via two international links. These institutions have the facilities to use e-mail locally within their institution, and externally with other NIS and Internet user. They also have the ability to

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<sup>32</sup> NIC is one of the centers of the Higher Council of Science and Technology. It was established in 1993, according to Article 11 of the 1987 Law on the Higher Council for Science and Technology. The Management Committee (Board of Directors) of the NIC is chaired by the Minister of Planning and includes the President of the NIC and representatives of government agencies and the private sector.



access any published information and to transfer data when and where necessary. This network provides access to the NIS' comprehensive information base and is currently being accessed by over 12,000 entities per month.

Since 1996, twelve **sectoral networks (clusters)** have been established in the following information sectors: economic, industrial, labor, agricultural, science and technology, social affairs, population and human settlements, law and legislation, culture, environment, health, and tourism. Other sectoral networks are in the process of being established, especially those dealing with geographic, political affairs, communication and transportation, and natural resources. Each of these sectoral networks (clusters) has its focal point, or portal, which provides aggregate information, and appropriate links to detailed information for that sector.

Training programs in information and information technology fields have been set-up by NIC and carried out in cooperation with local institutions to meet the needs of national institutions, as part of a plan drawn-up by NIC based on needs assessment study. Fifty-two training courses have been conducted on various subjects.

Seminars and workshops are regularly organized by NIC to promote understanding of the NIS, enhance cooperation among national institutions, and to ensure proper implementation of unified procedures and standards, as prepared by NIC. The NIC also conducted regional and international conferences in various fields of Information Technology to promote exchange of experiences and research results among scientists.

After five years of operation, the NIC conducted a comprehensive assessment's of the NIS' needs, practices, policy framework, and strategies. The main findings of the study were:

- The type of information published by the sources can be improved. In contrast to action plans prepared by the sectoral committees, reflecting users' needs, what is published by the sources often seem to be determined by what information is readily available.
- Quality of information varies, and the most common problem is timeliness.
- Designs of web pages with a similar purpose differ considerably, thereby impeding the extraction of information for analysis from similar sources.
- Some information services can be expanded.
- The structure of the NIS is more subject (and source) oriented than market oriented.
- The ultimate responsibility of the NIC towards the information content of the NIS is unclear, and there is a specific need to define or limit liability for the quality of the information.

## **Users' Views**

### **Summary of Results of Survey of Data Users**

1. With the assistance of the authorities, and to complement the Fund staff's own assessment of the quality of Jordan's macroeconomic statistics, the mission that visited Amman during January 23-February 6, 2002 conducted an informal survey of academics, media, business associations, banks, and public sector agencies. Public sector agencies included budgetary and extra-budgetary agencies, regulatory bodies, and nonfinancial public corporations. The survey asked users to evaluate nine different aspects of national accounts, prices, labor market, fiscal, monetary, and balance of payments statistics.
2. Twenty six of the sample of 33 users responded. In comparison with similar surveys conducted in other countries, the response rate was extremely good: 79 percent. Of the responses, 35 percent were submitted by public policy organizations; 46 percent by the private sector; and 19 percent by academics.
3. The table below shows that these respondents' views were very largely positive: 88 percent of the respondents (evenly distributed among public agencies, private sector and academics) consider Jordanian statistics to be "good," "very good," or "excellent," and only 8 percent of the respondents consider the statistics "unsatisfactory."
4. Users were particularly satisfied with the coverage and the detail provided by the statistics that they regularly use. They were also satisfied with the frequency of the data, the access to the data and the support provided by the compiling agencies. Users were critical about the timeliness of the data and showed an even lower level of satisfaction in terms of the clarity of the information on methodology used in preparing the statistics, the lack of advance release calendars, and the lack of information on revisions to the data. Notwithstanding these critical assessments, users considered Jordan's statistics to be far better than those of other Middle Eastern countries.
5. Many respondents took the opportunity to provide some comments and suggestions on Jordan's statistics; these are summarized below. Users expressed the need to produce more disaggregated and more frequent statistics, for example, on the poverty level, labor market indicators, foreign direct investment, and the international investment position. Some users asked that the coordination among statistical agencies be strengthened, and that the compiling agencies update the websites more frequently and provide better online access to statistics.
6. The selected comments below are grouped into five categories: (i) coverage and detail; (ii) periodicity and timeliness; (iii) accessibility; (iv) overall assessment; and (v) other comments.

## **B. Comments of Respondents to User Survey**

### **Coverage and detail**

- Better categorization and specification of GDP data are needed.
- Coverage of surveys is based on outdated methods and inadequate computer systems.
- Coverage of government finance and foreign investment need to be improved.
- Coverage of employment data is insufficient. It is hard to find data on a monthly and quarterly basis.
- Quarterly GDP data need to be more detailed.
- Coverage of labor market, government finance, prices and interest rates data is insufficient and should be increased.

### **Periodicity and timeliness**

- Most statistics should be improved in terms of periodicity and timeliness.
- The periodicity of quarterly GDP figures should be improved.
- The timeliness of national accounts, production indices, and GDP statistics should be improved.
- The Ministry of Finance and the Central Bank of Jordan's monthly bulletins are published with a two-month lag, and the Department of Statistics' annual external trade bulletin is published only with a seven to eight-month lag.
- Historical series for GDP should be improved.
- Timeliness of national accounts and balance of payments data should be improved.
- The English version of the CBJ's *Annual Report* takes a long time to be produced.
- Prefer timeliness of 30 days for banking statistics.
- Improve timeliness of national accounts, production indices.

### **Accessibility**

- Macroeconomic statistics are generally accessible, although after a delay.
- Access to description of methodologies is very limited.
- With the exception of the CBJ publications, easy access to all statistics should be improved.
- Data on labor indicators are difficult to access.
- Most datasets need to be more transparent regarding classification, description, and methodology.
- Accessibility of national accounts statistics should be improved.
- There are no regular updates to websites.
- Requests for official statistics from the CBJ have a very slow response.
- Statistics in electronic format are not adequate.

### **Overall assessment**

- In general, macroeconomic statistics in Jordan are of good quality.
- Statistics in Jordan are better than in other countries in the region.
- Presentation of GDP and unemployment data are not appropriate
- The overall quality of statistics should be improved.
- The statistical data in Jordan are better than those of other countries in the region.
- Most official statistics are sound, especially those disseminated by the CBJ.
- To some degree, the official statistics are unbiased and accurate.
- Despite some shortages, the statistics in Jordan look good and consistent with international standards.
- The methodology of official statistics is sound, particularly for monetary statistics.
- Jordan's statistics may be the best in the region; however, efforts are needed to compete internationally.
- International standards are largely used to compile statistics in Jordan.
- Well organized, but require a more business- (industry) oriented focus.
- Excellent compared with other countries in the region.

### **Other comments**

- There is a need for improvement in the data for some economic sectors, especially in measuring the poverty level of the population according to the regional distribution.
- Some information on the labor market data is not available or are classified differently from time to time.
- The depth and wealth of information offered should be expanded. For example:
  - New indicators should be calculated in relation to unemployment and wage structures.
  - A more detailed categorization of GDP numbers is needed.
  - Rearrangement of existing categorization in GDP numbers needs to be more practical.
  - Dissemination of data should be accelerated.
  - A time table, with fixed dates, for the release of economic figures should be announced.
- Due to frequent revisions and changes in the methodology of calculating some relevant figures, such as the GDP, it is impossible to conduct historical comparative analysis. Ministries need to frequently update their websites.
- Statistics released by the Department of Statistics, particularly GDP statistics, remained preliminary for three years.
- There should be better coordination among the Ministry of Finance, the Central Bank of Jordan, and the Department of Statistics, to publish the official statistics on a timely monthly basis. Also, it is important for the researcher to have an official source of information to rely on.
- Data on foreign direct investment by sector (and subsector) and by country need to be improved.

- Improve real sector data availability and dissemination. Provide (i) data on the website; (ii) a time table (announced) of data releases; (iii) description of the methodologies; and (iv) regular revisions of the data to ensure their accuracy.
- Compiling agencies should allow access to data electronically.
- More efforts are needed to strengthen the soundness of statistics, particularly in areas such as labor market, foreign direct investment, and the international investment position.
- Enhance and publicize online access to statistical data.
- To certain extent, methodology used for inflation is not accurate.
- DOS data, particularly GDP, are preliminary for three years.
- A need for more frequent and accurate statistics, based on fixed dates, that are comparable to historical statistics.
- Capital stock data (industry, sector) are not available.
- Room for improvement in labor market and foreign investment statistics.

**Table 7. Results of Jordan's User Survey**  
(number of responses in each category)

	Communications	Business associations	Banks	Universities	Public sector analysts and accountants	Ministries	Extrabudgetary units	Nonfinancial public enterprises	Regulatory agencies	Total	Percentage
<i>Questionnaires sent out</i>	4	4	6	5	4	2	3	3	2	33	100
<i>Responses (excl. not applicable)</i>	3	3	6	5	3	1	2	2	1	26	79
<b>Uses of Official Macroeconomic Statistics</b>											
1. Which macroeconomic statistics are you using regularly?											
▪ National accounts	2	3	5	3	3	1	2	1	1	21	81
▪ Production indices	1	2	5	3	3	0	1	2	0	17	65
▪ Prices	2	2	4	4	2	1	1	2	0	18	69
▪ Labor market	0	2	5	4	1	0	1	2	0	15	58
▪ Balance of payments	2	2	5	2	3	1	1	0	1	17	65
▪ Merchandise trade	2	3	4	3	3	1	2	1	0	19	73
▪ International reserves and foreign liquidity	1	3	5	4	3	1	1	1	0	19	73
▪ External debt	2	3	5	2	3	1	1	1	0	18	69
▪ International investment position	0	3	5	1	1	0	1	2	1	14	54
▪ Government/Public sector operations and debt	3	2	4	3	3	1	1	1	0	18	69
▪ Monetary statistics	2	3	6	3	3	1	1	2	1	22	85
2. Where do you obtain the official statistics?											
▪ Official press releases and publications	2	3	6	5	3	1	2	2	1	25	96
▪ Private sector summaries and analyses	1	3	4	1	0	0	0	2	0	11	42
▪ Official policy papers	1	3	2	2	1	1	1	1	0	12	46
▪ Publications from international organizations	1	2	5	5	1	0	1	2	1	18	69
3. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?											
▪ Yes	3	2	5	2	3	1	1	2	1	20	77
▪ No	0	1	0	2	0	0	1	0	0	4	15
▪ No opinion	0	0	1	1	0	0	0	0	0	2	8

	Communications	Business associations	Banks	Universities	Public sector analysts and accountants	Ministries	Extrabudgetary units	Nonfinancial public enterprises	Regulatory agencies	Total	Percentage
4. For what purposes do you use the official statistics?											
▪ Analysis of current developments for short-term decision making?	2	1	5	4	3	1	0	2	1	19	73
▪ Analysis of trends for longer-term policy formulation?	0	1	4	5	2	1	0	2	0	15	58
▪ Econometric model building and forecasting	1	1	2	4	3	0	0	2	0	13	50
▪ Economic research	2	2	5	4	3	1	0	2	1	20	77
▪ Comparison with economic developments in other countries	1	2	3	2	2	0	0	2	0	12	46
▪ General economic background	2	3	5	3	3	1	2	1	1	21	81
<b>Quality Aspects of the Official Macroeconomic Statistics</b>											
Quality Aspects of the Official Macroeconomic Statistics											
5.1 Is the coverage of these statistics satisfactory?											
▪ Yes	3	2	3	5	2	1	2	2	1	21	81
▪ No	0	1	3	0	1	0	0	0	0	5	19
5.2 Is the detail provided by these statistics satisfactory?											
▪ Yes	2	3	4	5	3	1	2	2	1	23	88
▪ No	0	0	2	0	0	0	0	0	0	2	8
▪ No opinion	1	0	0	0	0	0	0	0	0	1	4
6.1 Is the frequency (e.g. weekly, monthly, quarterly annual compilation) of these statistics satisfactory?											
▪ Yes	3	3	3	1	3	1	2	2	1	19	73
▪ No	0	0	3	1	0	0	0	0	0	4	15
▪ No opinion	0	0	0	3	0	0	0	0	0	3	12
6.2 Is the timeliness (the delay of publication) of these Statistics satisfactory?											
▪ Yes	2	1	1	3	2	0	1	1	1	12	46
▪ No	1	2	4	1	1	1	1	1	0	12	46
▪ No opinion	0	0	1	1	0	0	0	0	0	2	8

	Communications	Business associations	Banks	Universities	Public sector analysts and accountants	Ministries	Extrabudgetary units	Nonfinancial public enterprises	Regulatory agencies	Total	Percentage
7.1 do you know if there is a publicly disseminated calendar that announces the dissemination of the various official statistics?											
Yes	1	1	0	2	0	0	1	0	0	5	19
No	1	1	6	3	3	1	1	2	1	19	76
No opinion	1	1	0	0	0	0	0	0	0	2	8
7.2 If there is a calendar of release dates, are the official statistics released on the dates announced?											
Yes	1	0	1	1	0	0	1	0	0	4	15
No	1	0	2	0	0	1	0	1	0	5	19
No opinion	2	3	2	4	3	0	1	1	1	17	66
7.3 Is there enough information about revisions to official statistics to satisfy your needs?											
▪ Yes	2	1	3	2	0	1	0	1	0	10	38
▪ No	1	1	3	3	3	0	1	1	0	13	50
▪ No opinion	0	1	0	0	0	0	1	0	1	3	12
8.1 Are the official statistics referred in item 1 easily accessible to you?											
▪ Yes	2	3	5	5	3	1	2	0	1	22	85
▪ No	1	0	1	0	0	0	0	2	0	4	15
8.2 Can you get easy access to information pertaining to official statistics you use (explanatory notes, methodological descriptions)?											
▪ Yes	1	2	3	4	2	1	1	0	0	14	54
▪ No	1	1	3	0	1	0	0	2	1	9	35
▪ No opinion	1	0	0	1	0	0	1	0	0	3	11
8.3 Is the above information on methodology clear and adequate?											
▪ Yes	1	2	3	3	2	1	1	2	1	21	62
▪ No	1	1	2	0	1	0	0	0	0	5	19
▪ No opinion	1	0	1	2	0	0	1	0	0	5	19



	Communications	Business associations	Banks	Universities	Public sector analysts and accountants	Ministries	Extrabudgetary units	Nonfinancial public enterprises	Regulatory agencies	Total	Percentage
8.4 How do you get access to official statistics?											
▪ Hard copy	3	0	3	2	2	0	1	1	0	12	46
▪ Electronic form	0	0	0	0	0	0	0	0	0	0	0
▪ Both	0	3	3	3	1	1	1	1	1	14	54
9.1 Is the underlying methodology of official statistics sound and appropriate?											
▪ Yes	3	2	4	4	3	1	1	1	1	20	77
▪ No	0	0	2	0	0	0	0	0	0	2	8
▪ No opinion	0	1	0	1	0	0	1	1	0	4	15
9.2 Do you consider the official statistics to be unbiased and accurate?											
▪ Yes	2	1	1	3	3	0	1	1	1	13	50
▪ No	1	0	1	0	0	1	0	0	0	3	12
▪ No opinion	0	2	4	2	0	0	1	1	0	10	38
9.3 How do you compare the quality of official statistics of Jordan with those of other countries in the region?											
▪ Excellent	0	0	1	2	0	0	0	0	1	4	15
▪ Very good	0	0	0	0	3	0	0	0	0	3	12
▪ Good	2	0	3	2	0	1	2	0	0	10	38
▪ Unsatisfactory	0	1	0	0	0	0	0	0	0	1	4
▪ Bad	0	0	0	0	0	0	0	0	0	0	0
▪ No opinion	1	2	2	1	0	0	0	2	0	8	31
9.4 How do you assess the overall quality of the official statistics?											
▪ Excellent	0	0	0	1	0	0	0	0	0	1	4
▪ Very good	2	3	3	2	1	0	1	1	1	14	54
▪ Good	1	0	1	2	2	1	0	1	0	8	31
▪ Unsatisfactory	0	0	2	0	0	0	0	0	0	2	7
▪ Bad	0	0	0	0	0	0	0	0	0	0	0
▪ No opinion	0	0	0	0	0	0	1	0	0	1	4