

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

This Report on the Observance of Standards and Codes on Data Module for Pakistan was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on November 29, 2004. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Pakistan or the Executive Board of the IMF.

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

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

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ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
AGPR	Accountant General of Pakistan Revenue
<i>BPM4</i>	<i>Balance of Payments Manual, fourth edition</i>
<i>BPM5</i>	<i>Balance of Payments Manual, fifth edition</i>
CBR	Central Board of Revenue
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
EAD	External Affairs Division, MOF
FBS	Federal Bureau of Statistics
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HEIS	Household Expenditure and Income Survey
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification of all Economic Activities
ISWGNA	Inter-secretariat Working Group on National Accounts
ITRS	International Transactions Reporting System
MCD	Middle East and Central Asia Department
MFS	Monetary and Financial Statistics
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
MTBF	Medium-term Budget Framework
<i>MSB</i>	<i>Monthly Statistical Bulletin</i>
NAC	National Accounts Committee
NAW	National Accounts Wing, FBS
NSC	National Statistical Council
PIFRA	Project for the Improvement of Financial Reporting and Auditing
PPI	Producer Price Index
ROSC	Report on the Observance of Standards and Codes
SBP	State Bank of Pakistan
SDDS	Special Data Dissemination Standard
STA	Statistics Department, IMF
WPI	Wholesale Price Index

EXECUTIVE SUMMARY

This Report on the Observance of Standards and Codes (ROSC) provides a review of Pakistan's data dissemination practices against the IMF's General Data Dissemination System (GDDS), complemented by an in-depth assessment of the quality of the national accounts, consumer and wholesale price indices, and government finance, monetary, and balance of payments statistics. These data are produced by the Federal Bureau of Statistics (FBS), the Ministry of Finance (MOF), and the State Bank of Pakistan (SBP). At the request of the authorities, the mission also assessed Pakistan's data dissemination practices against the Special Data Dissemination Standard (SDDS) requirements for data coverage, periodicity, and timeliness. The assessments were conducted by a mission from the IMF's Statistics Department that visited Islamabad and Karachi during December 1-16, 2003.

Pakistani authorities are strongly committed to adhering to internationally accepted standards and good practices, as demonstrated by their recent participation in the GDDS. Nevertheless, the mission identified shortcomings in some statistical practices and databases that have the potential for detracting from the accurate and timely analysis of economic and financial developments, and the formulation of appropriate policies. The mission made recommendations to further enhance Pakistan's adherence to international statistical standards. While all of the recommendations are considered important, those regarding national accounts and government finance statistics need to be addressed with the greatest urgency. Some of these recommendations could be addressed with the current resources. However, improving the quality of statistics to make possible subscription to the SDDS within a year would require a commitment of additional resources. The main conclusions of the mission are:

- **General Data Dissemination System (GDDS) participation and Special Data Dissemination Standard (SDDS) subscription:** Pakistan meets the recommendations for the coverage, periodicity, and timeliness of most **GDDS** data categories. The only exceptions are the timeliness of the GDP¹ and the lack of annual data on wages/earnings. For subscription to the **SDDS**, Pakistan will need to disseminate: (i) biweekly data on the analytical accounts of the SBP²; (ii) monthly transaction data on central government operations; (iii) quarterly data on the GDP, employment, unemployment, and wages/earnings; (iv) more detailed breakdown of data on central government debt; (v) annual international investment position; and (vi) update and expand the metadata on compilation and dissemination practices. By developing and forcefully implementing an action plan, Pakistan should be able to meet the remaining requirements for SDDS subscription within a year.

¹ The first GDP releases, which are published about two weeks before the end of the fiscal year, are based on nine to ten months' observed data and two to three months' projections. The first annual GDP data based on 12 month's observations are disseminated with a lag of 11 months (vis-à-vis the recommended 6-9 months). This situation would be remedied with the publication of quarterly national accounts as presently in preparation.

² Beginning in February 2004, biweekly data on the analytical accounts of the SBP are disseminated on the website and the *Statistical Bulletin*.

- **Prerequisites of quality:** Even though Pakistani official statistical agencies have a broadly adequate legal and institutional framework that supports statistical quality, it will be further strengthened by the current initiative to provide more autonomy to the FBS. In general, institutions demonstrate an awareness of quality as the cornerstone of statistical work. However, responsibility for the compilation and dissemination of comprehensive government finance statistics is not defined, which hampers the compilation of the fiscal aggregates with broader coverage than budgetary government. Resources are broadly adequate to meet the needs of current programs. However, additional resources and targeted training, as well as more formal coordination among the statistical agencies would be needed for the further development of all statistics, particularly if the country is to subscribe to the SDDS. Coordination among, and within, the institutions compiling related sets of statistics should also be strengthened to promote consistent data across statistical systems.
- **Integrity:** In general, all institutions demonstrate professionalism, pursue transparency in their statistical practices and policies, and provide ethical guidelines to their staff. The National Accounts Committee, comprising individuals from government agencies and private sector institutions, is responsible for reviewing and approving the accounts. This committee focuses on providing updated source data and may also recommend revisions before dissemination of the data. Furthermore, while there is a longstanding convention of independence in MOF in compiling and publishing fiscal data, the terms and conditions under which the data are compiled and disseminated are not publicized.
- **Methodological soundness:** The methodologies for price indices and balance of payments statistics broadly follow international standards. However, there are significant shortcomings in the methodological soundness of other macroeconomic statistics, in particular regarding the scope of the national accounts and the classification and sectorization systems for government finance and monetary statistics.
- **Accuracy and reliability:** Price indices and fiscal statistics are broadly accurate. Nevertheless, there are important shortcomings in data sources for national accounts and monetary statistics. Weaknesses in statistical techniques also hinder the assessment and validation of national accounts. Studies of revisions are carried out for all datasets and used to inform the statistical processes, except for the balance of payments statistics.
- **Serviceability:** The disseminated data appear to broadly meet users' needs in terms of the level of detail but not with respect to the coverage, as indicated by the results of a recent user survey.³ Ongoing consultation with users, in particular from the private sector, should be undertaken on a more formal and regular basis for government finance, monetary, and balance of payments statistics. There is significant room for improving the inter-sectoral consistency of government finance, balance of payments, and monetary statistics. In general, the periodicity and timeliness of Pakistani statistics are satisfactory

³ With the assistance of the authorities, an informal survey was conducted among academics, media, business associations, banks, and public sector agencies. The results of the survey are presented in Appendix IV of the accompanying document presenting the detailed assessments.

for GDDS, although the periodicity of GDP data and the timeliness of the analytical accounts of the SBP for the end of the fiscal year should be improved.⁴

- **Accessibility:** There are opportunities for expanding the accessibility of all macroeconomic data and metadata for most datasets. In particular, official statistics should be made available to all users simultaneously. Assistance to users needs to be improved in all statistical agencies, in particular for the users of government finance statistics, by providing sector-specific contact information on the websites and in the hardcopy publications.

I. INTRODUCTION

1. The data module of this Report on the Observance of Standards and Codes (ROSC) provides a summary assessment of practices on the coverage, periodicity, and timeliness of the data categories against the IMF's General Data Dissemination System (GDDS).⁵ It is complemented by an assessment of the quality of national accounts, consumer and wholesale price indices, and government finance, monetary, and balance of payments statistics, using the Data Quality Assessment Framework (DQAF) developed by the IMF's Statistics Department (STA). This report is based on information gathered during a staff mission from December 1-16, 2003,⁶ publicly available information, as well as an informal users' survey conducted ahead of the mission.

2. Section II provides an assessment of Pakistan's data dissemination practices against the GDDS. At the request of the authorities, their current data dissemination practices were also reviewed against SDDS requirements, focusing on the coverage, periodicity, and timeliness prescriptions of the data dimension. Some significant issues that need attention prior to Pakistan's subscription to the SDDS are identified. Section III presents a summary assessment of the quality of the principal macroeconomic datasets, following the dataset-specific assessment frameworks. Finally, Section IV sets out recommendations for further improvements in Pakistan's macroeconomic statistics.

II. DATA DISSEMINATION PRACTICES AND THE GDDS: CURRENT DISSEMINATION PRACTICES

3. Pakistan's data dissemination practices are assessed against the GDDS. Where shortcomings are found, the focus is on the plans for improvements posted on the DSBB. Metadata were first posted on the DSBB in November 2003.

4. Macroeconomic statistics in Pakistan are mainly produced by three institutions: (i) the Federal Bureau of Statistics (FBS) is responsible for the national accounts, prices, other economic statistics; (ii) the State Bank of Pakistan (SBP) is responsible for monetary and

⁴ Beginning in June 2004, timeliness of the analytical accounts of the SBP has been improved.

⁵ A detailed description of the GDDS can be found on the IMF's Data Standards Bulletin Board (DSBB) on the Internet at <http://www.dsbb.imf.org>.

⁶ The mission team was headed by Mr. Edgar Ayales and included Messrs. Henri Hoetzoo, Cornelis Gorter, Rainer Koehler, Thomas Alexander, and Ricardo Davico (all STA), and Mr. Brian Donaghue (consultant).

balance of payments statistics; and (iii) the Ministry of Finance (MOF) is responsible for statistics on central and general government operations and central government debt.

5. Access to macroeconomic data and socio-demographic indicators is provided through several publications and at the following Internet websites:

- Federal Bureau of Statistics: <http://www.statpak.gov.pk>
- State Bank of Pakistan: <http://www.sbp.org.pk>
- Ministry of Finance: <http://www.finance.gov.pk>

Data dimension: coverage, periodicity, and timeliness

6. In general, Pakistan meets the GDDS recommendations for the comprehensive frameworks. However, there is room for improving the coverage of most datasets, particularly of national accounts. With respect to the periodicity and timeliness of core indicators, most GDDS recommendations are also met, with the exception of data on GDP and wages/earnings. The first GDP releases, which are published about 2 weeks before the end of the fiscal year, are based on 9 to 10 months' observed data and two to three months' projections. The first annual GDP data based on 12 month's observations are disseminated with a lag of 11 months (vis-à-vis the recommended 6-9 months). This situation would be remedied with the publication of quarterly national accounts as presently in preparation. Annual data on wages/earning are not disseminated. Table 1 shows an overview of current practices regarding coverage, periodicity, and timeliness of data in Pakistan compared to the GDDS.

Quality dimension

7. The quality dimension of the GDDS is particularly important, given that the primary focus is on improvements in data quality over time. The assessment of quality is based on the dissemination of (i) documentation on methodology and data sources, and (ii) component detail and reconciliation with related data.

8. Summary documentation on the methodology for all macroeconomic statistics in Pakistan is available on the DSBB. However, only limited detailed documentation on concepts and methods is published by the data-producing institutions and the DSBB is not yet sufficiently publicized on their websites.

Integrity dimension

9. The GDDS recommends the disclosure of the legal framework for the collection, compilation, and dissemination of data, including the confidentiality of the collected data.

10. The terms and conditions under which most official statistics are compiled and disseminated in Pakistan provide a legal framework that supports, to a large extent, the integrity of the statistical system, but this information is not sufficiently publicized. Procedures on the government's internal access to the data prior to public release are not always disseminated.

Access dimension

11. Dissemination of official statistics is an essential feature of statistics as a public good. Ready and equal access are principal requirements for the public, including market participants. The access dimension is based on two practices that facilitate ready and equal access to data: (i) dissemination of advance release calendars; and (ii) simultaneous release to all parties.

12. Advance release calendars are not in all cases provided to users, although all institutions follow internal fixed-term release schedules that are largely known by the public. Hardcopies of the data are released to selected users within the government as well as to the press shortly before they are published on the FBS website.

Plans for improvement

13. Plans for improving data quality are an integral part of the GDDS. The following comments are based on information available on the DSBB and comments provided by the authorities during the mission.

14. For the **real sector statistics**, focus is on expanding data sources and broadening the scope of the statistics. For prices, plans are to introduce COICOP and complete work on development of a PPI with base year 1999/2000. With respect to labor market statistics, the FBS is investigating the feasibility of compiling quarterly employment/unemployment data and of disseminating data on wages/salaries.

15. General plans for improvement of **government finance statistics** (GFS) include the Fiscal Responsibility Law, which has been already submitted to parliament for approval, and the Project for the Improvement of Financial Reporting and Auditing (PIFRA). The MOF also plans to develop and disseminate metadata and an advance release calendar for GFS. In the longer term, the MOF intends to adopt the *Government Finance Statistics Manual 2001 (GFSM 2001)*.

16. In the area of **monetary statistics**, the SBP will continue to adopt the *Monetary and Financial Statistics Manual (MFSM)*. In particular, the SBP plans to (i) disaggregate data on nonfinancial corporations and households within the private sector; (ii) collect data on nonbank financial institutions to expand the coverage of the monetary aggregates; (iii) and develop and disseminate metadata on the compilation of monetary statistics.

17. Regarding the **external sector**, the SBP plans to (i) continue the full implementation of the *Balance of Payments Manual*, fifth edition (*BPM5*); (ii) initiate plans to compile and publish data on the international investment position; and (iii) disseminate the metadata for the template on International Reserves and Foreign Currency Liquidity on the SBP website. The SBP also plans to develop advance release calendars for monetary and balance of payments statistics.

Table 1. Pakistan: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the General Data Dissemination System

GDDS Data Category	Coverage (meets GDDS)	Periodicity		Timeliness	
		GDDS	Pakistan	GDDS	Pakistan
Comprehensive Frameworks					
Real Sector: National Accounts	Yes	A	A	10-14 months	Final estimates: 11 months.
Fiscal Sector: Central govt. operations <i>General govt. operations</i> Central govt. debt	Yes Yes Yes	A A A	Q Q Domestic debt: M External debt: Q	6-9 mths 6-9 mths 6-9 mths	2 mths 2 mths 2 mths
Financial Sector: Broad Money Survey	Yes	M	M	2-3 mths	1 mth
External Sector: Balance of Payments	Yes	A	Q	6-9 mths	2 mths
Data Categories and Indicators					
Real sector					
GDP (nominal and real) <i>Gross national income, capital formation, saving</i>	Yes Yes	A A	A A	6-9 mths 6-9 mths	11 mths 11 mths
Manufacturing or industrial production index/indices	Yes	M	M	6-12 wks	No later than 6 wks.
Primary commodity, agricultural, or other indices as relevant	NA	As relevant	NA	6-12 wks	NA
Consumer price index <i>Wholesale price index</i>	Yes Yes	M M	M M	1-2 mths 1-2 mths	11 days 11 days
Employment	Yes	A	A	6-9 mths	6 mths
Unemployment	Yes	A	A	6-9 mths	6 mths
Wages/earnings (all sectors)	NA	A	NA	6-9 mths	NA
Fiscal Sector					
Central govt. budgetary aggregates: revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency) <i>Interest payments</i>	Yes Yes	Q Q	Q Q	1 qtr 1 qtr	2 mths 2 mths
Central govt. debt: domestic and foreign debt, as relevant, with appropriate breakdowns (debt holder, instrument, currency) <i>Government guaranteed debt</i>	Yes Yes	A A	Domestic debt: M External debt: Q Q	1-2 qtrs 1-2 qtrs	Domestic debt: 2 mths External debt: 1 qtr 2 mths
Financial Sector					
Broad money and credit aggregates	Yes	M	M	1-3 mths	1 mth
Central bank aggregates	Yes	M	M	1-2 mths	1 mth
Short- and long-term govt. securities rates, policy variable rate	Yes	M	D (TBills) M (other)	In high-frequency publication	Daily
<i>Money or interbank market rates and a of deposit and lending rates</i>	Yes	M	M	Same as above	Daily
<i>Share price index, as relevant</i>	Yes	M	D/W	Same as above	One day

GDDS Data Category	Coverage (meets GDDS)	Periodicity		Timeliness	
		GDDS	Pakistan	GDDS	Pakistan
External Sector					
Balance of payments aggregates	Yes	A	Q	6 mths	2 mths
Public and publicly guaranteed external debt outstanding, with maturity breakdown	Yes	Q	Q	1-2 qtrs	Provisional: 8-10 wks Revised: 6 to 8 additional wks
Public and publicly guaranteed external debt service schedule	Yes	Twice yearly	Q	3-6 mths	Same as above
<i>Private external debt not publicly guaranteed</i>	<i>Yes</i>	<i>A</i>	<i>Q</i>	<i>6-9 mths</i>	<i>Same as above</i>
Gross official reserves denominated in U.S. dollars	Yes	M	W	1-4 wks	1 wk
<i>Reserve related liabilities</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>1-4 wks</i>	<i>4 wks</i>
Total exports and imports in U.S. dollars	Yes	M	M	8-12 wks	5 days
<i>Major commodity breakdowns with longer time lapse</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>8-12 wks</i>	<i>Same as above</i>
Exchange rates: spot rates	Yes	D	D	In high-frequency publication	Daily

Italics indicate encouraged categories.

Special Data Dissemination Standard (SDDS)

18. Since Pakistan has expressed interest in subscribing to the SDDS in the near future, the current data dissemination practices were also reviewed against its requirements.⁷ The following points about the coverage, periodicity, and timeliness prescriptions of the data highlight significant issues to be addressed prior to Pakistan's subscription to the SDDS:

- In the **real sector**, all data categories meet SDDS coverage requirements, with the exception of the annual data on wages/earnings, which are not disseminated. With respect to periodicity and timeliness, the following data categories do not meet the requirements: (i) the first GDP releases, which are published about two weeks before the end of the fiscal year, are based on nine to ten months' observed data and two to three months' projections. The first annual GDP data based on 12 month's observations are disseminated with a lag of 11 months (vis-à-vis the recommended 6-9 months). This situation would be remedied with the publication of quarterly national accounts as presently in preparation.; (ii) employment/unemployment data, which are compiled on an annual basis and disseminated with a lag of six months (vis-à-vis the recommendation for quarterly periodicity and timeliness); and (iii) data on wages/earnings (SDDS requires quarterly periodicity and timeliness).
- In the **fiscal sector**, data on general government operations basically meet SDDS requirements on periodicity and timeliness. For coverage, even though the definition of general government excludes locally financed operations of district and local governments, their operations are immaterial. As regards data on the operations of the

⁷ A detailed description of the SDDS can be found on the IMF's Data Standards Bulletin Board (DSBB) on the Internet at <http://www.dsbb.imf.org>.

central government, they are only compiled on a quarterly basis and disseminated with a lag of two months (against the SDDS requirement of monthly periodicity and timeliness).

- In the **financial sector**, data on the analytical accounts of the banking system, interest rates, and the share price index meet SDDS requirements. However, the analytical accounts of the SBP do not distinguish the main aggregates clearly. SBP data are disseminated only four weeks after the end of the reference month, against the required two weeks.⁸
- In the **external sector**, most data categories (balance of payments, international reserves and foreign currency liquidity, merchandise trade, and exchange rate) meet the coverage, periodicity, and timeliness requirements of the SDDS. However, only partial and non-disseminated quarterly data are available on the international investment position (vis-à-vis the annual periodicity and semiannual timeliness required by the SDDS).

19. Appendix I in the accompanying document presenting the detailed assessments provides an overview of Pakistan's current practices regarding coverage, periodicity, and timeliness of data compared to the SDDS.

III. SUMMARY ASSESSMENT OF DATA QUALITY

20. Interest in assessing the quality of data derives from the need to complement the GDDS with more accurate and reliable data to support the surveillance of countries' economic and financial policies. Against this background, the IMF's Statistics Department (STA) has developed a tool based on international best practice to provide structure and a common language to assess data quality. The Data Quality Assessment Framework (DQAF) comprises a generic framework⁹ and a set of dataset-specific frameworks covering five dimensions of data quality—integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility—and a set of prerequisites.¹⁰

21. An assessment of six macroeconomic datasets (national accounts, consumer price index, wholesale price index, and government finance, monetary, and the balance of payments statistics) was conducted, using the frame of reference provided by each dataset-specific DQAF. The application of this framework to the Pakistani statistical system is presented below, following the structure of the DQAF. Conclusions are presented in standardized summary tables that assess data practices in terms of their adherence to international best practice, using a four-part scale (Table 2 in this report and Tables 1-6 in the accompanying document).

22. Pakistan's macroeconomic statistics and statistical base are considered broadly adequate by the IMF's Middle East and Central Asia Department (MCD) for effective

⁸ Beginning in June 2004, the SBP disseminates the analytical accounts based on month-end data with a lag of two weeks.

⁹ Information on data quality may be found in the "Data Quality Reference Site" on the IMF's Data Standards Bulletin Board (DSBB) website (<http://dsbb.imf.org/dqrs.index.htm>).

¹⁰ The Generic Framework is shown in Appendix III of the accompanying document.

surveillance. Nevertheless, the mission identified shortcomings in some statistical practices that may detract from the accurate and timely analysis of economic and financial policies.

Prerequisites of quality

The “Prerequisites of Quality” in the DQAF identifies conditions within the agency in charge of producing statistics that have an impact on data quality. The elements within the category refer to the legal and institutional environment, resources, and quality awareness.

23. The legal and institutional environment for compiling official statistics is established under the General Statistics Act No. 69 of 1975. The Act does not state explicitly that the **Federal Bureau of Statistics (FBS)** is responsible for the national accounts or price statistics; however, this is implied by the official status of the FBS and the tradition of its being the only agency compiling such statistics in Pakistan. The coordination of statistical programs is a task of the National Statistical Council (NSC), in which major ministries, chambers of commerce, researchers, and other users of statistics are represented. The Act guarantees the confidentiality of all data and specifies penalties for the breach of confidentiality by staff. It also provides the FBS with the legal basis for collecting the requisite data from all national units; however, the agency has experienced difficulty in having enterprises respond to questionnaires. Even though the Act establishes fines for noncompliance, the amounts of the fines are not indexed and have become insignificant for many nonrespondents. Resources for compiling national accounts statistics are generally below the desired levels. Though the number of staff in the National Accounts Wing (NAW) is broadly adequate, the technical skills of the staff may not be conducive to achieving its development goals. Information technology resources are deficient; most available computers are obsolete. The staff resources dedicated to the compilation of price statistics are broadly adequate. While computer resources in the Karachi office are just sufficient for the current program, only a few field offices have computers to transmit the price information by electronic mail. Many offices transmit the information by fax or express mail delivery. The managers of the FBS are sensitive to all dimensions of data quality and recognize the trade-offs within quality. Quality awareness is also evidenced by the convening of regular meetings among senior staff in the NAW to review work practices. Committees on national accounts and price statistics, comprising data providers and users, meet on a regular basis to review the statistical techniques and provide feedback on data quality issues.

24. The legal and institutional environment is largely supportive of government finance statistics (GFS). However, the responsibility for the compilation and dissemination of comprehensive government finance statistics by the **Ministry of Finance** is not well defined, which hampers the compilation of the fiscal aggregates with broader coverage than budgetary government. Arrangements for the supply of GFS revenue and expenditure aggregates by the Accountant General for Pakistan Revenue (AGPR) and financing aggregates by SBP are well established. Staff and computer resources in the MOF are adequate to produce GFS on a limited scale, but staff would benefit from further training in statistical methodologies. In AGPR, the main resource constraint is lack of computer automation of GFS processing, which significantly limits the range of GFS data that can be produced. Quality awareness should be strengthened. GFS compilers lack a user perspective and focus on processes rather than products. There are planned improvements to budget accounting standards and systems,

which will also allow improvements to GFS, but there are no specific processes in place to deal with quality considerations.

25. The **State Bank of Pakistan (SBP)** has a legal and institutional environment that supports its responsibilities for compiling and disseminating monetary and balance of payments statistics. Even though the existing laws do not explicitly mandate the SBP to compile monetary and balance of payments statistics, the SBP has been compiling these data since its establishment in 1948. Data sharing arrangements within the SBP and with other data providers are satisfactory. The laws establish the confidentiality and nondisclosure of data, with penalties for noncompliance. Statistical reporting of the banks is ensured through the Banking Companies Ordinance Act of 1962 and official notices to encourage response. The financial and computing resources allocated to the existing statistical programs are adequate to perform the required tasks and are used efficiently. Human resources are, in general, adequate for work on monetary and balance of payments statistics; however, monetary statistics compilers require further training in statistical methodology. The SBP demonstrates quality awareness through its published “Vision Statement” and the Statistics Department’s business plan, which show that managers are sensitive to all dimensions of data quality. The Statistics Department’s Planning and Development Division addresses quality issues and provides guidelines on new and emerging data requirements.

Integrity

Integrity identifies features that support firm adherence to objectivity in the collection, compilation, and dissemination of statistics so as to maintain users’ confidence. Elements refer to the professionalism and ethical standards that should guide policies and practices, which should be reinforced by their transparency.

26. The terms and conditions for the recruitment and promotion of staff at the **FBS** follow the public service regulations of Pakistan and encourage professionalism. Staff are appointed on a permanent basis after meeting the necessary civil service entry requirements. The head of the FBS can only be appointed from the ranks of the staff and is eligible to remain in the post until retirement. Some users of official statistics expressed concern about the delays in appointing a Director-General for the FBS and the authorities are actively seeking to identify an appropriate candidate. Furthermore, the decision on the dissemination of the national accounts statistics rests with the FBS. The National Accounts Committee, comprising individuals from government agencies and private sector institutions, is responsible for reviewing and approving the accounts. This committee, which is chaired by the Secretary of the Statistics Division, focuses on providing updated source data, and may also recommend revisions before dissemination. The FBS monitors press coverage of statistics and provides clarifications in cases of erroneous interpretation of the data. As to transparency, the laws governing the collection, compilation, and dissemination of statistics are posted on the FBS website and in hard copy publications. The relevant articles are cited on the survey instruments. Internal government access to some statistics prior to their release is made known to the public on the DSBB and in the publications. Statistical outputs of the FBS are clearly identified as such and advance notice of the impending improvements to the methodology and statistical techniques is provided on the FBS website and publications. Staff behavior is guided by the rules, regulations and administrative procedures of the civil

service, which are made known to the staff. Adherence to ethical standards is promoted in the training programs and assessed during the annual performance review of the staff.

27. **MOF** statistical policies and practices are guided by professional principles. While there are no specific laws which establish the professional independence of GFS compilers, the AGPR has autonomy under law in carrying out its accounting functions, and there is a longstanding convention of independence in MOF in compiling and publishing fiscal data. There has been no evidence of political influence in choosing either data sources or compilation methods. GFS policies and practices are broadly transparent. There are no restrictions on public access to GFS, nor is there privileged internal government access to the data. GFS are disseminated on the MOF website and in the annual MOF publication *Economic Survey*. Data compiled and disseminated by the MOF are identified as such, but little information is provided to users on the arrangements governing the production and dissemination of the statistics. GFS compilers are governed by the Pakistan civil service Code of Conduct, which requires them to properly apply laws and regulations and ensures that GFS policies and practices are guided by ethical principles. Staff behavior is guided by the rules, regulations and administrative procedures of the civil service, which are made known to the staff.

28. The **SBP** follows practices that encourage professionalism in the compilation of monetary and balance of payments statistics. SBP staff indicate that data are compiled on an impartial basis and that the choice of sources and statistical techniques is based solely on statistical considerations. The SBP provides comments on erroneous interpretation and misuse of its statistics. As for transparency, the terms and conditions under which monetary and balance of payments statistics are collected, processed, and disseminated are made available to the public. There is no internal government access to the data prior to their publication. Products of the SBP are identified as such and the SBP requests attribution when its statistics are used or reproduced. Major changes in methodology and sources are noted at the time the changes are introduced. Data suppliers for balance of payment statistics are notified in advance of major changes in methodology. The SBP Staff Regulations on staff conduct, which are made known to the staff, provide guidelines for ethical standards.

Methodological soundness

Methodological soundness refers to the application of international standards, guidelines, and agreed practices. Application of such standards, which are specific to the dataset, is indicative of the soundness of the data and fosters international comparability. Elements refer to the basic building blocks of concepts and definitions, scope, classification and sectorization, and basis for recording.

29. The **national accounts** follow the concepts and definitions of the *System of National Accounts 1968 (1968 SNA)*.¹¹ The scope of the annual accounts is very narrow and does not

¹¹ During 2004, the FBS has completed the rebasing of the national accounts at 1999-2000 prices and made progress towards the full adoption of the *System of National Accounts 1993 (1993 SNA)*.

meet the minimum requirements for implementing the *1993 SNA*. However, the FBS is instituting a comprehensive plan to revise the estimates and implement the recommendations of the *1993 SNA*. It expects to disseminate the revised estimates, along with a set of quarterly accounts, during the first half of 2004. Currently, the measurement of output does not cover all own-account production and most informal activities. The classification systems are broadly consistent with internationally accepted guidelines with the exception of household consumption, which is not classified by purpose. The basis for recording is not in full accordance with the *1993 SNA*. Sales taxes are excluded from the valuation of intermediate consumption. Recording is done on an accrual basis with the exception of government transactions, which are recorded on a cash basis.

30. The concepts and definitions of the **CPI and WPI** follow international guidelines. However, the CPI scope is limited to 52 urban centers (covering about 68 percent of all households), thus excluding households living in rural areas. The WPI does not cover small-scale manufacturing enterprises. While the national classification used for household consumption differs significantly from the international standards, the national activity classification is close to what is internationally recommended. Regarding the basis of recording, goods and services are correctly recorded at market values and on an accrual basis.

31. The concepts and definitions used in compiling **GFS** are broadly based on the methodology prescribed in *A Manual on Government Finance Statistics, 1986 (GFSM 1986)*, except that the treatment of privatization proceeds resembles the methodology of the *Government Finance Statistics Manual 2001 (GFSM 2001)*. However, the definition of government debt does not fully follow international standards because it includes government guaranteed debt. There are no specific plans to migrate to the *GFSM 2001* standard. The scope of GFS is budgetary general government, which covers the bulk of general government activity, but does not cover the activity of extra-budgetary units in central government. Classification and sectorization systems only follow *GFSM 1986* standards to a limited extent. Institutional sectors are not explicitly defined, since only budgetary data are covered in GFS. Central and provincial governments are distinguished, but local governments are included with the provincial governments. This is a significant problem given recent initiatives to devolve more power to the local government sector. Foreign grants received, and loans received by provincial governments from the central government, are incorrectly classified as financing, and revenue, respectively. The classification of expenditure departs substantially from *GFSM 1986* methodology, both because the economic and functional classifications are not clearly distinguished, and because the level of detail falls far short of what is required. The basis of recording GFS is on, or close to, a cash basis, as required by the *GFSM 1986* standard. Transactions are recorded on a gross basis. Corrective transactions are not necessarily made in the original period, as required by *GFSM 1986*.

32. In general, the analytical framework for **monetary statistics** reflects concepts and definitions that are based on the IMF's draft *Guide to Money and Banking Statistics in International Finance Statistics* of December 1984. The scope of the monetary statistics is comprehensive. Classification and sectorization principles for the monetary statistics published in the *Statistical Bulletin* do not follow international standards. For example, positions with nonresidents are not always identified as such, securities repurchase

agreements are not treated as collateralized loans, and data on financial derivatives are recorded off-balance-sheet. The basis for recording flows and stocks is largely consistent with *MFSM*, with accrued interest identified in the balance sheet but not included in the outstanding amount of the corresponding financial instrument. In addition to the monetary statistics that are published in the *Statistical Bulletin*, the SBP also prepares data for internal use and for reporting to the IMF. These data, which the SBP started publishing soon after the ROSC mission took place, use classification and sectorization systems that are broadly in line with the *Monetary and Financial Statistics Manual*. Because these data were not publicly available at the time of the mission, they were not used as the basis for the assessment.

33. Pakistan's **balance of payments statistics** are compiled broadly in accordance with the concepts and definitions of the *BPM5*. However, the presentation of the balance of payments on the web and in the publications of the SBP is still based on the *BPM4*.¹² In general, the scope of the balance of payments pertaining to residency conforms to *BPM5*. The exceptions include the enterprises operating in the Export Processing Zones and offshore banks, which are regarded as nonresidents, and Pakistani nationals residing abroad but owning a dwelling in Pakistan, which are considered residents. Classification and sectorization systems also follow, to some extent, *BPM5*. For example, the entire amount of oil exports under product sharing agreements is classified as direct investment in the current account; the portion of this amount relating to repatriation of direct investment capital should be recorded in the financial account. The basis for recording transactions follows best international practices.

Accuracy and reliability

Accuracy and reliability identifies features that contribute to the goal that data portray reality. Elements refer to identified features of the source data, statistical techniques, and supporting assessments and validation.

34. The source data for the **national accounts** are derived primarily from benchmark censuses, a regular household budget survey, and administrative sources. A comprehensive business register is updated on a continuous basis, but regular enterprise surveys are not conducted. A census of manufacturing is conducted every five years but other censuses are infrequent. In general, the censuses suffer from poor coverage of activities and very low response rates. In addition, while administrative data are received on a timely basis, delays in completing survey fieldwork hinder the use of the source data in the compilation process in a timely manner. The statistical techniques are weak. The estimates are compiled at 1980/81 prices and the reliance on benchmarks that are over five years old is widespread. Procedures used to derive the volume indicators are based on highly aggregated price indices, some of which do not reflect the underlying price changes. Procedures to adjust the data sources to improve coverage are deficient and techniques to derive exhaustive measures of GDP are not employed. Assessment and validation of source data are undertaken to determine the extent of sampling errors and non-response. However, despite the under-coverage in the surveys,

¹² During 2004, the SBP has made progress in adopting the *BPM5* format for the presentation of the data.

non-measurement of informal activities, and weaknesses in statistical techniques, discrepancies in statistical outputs are not investigated. The FBS has conducted a comprehensive set of revision studies as part of the exercise to update the base year and implement the *1993 SNA*. The studies develop experimental estimates for the major aggregates using revised data sources and statistical techniques.¹³

35. Source data for the **CPI** include the Family Budget Survey from which the weights have been derived. The weights for the **WPI** are based on a variety of sources, some of which are not entirely satisfactory. Both price indices use broad-based price collection surveys. Source data are timely and reasonably approximate the required definitions and accounting rules. Most statistical techniques are sound, but there are two exceptions for the CPI: (i) no adjustments are made to the results from the Family Budget Survey to resolve underreporting by households of certain types of expenditures; and (ii) the calculation of the price index for housing on the basis of smoothed construction costs does not reflect international standards. The latter problem has large repercussions for the accuracy of the CPI because of the large weight of housing. The assessment and validation of source and intermediate data and statistical outputs are adequate. Revision studies were conducted on the occasion of the change of the base year and were used to inform the statistical process.

36. Timely and reliable source data for **GFS** reasonably approximate the definitions, scope, classifications, valuation, and time of recording required by *GFSM 1986*. GFS are compiled directly from accounting or administrative data, and there is no need to apply other statistical techniques in the compilation process. Assessment and validation of source data are done mainly by vetting input data by line agencies and benchmarking preliminary data to audited final data. There are no material gaps in coverage or completeness of source data. No systematic reconciliation process is carried out to ensure that GFS is consistent with corresponding data derived from other sources. Revisions to GFS result routinely from the replacement of preliminary data by final, audited, data. No systematic studies are made of the revisions resulting from this process, but when benchmarking is done, the revisions are examined to ensure that any significant changes can be explained.

37. The main source data for **monetary statistics** are highly aggregated weekly statements from the Banking Supervision Department that do not provide the required breakdown of financial instruments and economic sectors. Source data are timely, with the exception of SBP data for the end of the fiscal year (end-June), which are only available with a two to three month lag¹⁴. Statistical techniques could be improved; weekly data are entered into the database manually, which can be a source of errors. There are automated procedures to identify processing errors¹⁵. The assessment and validation of source data are adequate, consisting of making comparisons between the banks' weekly and monthly statements. Plausibility checks are applied to identify out-of-trend movements in intermediate data. Findings from revision studies are used internally to inform the statistical processes.

¹³ During 2004, the FBS has completed the rebasing of the national accounts at 1999-2000 prices and made progress towards the full adoption of the *1993 SNA*.

¹⁴ In June 2004, the SBP started compiling monetary statistics based on month-end data.

¹⁵ Beginning in June 2004, source data are collected electronically, thereby reducing the possibilities of data-entry errors.

38. The main source data for **balance of payments** statistics are the International Transactions Reporting System (ITRS), other reports from enterprises, and administrative records of the government and the SBP. The data are broadly in line with the internationally accepted definitions, classifications, and scope and are received in a timely manner. Statistical techniques are generally sound, as evidenced by the methodology to calculate the cif/fob ratio. Procedures for assessment and validation of the quality of source data and statistical outputs include the comparison of data from different sources, for example, between data derived from the ITRS and data from government records or customs returns. Revision studies are not carried out.

Serviceability

Serviceability focuses on practical aspects of how well a dataset meets users' needs. Elements refer to the extent to which data are relevant, produced and disseminated in a timely fashion with appropriate periodicity, are consistent internally and with other datasets, and follow a predictable revisions policy.

39. The relevance of the **national accounts** statistics is monitored through regular meetings of the NAC, which includes representatives of private and public sector agencies. The NAC is responsible for reviewing all aspects of the national accounts data compilation system and providing guidance to the FBS. The timeliness of the data does not meet GDDS recommendations. The data are compiled annually, thereby meeting the GDDS but not the SDDS requirements on periodicity. The national accounts statistics are consistent within the dataset, over time, and with balance of payments and government finance statistics. Revisions follow a predetermined schedule but this is not communicated to the public.

40. Monitoring of the relevance and practical utility of the **CPI** and **WPI** is undertaken through involving expert groups and occasional users' surveys. The timeliness and periodicity of both indices are in accordance with the GDDS and the SDDS. The estimates are internally consistent in the sense that the aggregate index is invariant to the typology of the aggregation. Data on price indices are consistent over time. Revisions follow a well-established schedule; the base year is changed every ten years. Users are informed of the causes of revisions in the statistical series.

41. The fiscal tables produced as **GFS** output were designed to establish the basic parameters of fiscal policy and are extensively used for that purpose. MOF monitors press comments and comments arising at various economic forums, but receives little direct feedback from users of the statistics. No systematic procedures ascertain the relevance and practical utility of GFS in meeting users' needs. The timeliness and periodicity of GFS meet GDDS recommendations, but not SDDS requirements. GFS are internally consistent, with the exception of the discrepancy between the deficit/surplus and financing data, which is larger than would be expected. The annual GFS time series appear to be consistent over time as a percentage of GDP. However, GFS are not reconcilable with balance of payments or monetary statistics. Revisions usually follow a regular and well-understood schedule, and preliminary data are clearly identified. However, corrections are made to data in the period in which an error is discovered, rather than shown as revisions to the original data. There is no published analysis or explanation of revisions.

42. The relevance of **monetary statistics** is largely monitored in the context of interdepartmental meetings within the SBP. A formal process of consultation with external users to solicit feedback does not exist. The analytical accounts of the SBP and the banking sector meet the timeliness and periodicity recommendations of the GDDS, with the exception of SBP data for the end of the fiscal year (June), which are only disseminated with a two-three months lag. There are large discrepancies in the positions between the SBP and scheduled banks. Consistency checks of monetary data with balance of payments statistics are done regularly, but data are not reconcilable with government finance statistics. While there is no formal revision policy, monetary data are final when first released, and revisions are infrequent.

43. The relevance of **balance of payments** statistics to official users is monitored through the Balance of Payments Standing Committee, but feedback on quality issues from users outside the government is not sought. Data users can address questions by electronic mail. The balance of payments data exceed GDDS recommendations and meet the SDDS requirements for periodicity and timeliness. Data are internally consistent and are verified against monetary statistics, but not with government finance statistics. Revisions follow a regular, well-established, and transparent cycle, which is made known to users. Preliminary data are identified as such.

Accessibility

Accessibility deals with the availability of information to users. Elements refer to the extent to which data and metadata are clear and readily available and to which assistance to the user is adequate to help them find and utilize the data.

44. Regarding data accessibility, **national accounts** are presented in a clear manner, with varying levels of detail. A brief analysis of the estimates is provided in the national accounts publication. The data are not disseminated according to a preannounced schedule though users are aware of the timeframe for publication, which has remained stable over the years. The data are presented to the National Accounts Committee before finalization and wider dissemination to the public. Metadata accessibility is generally sound. The FBS website, the DSBB, and the national accounts publication contain detailed information on the sources and methods used to compile the statistics. Assistance to users is broadly adequate, but could be improved by providing contact information for specific subjects in FBS publications and the website. A catalog of publications is available in hardcopy and on the website.

45. The data and metadata accessibility of the **CPI and WPI** is mostly satisfactory. The main publication presents the data in a way that facilitates proper interpretation and meaningful comparisons. However, the Family Budget Survey, which is the source of the weights for the CPI, has not been published. The dissemination media for the price indices comprise e-mails, website, and hard-copy publications. Both indices are released according to a preannounced schedule. Hardcopies of the data are released to selected users within the government as well as to the press shortly before they are published on the FBS website. Assistance to users is broadly adequate, but could be improved by providing contact information for specific subjects and publishing a catalog of FBS services.

46. **GFS** data have limited accessibility. The dissemination media and format are adequate, and data are released on a regular, but not preannounced, schedule. However, GFS tables reflect the particular internal needs of MOF, and do not have a clear structure. No explanations or charts accompany the data. No time series of sub-annual data is provided. Quarterly data are presented on a cumulative basis, which obscures the data for individual quarters. GFS are released to all users at the same time. There are no non-published subaggregates. GFS metadata are accessible only on the DSBB in a summary form. Assistance to users of GFS is inadequate. The contact person for GFS is publicized only on the DSBB, including telephone and facsimile numbers but not e-mail address.

47. Accessibility of **monetary data** needs to be improved. The SBP balance sheet, as published in the *Statistical Bulletin*, is not presented in an analytically useful format (e.g., no information is available on the SBP's foreign liabilities)¹⁶. The statistics are released simultaneously to all interested parties. Nonconfidential unpublished data are made available upon request. Metadata are available on the SBP website through a hyperlink to the DSBB. Users are provided with contact information on the DSBB and the SBP website, but not in hardcopy publications. A list of publications is provided in the SBP's *Statistical Bulletin*.

48. The accessibility of data and metadata on **balance of payments** statistics is good. Statistics and metadata are presented in a clear manner that facilitates proper interpretation and meaningful comparisons in the *Statistical Bulletin* and in *Pakistan's Balance of Payments*. These publications are posted on the SBP website, which is also hyperlinked to the DSBB. The data are released simultaneously to all users. Nonpublished but nonconfidential data are made available upon request. Users are provided with contact information on the website but not in hardcopy publications. A list of statistical publications is included in the *Statistical Bulletin* and *Pakistan's Balance of Payments*.

IV. STAFF RECOMMENDATIONS

49. Based on the results of the data quality assessment, discussions with the Pakistani authorities, and responses from data users, the measures below are proposed to further enhance Pakistan's adherence to international statistical standards. While the actions listed below should be treated with high priority, those regarding national accounts and government finance statistics need to be addressed with the greatest urgency. A more detailed list of recommendations is included in the accompanying Detailed Assessments document.

General recommendations

- Pursue the initiative to give more autonomy to the FBS and conduct public awareness exercises aimed at improving the public perception of the FBS.
- Undertake actions to improve response rates for surveys, for example, by amending the General Statistics Act to increase the fines for not providing information.

¹⁶ In June 2004, the SBP began disseminating monetary statistics more in line with the *MFSM*. Also, a publicly announced advance release calendar is available on the SBP website.

- Undertake a review of statistical policies and practices in consultation with users, addressing at least the following issues: (i) presentation of statistics (tables, text, charts, etc.); (ii) development of detailed metadata for all datasets; (iii) establishment of advanced release calendars; (iv) simultaneous release of data to all users; (v) publicizing the availability of unpublished data; (vi) conducting revision studies; and (vii) assisting users of official statistics by providing more detailed contact information.
- Provide more training in statistical methodologies and modernize computer equipment.
- Strengthen coordination among institutions to enhance intersectoral consistency of data.
- Update and enhance regularly the GDDS metadata posted on the DSBB for all sectors.

National accounts

- Amend the role and functions of the NAC so that the final decision on the dissemination of the statistics rests with the FBS.
- Introduce a program of regular (annual) establishment surveys to improve the timeliness of source data. Broaden the economic activities covered by surveys.
- Improve the timeliness of the national accounts. Disseminate the estimates that are revised for government agencies six months after the end of the reference period.
- Implement procedures to estimate the non-observed economy. The procedures should target, in particular, informal activities that are significant in Pakistan.

Consumer and wholesale price indices

- Implement the planned introduction of the COICOP as soon as possible.
- Review the treatment of Housing in the CPI, preferably by replacing the technique for estimating rentals on the basis of construction costs with an index reflecting the cost of purchasing and maintaining dwellings.
- Consider expanding the scope of the CPI to cover all urban areas, and eventually cover all Pakistan by including information on rural areas.

Government finance statistics

- Set up a small group within the MOF whose main task is the compilation and dissemination of GFS.
- Migrate to the *GFSM 2001* classification structure, as far as possible.
- Provide the classificatory detail specified in the *GFSM 2001* and publish a time series of discrete quarterly data.
- Examine the statistical discrepancy between the deficit/surplus (net lending/borrowing under *GFSM 2001*) and financing for each quarter, under the supervision of the Fiscal Monitoring Committee.

Monetary statistics

- Compile and disseminate monetary statistics based on the data collected through the monthly report forms rather than the weekly statements provided by the Banking Supervision Department.¹⁷
- Enhance the existing data validation procedures to ensure that mutual claims between the SBP and the scheduled banks are recorded consistently.
- Implement fully the guidelines of the *MFSM* on sectorization, classification, and accounting.

Balance of payments statistics

- Compile data on the external transactions of enterprises operating in the Export Processing Zones and offshore banks and treat them as residents of Pakistan.
- Disaggregate the counterpart of exports of crude oil under product sharing agreements into (i) an income component, to be classified in the direct investment income account, and (ii) a component for the repatriation of direct investment capital, to be classified as foreign direct investment in Pakistan in the financial account.
- Strengthen the procedure to estimate reinvested earnings to include, in addition to earnings capitalized as bonus shares, all earnings capitalized in other reserve accounts.
- Reclassify government-guaranteed loans from the general government sector to the sector of the beneficiary of the loan proceeds.¹⁸
- Complete the compilation of the international investment position on the basis of *BPM5*.

¹⁷ Beginning in June 2004, monetary statistics are based on month-end data and are more in line with the *MFSM*.

¹⁸ This recommendation has been adopted in 2004.

Table 2. Data Quality Assessment Framework: Summary Presentation of Results for Pakistan

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	National Accounts Statistics (NAS)	Consumer Price Index (CPI)	Wholesale Price Index (WPI)	Government Finance Statistics (GFS)	Monetary Statistics (MS)	Balance of Payments Statistics (BOPS)	Comments	Plans for Improvement (as indicated by the authorities during the mission)
0. Prerequisites of Quality								
0.1 Legal and institutional environment	LO	O	O	LO	O	O	23, 24	NA, CPI, WPI (0.1): Authorities plan to propose legislation to give more autonomy to the FBS (short term).
0.2 Resources	LO	LO	LO	LO	LO	O	23, 24, 25	MS (0.2): SBP plans to increase resources dedicated to training in the monetary statistics methodology and compilation methods, including international statistical guidelines (short term).
0.3 Quality awareness	O	O	O	LO	O	O	24	
1. Integrity								
1.1 Professionalism	LO	O	O	O	O	O	26	
1.2 Transparency	O	O	O	LO	O	O	27	
1.3 Ethical standards	O	O	O	O	O	O		
2. Methodological soundness								
2.1 Concepts and definitions	LO	O	O	LO	LO	LO	29, 31, 32, 33	BOP (2.1, 2.2, 2.3): SBP plans to adopt fully the format of the <i>BPM5</i> for the presentation of data (short term).
2.2 Scope	LNO	LO	O	LO	O	LO	29, 30, 31, 32, 33	CPI & WPI (2.1, 2.3): FBS plans to disseminate data on a producer price index, and to introduce COICOP for the CPI (short term).
2.3 Classification/Sectorization	LO	LO	O	LNO	LNO	LO	29, 30, 31, 32, 33	GFS (2.3): MOF has expressed its intention to adopt the <i>GFSM 2001</i> (medium term).
2.4 Basis for recording	LO	O	O	LO	LO	O	29, 31, 32	MS (2.1, 2.3, 2.4): SBP plans to fully adopt the MFSM for the compilation of monetary statistics (medium term).

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									
Element	National Accounts Statistics (NAS)	Consumer Price Index (CPI)	Wholesale Price Index (WPI)	Government Finance Statistics (GFS)	Monetary Statistics (MS)	Balance of Payments Statistics (BOPS)	Comments	Plans for Improvement (as indicated by the authorities during the mission)	
3. Accuracy and Reliability									
3.1 Source data	LNO	O	LO	O	LNO	O	34, 35, 37	NA (3.1,3.2): FBS plans to extend surveys to improve data sources, and change the base year to 1999/2000 (short term).	
3.2 Statistical techniques	LNO	LO	O	O	LO	O	34, 35, 37	GFS (3.1): MOF plans to implement a revised chart of accounts and a new accounting model that are compatible with the eventual implementation of accrual accounting and reporting (medium term).	
3.3 Assessment and validation of source data	O	O	O	LO	O	O	36		
3.4 Assessment and validation of intermediate data and statistical outputs	LNO	O	O	LO	O	O	34, 36	BOP (3.5): SBP plans to conduct studies of revisions (short term).	
3.5 Revision studies	O	O	O	LO	O	LNO	36, 38		
4. Serviceability									
4.1 Relevance	O	O	O	LO	LO	LO	41, 42, 43	NA (4.2): FBS expects to disseminate quarterly GDP data by activity and category of expenditure in early 2004.	
4.2 Timeliness and periodicity	LO	O	O	O	LO	O	39, 42	GFS (4.2): MOF plans to disseminate monthly GFS with a lag of one month (short term).	
4.3 Consistency	O	O	O	LO	LNO	LO	41, 42, 43	MS (4.1, 4.2, 4.3, 4.4): SBP plans to (i) improve data consistency between the central bank and scheduled banks, and between MS and GFS (short term); and (iii) inform users of its revision policy and practice and include documentation of revisions in the statistical publications (short term).	
4.4 Revision policy and practice	LO	O	O	LO	LO	O	39, 41, 42	BOP (4.1): SBP plans to fully adopt the presentation format of <i>BPM5</i> (short term).	
5. Accessibility									
5.1 Data accessibility	LO	LO	LO	LO	LO	O	44, 45, 46, 47	GFS (5.2): MOF plans to develop and disseminate metadata (short term).	
5.2 Metadata accessibility	O	LO	O	LNO	LO	O	45, 46, 47	MS (5.1,5.2): SBP plans to continue to improve the presentation of monetary statistics to make them fully in accordance with the MFSM, and also to disseminate more detailed metadata.	
5.3 Assistance to users	LO	LO	LO	LNO	LO	LO	44, 45, 46, 47, 48		

INTERNATIONAL MONETARY FUND

PAKISTAN

**Report on the Observance of Standards and Codes (ROSC)—Data Module
Response by the Authorities**

November 29, 2004

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I. OVERVIEW

The authorities (the Federal Bureau of Statistics, the Ministry of Finance, and the State Bank of Pakistan) express appreciation for the IMF's data module ROSC report on Pakistan. The authorities welcome in particular the thorough analysis and balanced recommendations of the report in order to improve Pakistan's statistical database and achieve the country's goal in meeting the requirements of the Special Data Dissemination Standard in due course.

II. RESPONSE TO RECOMMENDATIONS

A. Federal Bureau of Statistics

The Federal Bureau of Statistics (FBS), responsible for the compilation of national accounts and price statistics thanks the IMF staff responsible for the assessment of the statistics produced by DOS and welcomes the recommendations contained in the ROSC documents. In this regard, the FBS provides the following comments to the specific recommendations addressing (i) general issues, (2) national accounts, and (3) price indices:

1. General Recommendations

Recommendation 1: Pursue the initiative to give more autonomy to the FBS and conduct public awareness exercises aimed at improving the public perception of the FBS

A proposal for creation of a single, fully professional, dynamic and autonomous statistical organization through merger of Technical Wing of Statistics Division, FBS, PCO and ACO as a step forward towards restructuring /reorganization of federal statistics system, submitted to the Government, is being pursued. Hopefully, this process will be completed during 2005. As far as public awareness is concerned, data users—producers meetings and workshops and press briefings are being held. With the launching of a website of the Statistics Division, a large number of citizens, students, researchers, etc. are visiting the website on daily basis. To further improve public awareness, meetings with private sector through different Chambers of Commerce and Industries and associations are being held.

Recommendation 2: Undertake actions to improve response rates for surveys, for example, by amending the General Statistics Act to increase the fines for not providing information.

This Division does not consider that increase in fines under the General Statistics Act, 1975 will work to improve the response rate for surveys. Help of CBR and relevant provincial departments is being sought to improve response rates in case of Large Scale Manufacturing Industries while response rate for Household Surveys is quite encouraging.

Recommendation 3: Undertake a review of statistical policies and practices in consultation with users, addressing at least the issues, i.e., presentation of statistical information (tables, text, charts, etc.), development of detailed metadata for all datasets, establishment

of advanced release calendar, simultaneous release of data to all users, publicizing the availability of unpublished data, assisting users of official statistics by providing more detailed contact information.

Statistical policies and practices are reviewed by the National Statistical Council (NSC) from time to time. The restructured NSC/Federal Statistical Council (FSC) is expected to meet shortly to deliberate upon a number of statistical issues. Efforts are constantly under way to improve the presentation of data in various socio-economic fields. In this regard, the format of *Pakistan Statistical Pocket Book*, *Monthly Statistical Bulletin*, and other major statistical publications has recently been improved. Presentation of data in other publications is planned to be reviewed accordingly. Advance release calendar has already been put in place on the FBS website. All data are simultaneously being released to all users as well as being posted on the website to facilitate the users. Relevant contact information (names, e-mail, phone, fax, postal address, etc.) is being given on all publications while the same is also available on the website.

Recommendation 4: Increase staff training in statistical methodologies and modernize computer equipment.

Efforts are underway to enhance the training facilities for the staff and modernize the computer equipment. A project proposal on Capacity Building of the Statistics Division and its attached departments with the assistance of the World Bank has already been sent to the Ministry of Finance. Simultaneously, a proposal for assistance to improve the training capacity and computer equipment of Training Wing of the FBS has also been negotiated with the UNFPA.

Recommendation 5: Strengthen coordination among institutions to enhance inter-sectoral consistency of data.

All out efforts would be made to enhance inter-sectoral consistency of data through regular meetings between producers and users of data.

Recommendation 6: Update and enhance regularly the GDDS metadata posted on the DSBB for all sectors.

Updates are being done regularly by the FBS.

2. National Accounts

Recommendation 1: Increase the fines for noncompliance to FBS requests for data so that the legislation acts as an effective deterrent.

Views on this are already given above under general recommendation 2.

Recommendation 2: Formulate programs aimed at increasing public awareness of the need to provide accurate statistics on a timely basis.

Steps will be taken to increase the public awareness and responsibility for providing accurate and timely statistics.

Recommendation 3: Improve computing resources to allow the NAW to take advantage of modern software that could enhance data validation, improve the compilation process and increase efficiency. The improved computing resources would enable the FBS to receive government finance data electronically rather than in hard copy.

The process of advancing FBS electronic data capacity has been under constant consideration. Efforts such as lining up of German support for improvement of capacity of Regional/field Offices and National Accounts are under way to replace the outdated 386/486 personal computers with the latest ones and proper networking to enhance data validation and compilation process and increase efficiency.

Recommendation 4: Develop training programs to enhance the technical skills of staff. The FBS may wish to make greater use of the Training Wing for this purpose by inviting experts to conduct training programs for staff.

We agree with the recommendation. IMF may provide training to National Accounts staff on estimation of seasonality and smoothing of quarterly national accounts. Proposal for improving training capabilities of the FBS Training Wing are underway separately through a UNFPA program.

Recommendation 5: Discontinue the current practice of the National Accounts Committee to review the statistics before dissemination. This practice suggests external influence over the statistics and may imply that the national accounts are not compiled on an impartial basis.

The National Accounts Committee (NAC) is a technical advisory body for providing advice to FBS for regular improvement of national accounts estimates and in no way it creates any external influence on the statistical out come. The Committee mainly targets the improvement of data availability for national accounts.

Recommendation 6: Fill the vacant post of Director General as the non-appointment has led to uncertainty amongst staff and users. If the vacancy exists because of the impending plans to reorganize the FBS, then this should be communicated to staff and to the public.

With reorganization of the set-up, heads of organs will automatically come in place. All stake holders are aware of it. There is no uncertainty.

Recommendation 7: Initiate measures to broaden the range of accounts and tables currently being compiled. In particular, the following should be compiled: (a) Regular

(preferably annual) supply and use tables that could be used to conduct consistency checks on the estimates; and b) accounts by institutional sector.

Both supply and use tables and institutional sector accounts would be developed by the FBS on annual basis for which capacity requirements are being worked out.

Recommendation 8: Improve coverage of merchandise trade. Efforts should be made to derive estimates of cross boarder trade not recorded by the customs authorities.

Presently no mechanism exists to catch the unrecorded cross-border trade. IMF's technical assistance would be welcome to help the FBS develop the requisite methodology.

Recommendation 9: Implement procedures to estimate the non-observed economy. The procedures should target, in particular, informal activities that are significant in Pakistan.

IMF technical assistance would be welcomed for estimating the non-observed economy.

Recommendation 10: Formulate plans for the next rebasing exercise. The estimates should be rebased with a minimum frequency of five years. Thus, following the release of the new series at 1999/2000 series the estimates should then be rebased to 2004/05 at the latest.

We agree with the IMF recommendations for rebasing after every five years. However, the next data rebasing will be for year 2005-06 after which a five year cycle will be observed. This would require additional financial and manpower resources.

Recommendation 11: Derive independent estimates of private final consumption expenditure using the data from the HIES. The availability of such estimates would enhance the practicality of consistency checks and help improve the overall estimates.

Agreed with IMF recommendation. This will however be done on every other year as HIES data/Living Standards will be available on alternate years.

Recommendation 12: Improve the timeliness of the national accounts. The FBS should disseminate the estimates that are revised for government agencies six months after the end of the reference period.

Efforts are being made to prepare and release quarterly national accounts which will eliminate the issue of timeliness.

Recommendation 13: Quarterly surveys to produce data on:

a) Employment/unemployment

Presently, FBS is conducting LFS on annual basis with a sample size of about 21,000 households, evenly distributed among four quarters for enumeration. FBS will have to increase the sample size to 32000 households (8000 households for each quarter) to make the **quarterly estimates** of employment and unemployment representative at the national level with rural-urban breakup. This will entail additional funds and manpower in all the Regional/Field Offices as well as in Labor Section of the FBS, HQ. The FBS plans to conduct survey on quarterly basis through its regular resources in 2005-06.

b) Wage rates

Currently Wage Rate Survey is not being done by the FBS. However, IMF technical assistance will be welcome.

3. Consumer and Wholesale Price Indices

Recommendation 1: The National classifications are used instead of the internationally recommended ones. Implement the planned introduction of the COIPOP as soon as possible.

This is a good recommendation and is under consideration.

Recommendation 2: The Family Budget Survey, which is the source of the weights for the CPI, has not been published. No adjustments are made to the results from the Family Budget Survey to resolve under reporting by households of certain types of expenditures.

Family Budget Survey was conducted in 2000-01. Its results are not published as the same are used only for change of base of CPI and SPI. Under reporting of expenditures was taken care of to the extent possible at the editing/coding stage of the Family Budget Survey. However, next survey will be published.

Recommendation 3: Review the treatment of Housing in the CPI, preferably by replacing the technique for estimating rentals on the basis of construction costs with an index reflecting the cost of purchasing and maintaining dwellings.

This is a good suggestion and we would welcome technical assistance from the IMF to handle house rent in CPI.

Recommendation 4: The CPI scope is limited to 52 urban centers (covering about 68 percent of all urban households), thus excluding households living in rural areas. Consider expanding the scope of the CPI to cover all urban areas (as allowed by the 2000/2001 Family Budget Survey), and eventually cover all Pakistan by including information on rural areas.

The CPI scope extends to 52 urban centers covering 68 percent of urban population (not 68 percent of households). Organized markets do not exist in the rural areas. Rural people purchase goods and services for consumption from nearby towns/small cities. Hence, small cities were covered in CPI.

Recommendation 5: WPI does not cover small scale manufacturing enterprises.

WPI covers large-scale as well as small-scale manufacturing enterprise.

B. Ministry of Finance

The Ministry of Finance (MOF) is committed to good quality statistics. It thanks the IMF staff for its assessment and recommendations of Pakistan's government finance statistics (GFS). The plans for improving GFS include:

- Developing a migration path for the adoption of the *GFSM 2001*.
- Implementing a revised chart of accounts and a new accounting model that are compatible with the eventual implementation of accrual accounting and reporting.
- Disseminating monthly GFS with a lag of one month.
- Developing and disseminating comprehensive metadata for the GFS.
- Setting up a group in the Ministry of Finance whose task would be to compile and disseminate GFS data.

C. State Bank of Pakistan

The State Bank of Pakistan (SBP) is working towards the full adoption of the *Monetary and Financial Statistics Manual (MFSM)*. The SBP provides the following comments to the ROSC mission's recommendation for monetary and balance of payments statistics:

1. Monetary Statistics

Recommendation 1: Compile and disseminate monetary statistics based on the data collected through the monthly report forms rather than the weekly statements provided by the Banking Supervision Department.

The Statistics Department has started compiling monetary survey on the basis of monthly statements of assets and liabilities since September 2004.

Recommendation 2: Implement the MFSM guidelines on the sectorization of institutional units, classification of financial instruments, and the recording of securities repurchase agreements (repos) and financial derivatives.

Sectorization of institutional units has been classified according to the guidelines of *MFSM* and will be implemented after the acquisition of data through data warehouse.

Recommendation 3: Incorporate accrued interest in the outstanding values of financial instruments, as recommended in the MFSM.

The issue will be resolved with the implementation of *MFSM*.

Recommendation 4: Enhance the existing data validation procedures to ensure that mutual claims between the SBP and scheduled banks are recorded consistently.

The problem of inconsistency has already been resolved and consistent data will be reported through the data warehouse, which will also be utilized for the compilation of a monetary survey according to the *MFSM*.

Recommendation 5: Improve the data capturing procedures for the SBP and banks' weekly balance sheet information by using electronic means to enter these data into the database.

The monthly data used for preparation of monetary survey are acquired electronically and weekly data will also be acquired electronically after the implementation of data warehouse project.

Recommendation 6: Improve the timeliness of SBP data for end-fiscal year by using preliminary accounting records, not yet approved by the High Council, to avoid the currently long delays in the compilation and dissemination of SBP monetary statistics.

From June 2004, monetary survey was compiled using provisional data of SBP accounts, which were accordingly revised after finalization of the accounts.

Recommendation 7: Establish a regular mechanism to verify the consistency between monetary and government finance statistics.

We feel that the two set of data are consistent with each other as the source of the two is the same.

Recommendation 8: Inform users of SBP's revision policy and practice and include a documentation of revisions in the statistical publications.

A proper revision policy document for all major data series compiled in the department is under preparation. Draft of the policy will be ready by December 2004. The policy document and practices of revisions will be made available to the general users.

Recommendation 9: Publish monetary data in a clear manner, especially by improving the clarity of the tables, to facilitate accurate interpretation and analysis (e.g., publish foreign liabilities and disaggregate the nonpublic sector in line with the MFSM guidelines).

Table of analytical accounts of SBP and scheduled banks is being published in the *Monthly Statistical Bulletin* consistent with the guidelines of MFSM.

Recommendation 10: Publish comprehensive metadata on the concepts and methodology used to collect and compile monetary statistics.

Metadata has been disseminated on the Dissemination Standards Bulletin Board (DSBB) of IMF and links have been provided in the SBP website.

Recommendation 11: Increase resources dedicated to training in the monetary statistics methodology and compilation methods, including international statistical guidelines.

This is the internal issue of SBP and should not be part of the report. The SBP has a transparent policy for training of its employees

Recommendation 12: Identify contact points for enquiries by mail, telephone, facsimile, or by e-mail.

Contact points of all data posted on the website are provided.

2. Balance of Payments

Recommendation 1: Compile data on the external transactions of enterprises operating in the EPZ and offshore banks and treat them as residents of Pakistan.

The issue of data relating to enterprises operating in EPZ still needs to be resolved due to some legal complications as in most other countries.

Recommendation 2: Disaggregate the counterpart of exports of crude oil under product sharing agreements into (i) an income component, to be classified in the direct investment income account and (ii) a component for the repatriation of direct investment capital, to be classified in the account for foreign direct investment in Pakistan of the financial account.

SBP is working on acquiring necessary data from the oil exploration companies which will enable us to properly classify data on export of crude oil according to the above recommendations.

Recommendation 3: Strengthen the procedures to estimate reinvested earnings to include, in addition to earnings capitalized in various other reserve accounts.

Data on reinvested earnings and retained earnings will be collected under the foreign investment survey. The survey questionnaire has been revised for this purpose.

Recommendation 4: Reclassify the government guaranteed loans from the general government sector to the sector of the beneficiary of the loan.

The government guaranteed loans from the government sector to the sector of beneficiary has already been reclassified as per recommendations of the ROSC.

Recommendation 5: Conduct revision studies.

Revision studies will be conducted after the formulation of the revision policy which is under preparation.

Recommendation 6: Develop and disseminate an advance release calendar.

The advance release calendar in respect of BOP has been prepared and posted on the SBP website.

Recommendation 7: Establish regular procedures to verify consistency between BOP and GFS.

The matter has been taken up with Ministry of Finance (budget wing) and EAD. In the future, the government finance data will be reconciled with EAD (BOP) source before its release.

Recommendation 8: Improve assistance to users by providing more detailed contact information in the publications and on the website.

To facilitate users, contact points of all data posted on the website are provided.

INTERNATIONAL MONETARY FUND

PAKISTAN

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Mohsin S. Khan

November 29, 2004

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Pakistan's Report on the Observance of Standards and Codes (ROSC)—Data Module. Also included as appendices are: Pakistan'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 Pakistan's macroeconomic statistics, and the results of a users' survey.

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ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
Ads	Authorized Foreign Exchange Dealers
AGs	Accountant Generals at the Provincial and Local Government Levels
AGPR	Accountant General for Pakistan Revenue
<i>BPM4</i>	<i>Balance of Payments Manual, fourth edition</i>
<i>BPM5</i>	<i>Balance of Payments Manual, fifth edition</i>
BOPD	Balance of Payments Division, SBP
CBR	Central Board of Revenue
CMI	Census of Manufacturing Industries
COFOG	Classification of Expenditure by Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
EAD	External Affairs Division, MOF
EECS	Exchange Entitlement Certificate
FBS	Federal Bureau of Statistics
FMC	Fiscal Monitoring Committee
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFCG	Gross Fixed Capital Formation
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual, 2001</i>
HIES	Household Income and Expenditure Survey
IFAC	International Federation of Accountants
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification of all Economic Activities
ISWGNA	Intersecretariat Working Group on National Accounts
ITRS	International Transactions Reporting System
MCD	Middle East and Central Asia Department
MFS	Monetary and Financial Statistics
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
MTBF	Medium-term Budget Framework
<i>MSB</i>	<i>Monthly Statistical Bulletin</i>
NAC	National Accounts Committee
NAW	National Accounts Wing, FBS
NFA	Net Foreign Assets
NSC	National Statistical Council
NSDP	National Summary Data Page

NSS	National Savings Schemes
PIFRA	Project for the Improvement of Financial Reporting and Auditing
PPI	Producer Price Index
PSPD	Public Sector Development Program
PSU	Primary Sampling Unit
ROSC	Report on the Observance of Standards and Codes
SBP	State Bank of Pakistan
SD	Statistical Division, MOF
SDDS	Special Data Dissemination Standard
SPI	Sensitive Price Indicator
SSU	Secondary Sampling Unit
STA	Statistics Department, IMF
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 wholesale price indices, government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the Pakistani officials. This information, which is organized along the lines of the generic DQAF (see Appendix III), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Pakistan'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 Islamabad and Karachi during December 1-16, 2003.¹

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 legal framework for compiling official statistics in Pakistan consists of two laws: the Industrial Statistics Act No. 19 of 1942 and the General Statistics Act No. 69 of 1975. The Industrial Statistics Act is limited in scope and covers the activities of the provincial governments in collecting data from business establishments. It is, therefore, used as the basis for conducting the census of manufacturing industries (CMI), which is undertaken by the provincial governments.

The General Statistics Act No. 69 of 1975 establishes broad responsibility at the federal and provincial levels for collecting, processing, and disseminating the statistics. Article 5 of the Act prescribes the appointment of a Federal Statistics Authority and provincial statistics authorities to perform the functions relating to the compilation of statistics required for economic planning.

The Secretary of Statistics is the Federal Statistics Authority and, as head of the central Statistics Division (SD), is authorized to appoint or engage statistical agents to perform the duties outlined under the Act. The SD comprises three attached departments: the Federal Bureau of Statistics (FBS), the Population Census Organization, and the Agricultural Census

¹ The mission team was headed by Mr. Edgar Ayales and included Messrs. Henri Hozoo, Cornelis Gorter, Rainer Koehler, and Thomas Alexander (all STA), Mr. Brian Donaghue (external consultant), and Mr. Ricardo Davico (STA—Research Officer).

Organization. Article 5 of the Act establishes the broad responsibilities of the Authority, which includes compiling data of a general nature for national and international reference and instituting procedures for all statistical enquiries. Thus, the tasks of the census organizations are limited to compiling specific statistics relating to their census activities, whereas the FBS is responsible for compiling general statistics on all activities in Pakistan.

In this regard, though the General Statistics Law does not state explicitly that the FBS is responsible for compiling the national accounts statistics, this is implied by the established functions of the statistical authority. Further, the FBS has continued the tradition of being the only institution in Pakistan compiling the national accounts statistics, which has been accepted by national and international agencies as the official statistics of the country.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Article 3 of the General Statistics Act makes provisions for the formation of a National Statistical Council. The functions of the council include coordinating the activities of the relevant authorities and advising them on the means to achieve efficient, adequate, and prompt results. The National Statistical Council has not been active in this regard, and much of the effort of coordinating data sharing has been undertaken by the National Accounts Committee (NAC), which comprises representatives from most of the data-producing agencies (see also 0.3.2). The FBS notes that it has no difficulty receiving administrative data from these agencies.

Data coordination is also promoted through the system of statistical offices and cells operated by the FBS and other agencies. The FBS has a network of 16 regional offices and 19 field offices. The field offices are one level below the regional offices in the organizational structure. In addition, 131 statistical cells operate out of various ministries and government agencies and perform specific statistical tasks; for example, the cells at the customs stations compile trade data.

One distinct example of interagency cooperation is with the conducting of the CMI. This census is carried out every five years as a joint effort between the provincial offices and the FBS. The provincial offices operate independently of the FBS as they are under the control of the provincial governments. However, all the agencies agree on the timing of the census and the effective execution of required tasks (see also 3.1.1.).

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

Confidentiality of respondents' data is protected under both the General Statistics Act of 1975 and the Industrial Statistics Act of 1942. Article 11 of the General Statistics Act stipulates that information collected under the Act shall not be used for any purpose other than the compilation of statistics. It states further that the information shall not be published in a form that discloses the state of affairs of the unit and can only be disclosed with the written consent of the respondent. Information collected under the Act cannot be used as

evidence against the respondent unless it is being used to prosecute the respondent for contravening any provisions under the Act.

Article 15 of the General Statistics Act establishes penalties for the breach of confidentiality, which may be either a fine or imprisonment, or both. The Act was amended by Ordinance No. 7 of 2000 to increase the fine from 1,000 rupees to 7,000 rupees.

Likewise, the Industrial Statistics act of 1942 provides legal safeguards for protecting information collected under the act. This is stipulated in Article 7, and the penalties for improper disclosure are stipulated in Article 9.

In the survey of users conducted by the IMF assessment team, many respondents expressed reservations about the ability and willingness of the FBS to conform to the provisions of confidentiality. Respondents are concerned that the data provided to the FBS may be transferred to the tax authorities at the Central Board of Revenue (CBR) of the Ministry of Finance (MOF) and used as a basis for assessment. However, there is no evidence to support the respondents' assertions of a breach of these provisions by the agency.

The FBS has implemented measures to minimize the exposure of the records of individual respondents and ensure that the data are kept confidential. Surveys conducted by the provincial authorities are processed at the provincial level and are submitted to the federal office in aggregate form or after the records identifying the respondent have been removed. Data collected at the federal level can only be accessed by individuals engaged in the processing of the statistics. Questionnaires and other confidential material are destroyed by the FBS according to the administrative regulations of the civil service, which stipulate that confidential material be disposed of by incineration.

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

Article 9 of the General Statistics Act authorizes the statistical agent to collect from individuals within Pakistan any information it deems relevant for compiling statistics. The individual is obligated to provide the information to the agent. Article 10 of the Act stipulates that a statistical agent should, after giving due notice, have access to any statistical record or to any premises where he believes that relevant records or documents are being kept.

Article 12 establishes penalties for noncompliance by respondents. The fine for noncompliance is 500 rupees and, for establishments, a further fine of up to 200 rupees for each day that the order is violated. The fines are very low and have not been increased since the Act was promulgated in 1975, though there have been increases in fines for other offenses under the Act (see also 0.1.3).

Despite the high rate of non-response, the penalties are rarely employed and the process for pursuing nonrespondents remains largely ineffective. Individuals refuse to provide

information, citing concerns about confidentiality—that the information will be passed on to the CBR, which is also a division of the parent ministry of the SD (see also 0.1.3).

0.2 Resources

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

Whereas the number of staff positions for compiling the national accounts statistics is adequate, the technical skills of staff are not commensurate with the requirements for compiling the statistics. The National Accounts Wing (NAW) has 61 staff positions with 10 vacancies, mainly at the clerical level; however, staff require training in national accounts statistics. Staff turnover is low and the FBS does not foresee an increase in turnover rates, through retirement or other means, over the next five years.

Financial resources for recurrent activities are broadly adequate, though delays in the disbursement of allocated funds by the MOF have hindered the completion of some tasks. Resources for equipment and transportation are inadequate, as exemplified by the critical deficiency of the computing resources. The NAW does not have a central processing facility and is not connected to the data processing unit of the FBS. Further, the number of computers in the NAW is below the number required; therefore, technical staff do not always have access to dedicated machines. The available machines are obsolete, comprising primarily computers with 386 and 486 processors, which are unable to support the modern computing software that the NAW would wish to employ to compile the statistics. The current inefficient practice used to consolidate the government finance statistics (GFS) is directly associated with the paucity of the computing resources. Staff of the NAW compile the GFS tables using the hardcopy budget statements received from the numerous levels of federal, provincial, and local governments despite the fact that the data are available electronically and provided to the MOF in that form.

0.2.2 Measures to ensure efficient use of resources are implemented

The FBS ensures that all departments at the federal and regional levels utilize similar definitions and classifications when compiling data, thus helping to reduce the number of errors due to processing.

The FBS prepares a surveys plan in May for the upcoming financial year and attempts to schedule surveys in a manner that would make effective use of survey staff and obviate the need to hire additional temporary staff. Survey instruments are reviewed annually to minimize the size of questionnaires and, wherever possible, to pool surveys to minimize processing costs.

Department heads meet monthly to review the expenditure of each department and decide on allocations for the upcoming month. The regular review of expenditure ensures that funds are used efficiently and allocated to the tasks that are deemed critical to achieving the broad goals of the FBS.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Quality awareness is evidenced by the constant desire by management to improve the statistics in response to concerns of users, notwithstanding the administrative and resource constraints.

The FBS mission statement reflects a commitment to quality. It asserts that the FBS is committed to providing accurate, reliable, timely, comprehensive, and user-friendly information to national and international agencies. Quality awareness is also illustrated by the recent decision by Pakistan to participate in the IMF's GDDS and the posting of the metadata on the Data Standards Bulletin Board (DSBB).

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

The NAC reviews the quality of the national accounts and the compilation system. The NAC was formed by the Government of Pakistan through Notification No. 71(6)EEP/68 Islamabad, on November 5, 1968. The functions of the NAC are as follows:

- to examine and assess the requirements of data for the national accounts and determine the priorities for collecting comprehensive data;
- to review the conceptual approach of the FBS and recommend improvements;
- to examine and approve the national accounts for release; and
- to recommend research in national accounts.

The NAC is chaired by the Secretary of the SD. The Director-General of the FBS serves as the secretary. Its membership comprises heads of public sector agencies, including the State Bank of Pakistan (SBP), directors of the provincial statistical offices, and representatives from private sector organizations.

The NAC meets at least twice annually to review the activities of the NAW. FBS staff are required to prepare working papers on specific issues for the consideration of the NAC. The FBS does not conduct regular formal user surveys because it considers the NAC to be representative of the main users in Pakistan.

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

The awareness of the trade-off between the timeliness and accuracy of the data is illustrated by the schedule for compiling and revising the statistics. The FBS compiles a first set of

estimates principally to meet the needs of national planners² and produces a revised set of estimates using comprehensive data at a later stage.

Seminars on national accounts and computing techniques are conducted regularly by the Training Wing of the FBS, which is responsible for improving the technical skills of staff in the SD.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The terms and conditions for the appointment of FBS staff follow the regulations of the public service of Pakistan as established in the Civil Servants Act No. 71 of 1973. The Director-General is appointed by the Prime Minister upon the recommendation of both the Establishment Division and the SD. The individual must be selected from the ranks of the agency and can only be removed from office on the recommendation of both divisions for an offense stipulated in the public service rules and regulations. Staff are selected from the pool of recruits who have met the public service entry requirements and have successfully completed the public service entrance examinations.

The post of Director-General is currently vacant, following the retirement of the last Director-General in May 2003. Some users of official statistics expressed concern about the delays in appointing the Director-General and the authorities are actively seeking to identify an appropriate candidate.

The National Accounts Committee, comprising individuals from government agencies and private sector institutions, is responsible for reviewing and approving the accounts. This committee, which is chaired by the Secretary of the Statistics Division, focuses on providing updated source data, and may also recommend revisions before dissemination.

² The FBS produces a set of provisional estimates in May, in time for planners in the MOF to prepare the economic review that has to be presented to parliament for the coming financial year, which begins in July.

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

The choices of sources and statistical techniques are influenced solely by statistical considerations. The FBS is conducting the first comprehensive revision of the compilation process since 1980/81 and staff have compiled a series of case studies on improving specific areas of the national accounts. The proposed techniques are based on the need to adopt good practices while recognizing the constraints of data collection.

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

The FBS is entitled to respond and does so, to the misuse of the statistics in the national press. The agency generally verifies the data presented in the media and comments on or refutes erroneous statements regarding the statistics. The FBS may also request that the data be corrected.

1.2 Transparency

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

The terms and conditions under which the statistics are collected and processed are detailed in the General Statistics Act. The relevant Articles of the Act are summarized or quoted on the survey instruments used by the FBS and in correspondence to respondents. The terms and conditions under which the data are collected and compiled are also available as part of the GDDS metadata.

The data dissemination policy of the FBS is outlined in the *Brochure of the Federal Bureau of Statistics, 2002-2003* and is available on the website of the FBS.

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

The Ministries of Finance and Planning receive the national accounts statistics before the data are released to the public. This is identified in the *Brochure of the Federal Bureau of Statistics, 2002-2003* published by the FBS and posted on the DSBB.

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

All publications of the FBS identify the agency as the producer of the statistics. In addition, users are asked to acknowledge the source of all published and unpublished data used in research papers and articles.

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

The FBS will be implementing comprehensive changes to the national accounts methodology and compilation practices during the months following the date to which this assessment refers. The agency has kept users abreast of its plans by providing information on the website, in the annual national accounts publication, and in the brochure of the FBS.

1.3 Ethical standards

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

Staff behavior is guided by the rules, regulations, and administrative guidelines of the civil service, which are established in various pieces of legislation. These are compiled in the compendium, Civil Service Establishment Code, which is made available to staff upon hiring. The annual performance appraisal system assesses staff conduct and this serves as a regular reminder to staff that they should uphold the principles of good behavior established in the staff regulations. Training sessions to prepare staff for survey fieldwork also remind staff of the need to adhere to the guidelines of good behavior when conducting surveys.

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 national accounts statistics are compiled according to the recommendations of the *System of National Accounts 1968 (1968 SNA)*. The FBS is instituting a comprehensive plan to revise the estimates and implement the recommendations of the *System of National Accounts 1993 (1993 SNA)*. It expects to disseminate the revised estimates, along with a set of quarterly accounts, during 2004.

2.2 Scope

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

The FBS compiles the following accounts, which are part of the minimum requirements established by the Inter-Secretariat Group on National Accounts (ISWGNA) for implementation of the *1993 SNA*.

- annual value added and GDP at current and constant prices by activity;
- annual expenditures on GDP at current and constant prices; and

- annual value added components at current prices by activity.

This set of accounts does not fulfill the minimum requirements established by the ISWGNA for implementation of the *1993 SNA*. The FBS compiled experimental accounts by institutional sector for 1984/85, 1989/90, and 1990/91; however, the ISWGNA requires annual compilation. Further, the FBS does not disseminate quarterly GDP estimates or annual supply and use tables as recommended by the ISWGNA.

The accounts cover most of the economic territory of Pakistan, including, in particular:

- territorial enclaves in the rest of the world, such as embassies; and
- workers who work part of the year in another country.

However, the following areas are excluded from the scope of household income and expenditure survey (HIES):

- the Federally Administered Tribal Areas; and
- military restricted areas.

The production boundary of the national accounts is not in full accordance with the *1993 SNA*. The scope of output measurement includes the following:

- mineral exploration;
- production of computer software; and
- production of entertainment, literary or artistic originals.

However, the following items are not measured:

- own-account production of goods for final consumption;
- research and development on own-account;
- output of goods for own account fixed capital formation; and
- illegal output sold to willing buyers.

The assets boundary is not in accordance with the *1993 SNA*. The following items are not included in the measurement of assets:

Among tangible assets:

- defense related assets that could be used for civilian purposes;
- valuables and historical monuments; and
- agricultural work in progress.

Among intangible assets:

- mineral exploration;
- Systems and standard applications computer software and databases;
- entertainment, literary, and artistic originals;
- patented entities; and
- leases and other transferable contracts.

2.3 Classification/sectorization

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

The FBS has developed the following classifications for national accounts that take account of the specific recording requirements of the Pakistan statistics:

- the Pakistan Standard Industrial Classification to classify activities, consistent with the second revision of the International Standard Industrial Classification; and
- the Pakistan International Product Classification to classify products, consistent with the Central Product Classification.

Current expenditure of general government is classified using the Classification of the Functions of Government.

The annual national accounts statistics are not classified by institutional sector.

Household final consumption expenditure is not classified by purpose, and no functional classification of consumption such as the Classification of Individual Consumption by Purpose is used.

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 partially in accordance with the 1993 SNA. In particular, the following valuation rules are followed:

- Total imports and exports are valued on an f.o.b. basis.
- Information on insurance and freight is available.

However, the following valuation rules deviate from the recommendations of the *1993 SNA*:

- Market output is valued at factor cost and not at basic or producer prices.
- Intermediate consumption excludes sales tax.

The national accounts are compiled according to the fiscal year of the government, which is July to June.

2.4.2 Recording is done on an accrual basis

Transactions are recorded on an accrual basis, except for government transactions, which are recorded on a cash basis. Work-in-progress for construction is recorded in the period it is produced; however, agriculture work-in-progress is not estimated, as recommended by the *1993 SNA*. Rather, the production of crops is recorded in the period of harvest. The revised estimates based on the new base year will include estimates for agriculture work-in-progress.

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

Transactions between establishments of the same enterprise are recorded on a net 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

The FBS maintains a business register that is used as the sample frame for censuses and surveys of enterprises. The register is updated on a continuous basis. Information on new corporations is obtained from business associations, farmers' associations, provincial statistical offices, and provincial departments. The Securities and Exchange Commission provides information on new enterprises, dropouts, or enterprises that are not active. Information from field staff conducting other surveys is also used. The register contains about 56,000 records of corporations and includes information such as the number of employees, major type of activity conducted by the enterprise, and start-up capital. However, the register may not represent the number and range of enterprises operating in Pakistan and may need to be updated with a business census.

The FBS does not conduct regular enterprise surveys; thus, current data for the compilation system are derived primarily from administrative sources. A Pakistan Integrated Household Survey, incorporating an HIES component, was last conducted in 2000/01, and a CMI is conducted at regular five-year intervals. A review of source data follows:

(1) Census of Manufacturing Industries

The CMI is conducted as a collaborative exercise between the FBS, provisional statistical offices, and the provincial governments. The FBS is responsible for the broad coordination of the CMI, the provincial governments undertake the fieldwork, and the provincial statistical offices are responsible for processing (editing, coding, data-entry) the responses.

The census is conducted based on the list of factories maintained by the provincial governments, as required under the Factories Act of 1934. The list is not updated regularly and may not represent the manufacturing industry.

The CMI is plagued by survey and administrative difficulties that limit its accuracy and usefulness to the national accounts. The response rate for the census is low. Only 46 percent of the 9,800 factories surveyed responded to the 2000/01 census. Delays in completing the fieldwork and processing the questionnaires have been caused by the lack of resources in the provincial offices. The FBS has little control over the execution of the CMI, since provincial statistical offices do not come under its control.

The FBS has developed a survey of large-scale manufacturing, which will be conducted quarterly, to improve coverage. The new survey will be administered by the FBS and will target a sample of manufacturing enterprises. The business register is currently being used as a frame but will be replaced by the frame derived from the economic census.

(2) Household Income and Expenditure Survey

The FBS conducted the latest HIES during 2000/01. The survey covered all urban and rural areas, but excluded military restricted areas and protected areas of the North-West Frontier Province. These areas constitute about 3 percent of the total population.

The sample frame for the urban areas is different from that used for the rural areas. For urban areas, the FBS developed a sample frame using quick count listing methods for households in the major town and cities. Each area was subdivided into enumeration blocks of about 250-350 households. For rural areas, the list of villages from the 1998 Housing and Population Census was used as the frame.

The sampling procedure was based on a two-stage random sampling design. In the first stage, the enumeration blocks and villages were considered the primary sampling units (PSU). The sample of PSUs was selected with probability proportional to the size, based on the number of households in the PSU. The households within each PSU constituted the secondary sampling units (SSU), which were selected using systematic samplings techniques. Twelve households were selected from each urban PSU and 16 from each rural PSU. The survey covered all income levels.

A total of 14,912 households was selected from 1,050 PSUs. Sixty-two percent of the households were selected from urban areas. The response rate from the survey was high with only 233 refusals after two rounds of visits.

Data from the HIES are not widely used in the estimation process.

(3) Administrative data

Data on government operations are obtained from the respective levels of government as follows:

- Federal – MOF
- Provincial – Provincial finance departments
- District – District governments
- Towns – Town committees

Budgetary data are received in hard copy and processed by the FBS. Detailed data are available to measure output, intermediate consumption, fixed capital formation, and final consumption expenditure of government services. Defense related expenditures are not available by type.

The balance of payments statistics are received from the State Bank of Pakistan.

Detailed foreign trade statistics are compiled by the FBS and available to the national accounts staff within four weeks of the end of the period. However, the data only cover trade documented by customs authorities. Unrecorded cross-border trade is not recorded and no estimates are made by either the customs authorities or the FBS.

(4) Ad hoc Surveys and Censuses

The FBS has conducted a series of ad-hoc surveys over the past three years. However, the data from these surveys have not been used in the estimation process; rather, they are expected to serve as benchmarks for the revision of the estimates. The major censuses and surveys include the following:

- Census of Electricity Undertakings – 1999/2000
- Census of Mining Industries – 1999/2000
- Economic Census – 2000
- Rent Survey of Dwellings – 1998/99
- Survey of Inland Commercial Fishing – 1999/2000
- Census of Software Industry and Related Services – 2002

The reliance on censuses is costly and time-consuming and there is no guarantee that the data would be of superior quality to what may be obtained from sample surveys. The high cost of conducting such exercises has reduced their usefulness to the national accounts compilation process; in many cases, the unavailability of resources has compromised the quality of the fieldwork.

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

The data from administrative sources reasonably approximate the definitions, scope, valuation, and time of recording required. The definitions and classifications used in the HIES and CMI are consistent with national accounts methodology, because these surveys were developed with input from the national accounts staff.

3.1.3 Source data are timely

The data from the administrative sources are timely. However, the timeliness of survey source data has been affected by delays in completing fieldwork.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

Production approach procedures

Estimates of gross output and intermediate consumption are compiled largely at the two-digit level of the PSIC.

The use of fixed ratios is widespread in the compilation process, and many are derived from benchmarks that are more than five years old, contrary to recommended good compilation practices. Further, the estimation methods for many activities assume a fixed relationship in volume terms between intermediate consumption and output since the benchmark year.

Summary of Sources and Techniques used to Derive Estimates of Value Added by Type of Activity

Economic Activity	Source Data	Deflation/Reflation Method
Agriculture	Current data on output volumes of crops obtained from provincial governments.	Reflated using the wholesale price index.
Livestock	Intercensal growth rates of livestock censuses for 1976, 1988, and 1996.	Reflated using the WPI.
Large-scale manufacturing	1) CMI – used when data are available. 2) Quantum index of manufacturing to be applied to base year estimates of value added.	Reflated using the relevant section of the WPI.
Small-scale manufacturing	Growth rate of the volume of small-scale manufacturing obtained through surveys conducted in 1987/88 and 1996/97.	Reflated using relevant section of WPI.
Construction	Data on coefficient of value added to GFCF obtained from government agencies, including the Public Works Department, and construction companies. Coefficient applied to GFCF estimates.	Value added deflated using wage index of construction workers.
Electricity and gas distribution	Data on volume and price of electricity and gas generated and distributed obtained from the producers.	Deflated using unit value indices of electricity and gas.
Transport, storage and communication	1) Data on railways, air transport, water transport, and communications obtained from relevant enterprises. 2) Data on mechanized road transport obtained FBS survey in major cities. 3) Data on non-mechanized transport obtained from town committees.	1) Railways deflated using unit value indices of passenger and tonnage kilometers for railways. 2) Air and sea transport deflated using passenger and tonnage kilometers for air and sea transport.
Wholesale and retail trade	1) Data from trade statistics on imports and from industrial production statistics on domestic production of goods. 2) Data on marketed ratios and trade margins obtained from surveys of wholesale/retail conducted in 1984/85.	Deflated using unit value indices of imports and price indices of domestic production.
Finance and insurance	Data obtained from State Bank of Pakistan and from other financial intermediaries.	1) Wages deflated using wage index of employees. 2) Other goods and services deflated using GDP implicit deflator.
Owner-occupied dwellings	1) Data on number of dwellings derived from 1980/81 Population and Housing Census. 2) Rental values for urban areas from rental survey 1985. 3) Rental values in rural areas from 1984/85 HIES.	1) Reflation of volume estimates using number of dwellings.
Community, social, and personal services	Number of employees in service industry derived from 1980/81 census.	CPI is used to as a deflator.

Specific issues related to the production approach

Owner-occupied dwellings

The output for owner-occupied dwellings is valued as the estimated rentals that tenants would pay for similar accommodation. This practice is in line with international recommendations; however, the benchmark data used are outdated, thus leading to biased estimates.

Work-in-progress

Growing crops, standing timber, stocks of fish, and livestock reared for food are not treated as work-in-progress. The total output from these activities is allocated to the period when the harvest occurs or when the livestock is slaughtered.

Inventory valuation adjustment

Inventories are not adjusted for holding gains/losses. The estimates are deflated using the general wholesale price index.

Consumption of fixed capital

The perpetual inventory method is not used to estimate consumption of fixed capital. The FBS has conducted a study of consumption of fixed capital and has compiled experimental estimates using the perpetual inventory method. It plans to introduce this method when the revised estimates of GDP on the new base year are compiled.

Cash vs. accrual

Data received on a cash basis are primarily for government transactions. No adjustments are made to convert government transactions to an accruals basis.

Specific issues relating to volume measures of GDP

The base year for the constant price estimates is 1980/81, which is outdated. International best practice recommends that chain linking be used to derive the constant price estimates. Otherwise, the base year for the estimates should be updated with a minimum frequency of five years.

The deflators used to derive the constant price estimates are compiled at a highly aggregated level, which is consistent with the value added estimation method. Further, many of the indicators used to derive the constant price estimates do not reflect the underlying price changes of the aggregates. The wholesale price index is widely used; however, the index may include price changes related to transportation and trade margins, which are not part of the value of the output (see previous table).

Double deflation techniques are not used; rather, the estimation system depends heavily on reflation of the volume estimate to derive the current price estimate.

Volume measures of taxes and subsidies on products are estimated by deflating the current estimates using the wholesale price index. This is contrary to recommended international practice. The *1993 SNA* recommends that volume measures of taxes and subsidies on products be estimated by applying base-year tax rates to the volume of transactions subject to the tax or subsidy. Alternatively, the volume measure could be obtained by extrapolating the base-year tax/subsidy using a volume extrapolator of transactions subject to the tax/subsidy.

Expenditure approach procedures

The estimate of household final consumption expenditure is derived as a residual. The FBS cites the difficulty in obtaining the necessary data required for a commodity flow approach as the basis for not compiling independent estimates.

Government final consumption expenditure is estimated at the one digit level of the COFOG. Constant price estimates are derived using a wage index for the compensation of employees and wholesale price index for other goods and services.

Gross fixed capital formation (GFCF) is estimated by type of economic activity for the major groups of the Pakistan Industrial Classification and by type of asset. The data sources for the estimates of GFCF by activity are similar to the sources for the estimates of value added; therefore, the estimates are affected by the same data deficiencies.

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

Techniques for data adjustments and transformations are weak. Procedures to obtain exhaustive measures of GDP are not employed despite the high level of informal activity, unrecorded cross-border trade, and under-coverage of the periodic surveys. The FBS is currently receiving assistance from the United Nations Economic Commission for Asia and the Pacific to derive preliminary estimates of informal activity.

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

Sampling errors, response errors, and nonsampling errors are routinely assessed; however, the information is not made available to users. The information is used internally to inform

the estimation process. Data are checked for errors and inconsistencies through the use of range checks and benchmarks.

As part of the efforts to improve the compilation process, the FBS conducted a three-year project to assess and validate the statistics that it compiles. The project, conducted during July 1995 to June 1998, had the following broad objectives:

- to improve the validity of data through cross-checking;
- to analyze the data from various sources; and
- to conduct surveys and studies in the weak areas of the statistics.

The exercise examined all the main surveys and censuses conducted by the FBS, many of which are used in the national accounts compilation process.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

Data on production of primary goods are assessed against merchandise trade statistics and other secondary sources, including the HIES.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Ad hoc assessments are conducted when discrepancies in intermediate data are identified.

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

The statistical discrepancy between GDP by activity and GDP by expenditure is not shown separately, because private final consumption expenditure is derived as a residual—the difference between the estimate by economic activity and the remaining components of GDP by type of expenditure. Thus, the FBS is unable to conduct studies of statistical discrepancy.

The FBS has compiled supply and use tables; however, the data are not recent and the framework is not used to investigate the discrepancies in the accounts. Research institutions within Pakistan have occasionally compiled independent GDP estimates; however, the FBS does not compare its estimates with these data. It notes that the estimation process utilized by other agencies is not as rigorous as that of the FBS.

3.5 Revision studies

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

As part of the comprehensive plan to improve the estimates, the FBS commissioned 23 studies to review data sources and statistical techniques used to compile estimates of output, value added, and gross fixed capital formation for the broad range of economic activities covered by the compilation process. The studies introduced experimental estimates based on new data sources and techniques. The first study was completed in May 2001 and the last one in May 2002. The results of these new studies have been used as part of the exercise to rebase the estimates to 1999/2000.

4. Serviceability

4.1 Relevance

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

The NAC is active in reviewing the national accounts statistics. The committee encompasses a broad range of users from both the public and private sectors that assess the national accounts compilation process and provide recommendations for improvement (see also 0.3.2).

When compiling the statistics, the FBS considers the comments received during the press conference to present the estimates. However, as the FBS concedes and as noted previously in this report, the scope for improving the estimation process has been limited. The FBS observes that it receives very little feedback from users not represented on the NAC.

Staff of the FBS attend international meetings and seminars where issues relating to the statistics are discussed.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The first GDP releases, which are published about two weeks before the end of the fiscal year, are based on nine to ten months' observed data and two to three months' projections. The first annual GDP data based on 12 months' observations are disseminated with a lag of 11 months (vis-à-vis the recommended 6-9 months). This situation would be remedied with the publication of quarterly national accounts as presently in preparation.

4.2.2 Periodicity follows dissemination standards

The estimates of GDP are compiled on an annual basis, which is in line with the recommendations of the GDDS.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The statistical discrepancy between the estimates by type of activity and category of expenditure is not shown independently, but is included in private final consumption expenditure as a residual. Thus, the consistency between the two estimates cannot be investigated.

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

Consistent estimates of GDP by type of activity are available from 1950/51 and by category of expenditure from 1964/65. The FBS adjusts back series, wherever possible, to take account of changes in methodology to eliminate discontinuities in the data.

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

The national accounts statistics are reconcilable with the balance of payments statistics, the foreign trade statistics, and the government finance statistics.

4.4 Revision policy and practice

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

The revision process follows a regular, well-established schedule, because the FBS is obligated to provide data for inclusion in the economic survey compiled by the MOF. The provisional estimates that are compiled one month before the end of the reference period are updated six months after the end of the period, but the updated estimates are submitted only to government agencies. The FBS claims there is no public interest in these updated estimates, though some users have complained about the lack of regularly revised data. A comprehensive revision of the provisional estimates is undertaken and these data are released eleven months after the end of the period.

4.4.2 Preliminary data are clearly identified

Preliminary data are clearly identified as such in press releases, on the website, and in the hardcopy publications produced by the FBS.

4.4.3 Studies and analyses of revisions are made public

Revision studies have been made available to national and international research agencies for review and comment, and are available to the public on request.

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 statistics are presented in the national accounts publication, on the website, and in the yearbook in a clear manner; charts, tables, and explanatory notes are presented with the data to facilitate analysis. The national accounts publication includes summary tables with time series and detailed tables presenting the estimates for the period being considered.

5.1.2 Dissemination media and formats are adequate

Dissemination formats are adequate. The data are first presented via a press release and are subsequently posted on the FBS website. Detailed data are presented in the annual national accounts publication *National Accounts of Pakistan* and other hardcopy publications.

5.1.3 Statistics are released on a preannounced schedule

The advance release calendar published by the FBS does not include release dates for the national accounts. However, users are aware of the timeframe for the release of the statistics because of the tradition and practices that have been followed by the FBS. The precise date of release may vary from one period to the next, owing to delays in compilation or in receiving the approval of the NAC.

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

The data are presented to the National Accounts Committee before finalization and wider dissemination to the public.

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

Nonpublished (but nonconfidential) data are available to users for a fee. The data dissemination policy of the FBS states that micro-level data may be supplied to users on tapes/diskettes after the publication of the report. The recipient is expected to provide assurance that the data will not be supplied to a third party either free or for a charge. Further, the user is expected to acknowledge the source of the data and provide copies of the resulting research or article, whether published or unpublished, to the FBS.

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

Information on the methodology, data sources, and statistical techniques used to compile the estimates is provided in the annual national accounts publication and on the website of the FBS. Metadata are also available on the DSBB. However, the metadata do not provide sufficient information on the deviations from international guidelines or the weaknesses in the source data. The national accounts publication does not detail the possible biases in the source data, the degree of coverage, or the level of non-response.

The 23 case studies on the proposed techniques for improving the estimates describe of the current practices and contain a discussion of the weaknesses.

Details about the concepts, definitions, sampling procedures, and other attributes of the surveys and censuses that are data sources for the national accounts are provided in the reports of these surveys. References to these surveys and censuses are presented in the national accounts publication.

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

The metadata reflect the level of detail of the disseminated data. The website and the annual national accounts publication, which contain the most detailed data, provide comprehensive information on the methodology, data sources, and statistical techniques.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

Publications and the website list the names, email addresses, and telephone numbers of staff of FBS who could be contacted regarding the products and services of the agency. However, the information does not specify the subject field of the contact person.

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

The FBS has compiled a catalog that lists the price and frequency of available publications. The hardcopy version of this catalog is published annually. A catalog of publications is also available on the website of the FBS; however, it does not list the price of the publications. Both the hardcopy catalog and the website provide information on agencies or bookstores where the publications could be purchased as well as ordering information and assistance. The FBS operates a bookstore, located at the headquarters in Islamabad.

Table 1. Pakistan: Data Quality Assessment Framework—Summary of Results for National Accounts
(*Compiling Agency: Federal Bureau of Statistics*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			Current efforts to encourage reporting are weak. Computing resources are obsolete.	Authorities plan to propose legislation to give more autonomy to the FBS (short term).
0.2 Resources			X				
0.3 Quality awareness		X					
1. Integrity							
1.1 Professionalism			X			Dissemination process influenced by outside agencies represented on NAC.	
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X			Accounts based on 1968 SNA. Limited range of accounts. Own-account production excluded. COICOP not used. 1993 SNA not used to classify units.	
2.2 Scope			X			Market output at factor cost. Sales taxes excluded from intermediate consumption.	
2.3 Classification/sectorization			X				
2.4 Basis for recording			X				
3. Accuracy and reliability							
3.1 Source data				X		Enterprise data weak and outdated.	FBS plans to extend surveys to improve data sources, and change the base year to 1999/2000 (short term).
3.2 Statistical techniques				X		Outdated base year. Outdated benchmarks.	
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				

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

Table 1. Pakistan: Data Quality Assessment Framework—Summary of Results for National Accounts
(Compiling Agency: Federal Bureau of Statistics)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
4. Serviceability							
4.1 Relevance		X					
4.2 Timeliness and periodicity			X		Timeliness not in line with GDDS.		FBS expects to disseminate quarterly GDP data by activity and category of expenditure in early 2004.
4.3 Consistency		X					
4.4 Revision policy and practice			X		Revision cycle not known to users.		
5. Accessibility							
5.1 Data accessibility			X		No publicized advance release dates.		
5.2 Metadata accessibility		X			Contact information not specific to subject areas.		
5.3 Assistance to users			X				

RECOMMENDATIONS ON NATIONAL ACCOUNTS STATISTICS

As noted in the assessment, the FBS has undertaken measures to improve the national accounts statistics. The national accounts improvement project currently underway would address many of the issues relating to the accuracy and reliability of the statistics highlighted in the assessment. The mission supports these efforts and outlines some additional recommendations that the FBS may wish to consider.

Prerequisites of quality

- Increase the fines for noncompliance to FBS requests for data so that the legislation acts as an effective deterrent.
- Formulate programs aimed at increasing public awareness of the need to provide accurate statistics on a timely basis.
- Improve computing resources to allow the NAW to take advantage of modern software that could enhance data validation, improve the compilation process, and increase efficiency. The improved computing resources would enable the FBS to receive government finance data electronically rather than in hard copy.
- Develop training programs to enhance the technical skills of staff. The FBS may wish to make greater use of the Training Wing for this purpose by inviting experts to conduct training programs for staff.

Integrity

- Discontinue the current practice of the NAC to review the statistics before dissemination. This practice suggests external influence over the statistics and may imply that the national accounts are not compiled impartially.
- Fill the vacant post of Director-General because the nonappointment has led to uncertainty among staff and users. If the vacancy exists because of the impending plans to reorganize the FBS, then this should be communicated to staff and to the public.

Methodological soundness

- Initiate measures to broaden the range of accounts and tables currently being compiled. In particular, the following should be compiled:
 - regular (preferably annual) supply and use tables that could be used to conduct consistency checks on the estimates, and
 - accounts by institutional sector.

- Improve coverage of merchandise trade. Efforts should be made to derive estimates of cross-border trade not recorded by the customs authorities.

Accuracy and reliability

- Formulate plans for the next rebasing exercise. The estimates should be rebased with a minimum frequency of five years. Thus, following the release of the new series at 1999/2000, the estimates should then be rebased to 2004/05 at the latest.
- Undertake regular (preferably annual) enterprise surveys taking account of all formal activities not covered by administrative statistics. This would improve the source statistics for measuring business services, which is a weak area of the estimates.
- Derive independent estimates of private final consumption expenditure using the data from the HIES. The availability of such estimates would enhance the practicality of consistency checks and help improve the overall estimates.

Serviceability

- Disseminate to the public the statistics that are revised six months after the end of the reference period.

II. 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 Federal Bureau of Statistics (FBS) collects retail and wholesale prices, on the basis of which three indices are compiled: the Consumer Price Index (CPI), Sensitive Price Indicator (SPI), and Wholesale Price Index (WPI). Although the FBS compiles most statistics with a nationwide scope, there is no specific legal provision stating that it should prepare a CPI or WPI for Pakistan. Its responsibility, which is not challenged by any other agency, thus largely rests on tradition.

The authority of the FBS to collect, process, and disseminate statistical series finds its basis in the General Statistics Act, No 69 of 1975 and subsequent decisions by the Federal Government. The FBS is one of three attached departments of the Statistics Division of the Ministry of Finance. Head of the Division is the Secretary, who also is the Federal Statistics Authority.

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

No data sharing with other agencies takes place to prepare the CPI and the WPI: the FBS compiles the statistics that serve as the basis for the weights of both price indices and also collects the periodic price information. The coordination of statistical programs is a task of the National Statistical Council (NSC), in which major ministries, chambers of commerce, researchers, and other users of statistics are represented. In total, there are 34 members. The NSC meets on a regular basis.

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

Article 11 of the General Statistics Act, 1975 stipulates that all information furnished under the Act shall be confidential and not to be published in a form that may disclose the state of affairs of any particular individual, firm, or institution. Respondents' information should not be accessible to the inspection of any person other than for the prosecution for contravention of the provisions of the Act itself. However, individual data may be divulged if the written consent of the person involved has been obtained. Improper disclosure of information is punishable with imprisonment for up to three months, a fine up to 7,000 rupees (about \$110), or both.

In practice, the FBS considers information that is published elsewhere, such as in annual reports or public statements by enterprises, as nonconfidential. This rule is also applied, for instance, in the case of wholesale prices that are available from enterprise catalogs.

Respondents are informed of their rights and obligations with regard to the provision of information. Most FBS survey forms contain a box advising that (i) providing the information required is obligatory under the General Statistics Act, 1975 and (ii) information supplied will be treated as confidential and be used to produce aggregate tabulations and not made available to any government agency or department for tax or any other purpose.

Access to individual data is restricted to staff who require the information in the performance of their duties: computers are password protected and the central data processing center permits access to information by the custodians only. The premises are guarded and rooms are locked by key when agents leave. Price information collected by the regional and field offices is stored in lockers. All official records that are no longer needed, which is usually after five years, are destroyed by a special government service.

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

The General Statistics Act stipulates that any person required to give answers to a statistical questionnaire shall do so the best of his knowledge. Refusal may be punishable with a fine of up to 500 rupees (about \$9) and, in the case of an enterprise, with a further fine of up to 200 rupees (about \$3.50) for every day the offense continues.

For various reasons, these sanctions are never applied in practice. First of all, the General Statistics Act requires that any prosecution for an offense requires the previous sanction of the appropriate government. The amounts of the fines are not indexed and have become insignificant for many nonrespondents. The FBS does not have the legal expertise in-house to start prosecution, and anyhow prefers to convince respondents of the importance of providing information rather than obtaining it by threatening with sanctions. Unfortunately, this has led to low response rates for many surveys. The negative effects are limited, however, for the collection of prices. Possibly this is the result of a special effort to explain the objectives of the surveys and, in the case of the CPI, of regular personal contacts with respondents. The response rate to household surveys is very good.

0.2 Resources

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

The CPI, SPI, and WPI are all compiled by the price statistics section, located in Karachi and headed by a director. Centrally, 22 staff are employed, of which 12 are statistical officers and six statistical assistants. This number is adequate to perform the required tasks. All staff are professionally well-educated; the statistical officers are postgraduates in statistics, mathematics, economics, commerce, or sociology. New staff receive on-the-job training; for sitting staff the opportunities are limited to receiving training in computer use or keeping up with new developments in price statistics as laid down in the revised international CPI and PPI manuals.

In addition to the above, staff in the 35 FBS regional and field offices spend a large portion of their time on the collection of prices. Local staff receive training as well; for this purpose the FBS has developed a *Manual of Instructions for Price Collection*. On the occasion of the recent change of the base years, supervisors received 15 days training in the FBS Lahore training wing and at Karachi. The course included both statistical aspects and technical issues, including the use of computers.

In general, staff turnover is very low in the FBS. The availability at any point in time of a core contingent of trained staff is therefore assured. Nonetheless, a large section of staff appears to feel not well motivated. The reasons are diverse and include a promotion policy that gives little weight to individual performance, low mobility possibilities within the civil service except for the highest grades, insufficient allowances for travel expenses, nonindexation of housing allowances, and in some cases repeated refusal of requests for annual leave. Most of these circumstances result from general government policies and are not typical for the FBS. However, possibilities for improvement are opened by the recent decision to transform the Statistics Division, to which the FBS belongs together with the Agricultural Census Organization and the Population Census Organization, into a more autonomous agency.

Computer resources in the Karachi headquarters are hardly sufficient for the current work program. Most calculations are done on a mainframe that is rapidly becoming obsolete. For instance, there is no database for prices: storage of data is done on diskettes. The number of personal computers is low, and certainly too low in view of the envisaged producer price index that should run on PCs. Computer resources in the regional and field offices are not sufficient. Only a few offices have a PC at their disposal and are able to transmit their price information to Karachi by e-mail. Most offices depend on written overviews that are transmitted to the price statistics section by fax. Some of the smaller offices still depend on express mail delivery.

Financial resources are overall sufficient for the price index program, even if the actual costs are usually higher than the budget permits. An exception is insufficient allowance for travel expenses, which especially hits the price collectors in the regional and field offices.

0.2.2 Measures to ensure efficient use of resources are implemented

Budget control is strict in the Pakistan civil service and the efficient use of resources is a requirement for every agency. On the other hand, tedious clearance procedures and arrears in the payment of budgeted allowances sometimes reduce the possibility of the Statistics Division to respond dynamically to opportunities to improve efficiency. For instance, it is difficult to obtain the Ministry's permission to equip price enumerators with motorcycles, even though the budgetary consequences would be very limited. Consistency in concepts and methodologies across the different units within the FBS avoid unnecessary recoding and adaptation activities. Within the available means, data procedures are managed to minimize processing errors. Coordination meetings are regularly held to monitor the working process.

However, the overall resource usage of the price statistics is not known³ and thus a comparison with other FBS statistics in this respect cannot be made. On a practical level, efficient work processes in the price statistics section are supported by the availability of an extensive manual of operating instructions.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Overall, the managers of the FBS are sensitive to all dimensions of data quality. The organizational infrastructure supports data quality, as evidenced for instance in the following mission statement: “FBS is committed to provide accurate, reliable, timely, comprehensive and user-friendly information to public, private, national and international organizations. FBS will undertake research, up-to-date its technical knowledge, and adopt improved methodologies and new technologies for meeting the future demand of potential users.” However, special processes that focus on quality, such as Total Quality Management, ISO 9000 or external audits, are not used.

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

Reviews are undertaken to identify problems at the various stages of collecting, processing, and disseminating data. At the highest level, guidance in this respect is received from the NSC and its subcommittees. For price statistics, an experts group chaired by the chief economist of the Planning and Development Division provides guidance related to important changes, such as the change of the base year. In addition, a standing panel on price statistics convenes from time to time at the request of the FBS to discuss specific issues. The panel comprises about 20 main users and public and private sector stakeholders and is chaired by the Secretary of the Statistics Division. Further feedback is received, for instance, from a workshop for users of social statistics and from a questionnaire that sometimes is added to the *Pakistan Statistical Yearbook* or specially sent to users.

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

Trade-offs among the various dimensions of quality are recognized, but in making the choice between timeliness and accuracy/reliability, in practice timeliness always receives prevalence. This choice is well-known to the advisory bodies on price statistics.

³ From time to time an estimate is made of the expenditure related to the price collection activity of regional and field offices.

Planning for improvement of data quality at the FBS is evidenced, for instance, in the recent enhancements in the domain of data dissemination (the Statistics Division's website, revamped *Monthly Bulletin of Statistics*, and the new *Pakistan Statistical Pocket Book*), and the concrete plans to further develop the professional skills of staff through extension of the training wing. In the domain of prices, one notes the continuing improvements on the CPI and the development of a producer price index.

The price statistics section listens attentively to user requirements. For instance, at the suggestion of users, the geographical scope of the CPI was recently widened, additional breakdowns were introduced at the commodity level, the treatment of seasonal items was modified, changes were made in the treatment of rents, and even the label "medicines" was changed into "Medicare."

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The General Statistics Act does not contain a provision regarding the professional independence of the data producing agency. Furthermore, the predominant function of the Secretary of the Statistics Division in the decision making process of the FBS could lead to the conclusion that political interference in the statistical process is not excluded.

Still, there is no recent evidence of such interference. The 1996 report of the task force that formulated a proposal to turn the Statistics Division into an autonomous statistical organization contains a noteworthy discussion on this subject: "In recent years the credibility of official statistics has been questioned constantly. The integrity of the data producing agencies and of the systems used in compiling data is frequently challenged, despite the fact that statistics are compiled in accordance with United Nations standards and international practices as far as possible. This state of affairs is often disputed by FBS which categorically denies that it manipulates statistics at the behest of vested interest groups."⁴ The task force said that the charge against the FBS cannot be defended adequately, largely because of lack of transparency in its operations and the non-publication of the methodology used to compile the statistics. Since 1996, the FBS has made good progress in the indicated domains, in particular by way of its acclaimed website.

Concerning price statistics, it is important to note that the bulletins are signed off by the FBS director general and that the data are not reviewed by any other party before publication.

⁴ Report of the Task Force on Proposal for an Autonomous Statistical Organization (Ministry of Finance & Economic Affairs, December 31, 1996), Part I, paragraph 3.

Professional competency plays a key role in the recruitment of staff, but much less so in promotion practices. Staff are appointed to the FBS on a permanent basis after meeting the necessary civil service requirements. The director general can only be appointed from the ranks of the staff and is eligible to remain in the post until retirement. To some extent, professionalism is promoted by contribution to methodological descriptions, organization of conferences or workshops, and permission to attend local meetings of economic associations. Documents for publication are reviewed with the objective of maintaining the professional standards of the FBS.

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

The choice of statistical techniques in price statistics is solely based on statistical considerations. The choice of methodologies is laid down in publications such as the Reports of the Expert Groups on the change of base year of the CPI and the WPI to 2000-2001 (published in February 2002 and May 2003 respectively).

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

The FBS sends a letter of clarification and requests rectification when it becomes aware of erroneous interpretation or misuse of its data. (It first verifies whether possibly a mistake has been made in the statistics.) To prevent misinterpretation, occasionally press briefings are organized. A few years back a workshop for users of statistics was organized. The Coordination section maintains a clipping service.

1.2 Transparency

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

The Statistics Division's website contains a mission statement, as well as the text of the Statistics Act, 1975. FBS publications generally include contact information on where further information can be obtained. The data dissemination policy of the FBS is outlined in the *Brochure of the Federal Bureau of Statistics 2002-2003*, which can be accessed on the FBS website.

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

There is no government access to price statistics prior to the date of release.

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

Data released to the public are clearly identified by the Statistics Division's and/or the FBS's name. The FBS requests attribution when its statistics are reproduced.

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

Advance notice of major changes in methodology is given to newspapers and appears in the Statistics Division's newsletter. Since recently, the website is also used to announce such changes.

1.3 Ethical standards

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

As indicated earlier, the General Statistical Act strictly prohibits divulging individual data. More extensive rules on correct behavior are included in the Civil Service Rules of 1973, of which a copy is available at every FBS office, but these are not widely known by staff. At the Statistics Division level, no further ethics rules are available in writing, and staff are not reminded about the rules from time to time. However, proper conduct is expected from staff and also is an element periodically monitored on an individual basis.

The price statistics section gives much weight to correct behavior in dealing with data providers. The *Manual of Instructions for Price Collectors* includes a section recommending, for instance, politeness rather than an official attitude and underscoring the importance of explaining the purpose of the price collection. These rules are followed up in training sessions.

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 CPI measures changes in the cost for urban households of buying a fixed basket of goods and services representing all types of final consumption expenditure. Four income brackets are distinguished; previously also price indices for different categories of employees were computed. The overall structure of the CPI concepts and definitions follows the existing guidelines of the International Labor Organization. So, for instance, transaction characteristics are taken into account when defining the prices that are collected each month.

2.2 Scope

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

The scope of the CPI is limited to households living in urban centers (there are very considerable differences in consumption pattern between urban and rural households). Excluded are households living in areas under military control. Families of all sizes, economic activities, and income levels are covered. The scope of the transactions is nearly identical to household consumption expenditure as defined in the *1993 SNA*, that is, as monetary purchases, goods and services intended for final consumption, consumption of goods produced on own account, receipts of assistance in kind, and the services of dwellings occupied by their owners. Illegal goods and services (such as wine) are not included.

2.3 Classification/sectorization

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

Neither the Classification of Individual Consumption by Purpose (COICOP) nor the Central Product Classification (CPC) is used. Instead, on the advice of the Experts Group, an eight-digit classification is used, of which the first two digits indicate the nationally used consumption function; the second two digits the type of commodity, of which the manufactured ones are classified according to the Pakistan Standard Industrial Classification; the third pair of digits the item; and the last two digits the urban center.

The price statistics section keeps the deviation from the internationally recommended classifications under review and considering introducing the COICOP and/or CPC.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

The goods and services included in the CPI are valued at local market prices at which they are acquired, that is, including trade and transportation margins and applicable taxes less subsidies on products. As prices are determined by various factors, cash purchases with immediate delivery are recorded. To allow for different types in standing, service, etc., prices are collected in outlets representing different market segments. In line with current international recommendations, sale prices are included except when they reflect an abnormal situation. If the price of an article is controlled through ration stores and also is sold in the open market, the open market price is recorded.

2.4.2 Recording is done on an accrual basis

All prices used for the calculation of the CPI for a particular month are collected in that same month. The following scheme applies:

- Food and beverages are collected during the 11th–14th of the month.
- Apparel, textile and footwear, fuel and lighting are collected during the 1st–3rd of the month.
- Household furniture and equipment are collected during the 4th–6th of the month.
- Recreation, entertainment and education, cleaning, laundry and personal appearance and Medicare are collected during the 7th–10th of the month.

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

In variance with the recommendations of the 1993 SNA, the CPI weights treat the purchase of existing goods on a gross basis instead of net of sales in secondary markets (sale of used cars, furniture, etc.).

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 CPI weights have been derived from the Family Budget Survey that was conducted in urban areas during 2000-2001. The Family Budget Survey is compiled with a frequency appropriate to the change in consumer behavior, but is not annual, which would have allowed compiling a chain index. The institutional coverage is good. All four provinces are covered (except for parts under military restrictions).

The sample design used scientifically sound methods. With respect to urban areas, the Family Budget Survey made use of an area frame developed by the FBS adopting the Quick Count Survey Technique. According to this method, all urban areas have been divided into enumeration blocks comprising about 200-250 households. A total of 22,800 urban enumeration blocks have been distinguished. From this frame, 2,053 primary sample units in 52 cities or towns were drawn according to the probability proportional to size (PPS) method, which was considered sufficient to produce estimates of key variables at the national and provincial level at 95 percent margin of confidence. From these primary sample units, 20 households have been selected by random systematic sampling. The total sample size was

41,060 households; about 10,000 households were surveyed each quarter of the fiscal year 2000-01.

If the selected households had migrated from the primary sample unit, a replacement was sought. Nonresponse was very low (less than 1 percent) and did not lead to replacement of households in order to keep the sampling design intact. The data collected through the Family Budget Survey are sufficiently detailed and include the rental value of owner-occupied dwellings.

Most prices for the CPI are collected through a monthly price collection survey. The coverage is comprehensive, including all types of consumer acquisitions. A stratified random selection has been used to select urban centers in the categories large, medium, and small, complemented with an urban center of less than 50,000 inhabitants in each province (this generated 52 centers). The final selection for the purposes of the price collection included only 35 cities. Considerations were that (i) that not all CPI items were being marketed in all centers, (ii) the price trends remained more or less the same in small centers, and (iii) collecting prices in small centers raised cost issues.

All other selections are made purposively. The 71 markets are selected on volume of sales and the income groups that frequent them. The 374 items are selected on their general availability in urban centers. Outlets are selected on volume of sales.

From each market and for each item, four quotations are obtained. Usually, the simple average of those four is taken as the representative price for that market. The city average price for each item is obtained by averaging all selected markets in that city. The price data are sufficiently detailed by product and use sufficient product specifications to ensure that the same variety is priced each period.

No ad hoc surveys are conducted to supplement the regular survey program, for instance, to identify new products.

Some prices are collected directly, that is, those that are under government control or that have just one provider. This refers to items like electricity, water, and telephone and train fares.

Developments related to prices are monitored through contacts with market committees, newspapers, etc.

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

The Family Budget Survey is consistent with the definitions, scope, classifications, valuation, reference period, and time of recording required in the CPI. This is also reasonably true for the price collection.

3.1.3 Source data are timely

The source data are timely for the purposes of the monthly CPI calculation.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The level of detail for commodities is sufficient for analysis; at least the ten largest groups in the classification are used.

The weights in the overall CPI reflect the aggregate value of the commodity group acquisitions in the base year in the 52 cities that were selected through stratified random sampling. The weights, thus, can be seen as representing the total urban population, although it might have been preferable to take the weight totals directly from the Family Budget Survey. No corrections are made for underreporting of certain types of expenditures.

For both rented and owner-occupied housing, the price changes are computed on the basis of eight indices representing construction costs. To take out undue fluctuations, these data have furthermore been smoothed by taking the geometric mean for the past 24 months. Apart from the smoothing, this procedure does not reflect internationally accepted standards, as construction costs are a too indirect measure of actual rentals (or, in the case of owner-occupiers, the estimated rentals that tenants would pay for similar accommodation). The root of the problem is that the measurement of actual rentals poses severe practical difficulties in Pakistan. First of all, most households live in dwellings they own, so the rental market is thin. More serious even is the fact that contractual arrangements fix prices for long periods, resulting in unacceptable results when trying to measure the price change through surveys.⁵ The problem has large repercussions for the overall CPI, because the weight of housing in the total is 23.4 percent. A solution that probably most often is taken in such situations is to start recording changes in the purchasing price of dwellings or, if there are no better alternatives, to delete the housing item completely from the scope of the CPI.

⁵ In the Family Budget Survey, the imputed rentals for owner-occupied dwellings are based on self-assessments by the owners.

An unbiased formula is used to calculate the elementary level indices, namely the ratio of average prices. Average prices are mostly determined as the arithmetic average of the observed quotations. Where the spread in prices is quite large, a geometric average is taken. To compute the national CPI, the unweighted average of quotations in all selected markets is taken. This procedure is acceptable if the CPI represents the selected cities, rather than the full urban population, as discussed above.

An appropriate index formula is used to aggregate the elementary indices to higher levels, namely the fixed-based Laspeyres. The weight reference period and the price reference period are the same, that is, the full year 2000-2001. The use of a full year as price reference period is acceptable practice, but most countries prefer to choose a particular month (say June 2001) as the price reference period. This avoids a certain jump in the series between the end of the base year and the start of the next year (so, in the Pakistan case between June and July 2001).

The weight reference year is very recent. When new weights are introduced, the FBS constructs backward series for main categories and the overall CPI by way of splicing over the annual data.

Temporarily missing prices are appropriately handled by carrying the last reported price forward for a short period. If the item remains unavailable in the selected outlet, another outlet is chosen. When a product disappears from all markets (an example is the radio license fee), normally a close substitute is selected (in the example, the television license fee). In case of substitution, a base year price for the new item is imputed by applying the price change since the base year for the old item to the current price of the new item. If called for, appropriate adjustments are made for quality differences in the items. The FBS does not add new products to the sample between changes of the base year.

With respect to seasonal products, monthly weighting schemes have been developed that leave the weight for the main commodity group unaffected.

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

The 52 selected urban centers are representative of about 68 percent of the total population. The implicit deflators in the national accounts are not really an alternative for the part not covered by the CPI because the national accounts data for household consumption are calculated as a residual.

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 no sampling error; the results of the assessments are monitored and made available to guide planning

Sampling errors for the Family Budget Survey were calculated; these data are analyzed. A post-enumeration survey was carried out.

Reportedly, the influence of outliers in the price quotations is limited. Still, high-value transactions and other unlikely quotations are verified.

At the regional and field offices, supervisors are obliged to verify each month 10 percent of the recorded price quotations. Their understanding is supported by notes made by the enumerators in a remarks column. For instance, if there is a variation of 5 percent or more in prices compared to the previous month, specific reasons should be given. The supervisors' findings are laid down in written reports. The accuracy of individual price data also is verified in the Karachi office of the FBS. The computer-assisted verification concentrates on temporal and geographical consistency. For this purpose, among other things, standard deviations are computed. Consistency with other data sources, such as newspaper reports, is reviewed as well. Inspection visits are undertaken to the regional or field offices in cases where persistent problems are noted, but no external audits take place.

Source data are especially scrutinized in the context of a change in the base year.

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 CPI is compared with the results of the SPI and the WPI. Validation is also done with other sources, such as newspapers, the Bureau of Supply and Prices, and the commercial agency Vital Information Service that collects prices in Karachi and Lahore.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Once the prices have been verified as described above, they are sent to the computer service for the calculation of the indices. The indices thus prepared are then checked by a number of agents before being submitted to the Director-General for final decision.

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

See above (3.4.2).

3.5 Revision studies

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

On the occasion of the change of the base year, the Experts Group analyzes the revisions carried out. The relative report is printed and available for interested users. Occasionally, if errors are found, the CPI is revised. In the past, this has happened to the data for three months back. This informs the statistical processes in the sense of being a warning to be more vigilant in certain areas.

4. Serviceability

4.1 Relevance

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

Monitoring the relevance and practical utility of the CPI takes place largely in the framework of the Experts Group and the Panel for Price Statistics. These bodies comprise users as well as other public and private stakeholders. From time to time, also feedback is received on the occasion of workshops and seminars, or from user questionnaires. The CPI also is a standard item on the agenda of the monthly meetings of the Economic Coordination Committee of the Cabinet, in which the secretary of the Statistics Division and the FBS Director-General participate.

To a limited extent, the FBS participates in international meetings in which the relevance of price indices is discussed. Normally, the Director-General attends to such meetings.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The timeliness of the CPI is in accordance with the GDDS as well as the SDDS.

4.2.2 Periodicity follows dissemination standards

The periodicity of the CPI is in accordance with the GDDS as well as the SDDS.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Estimates produced for all classification typologies (commodities, geographical areas, and income groups) are consistent in the sense that the aggregate is invariant to the typology of aggregation.

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

The CPI is published in the *Pakistan Statistical Yearbook* over a consistent period of ten years, which is satisfactory. On request, these data are provided in a 59 item breakdown. On the occasion of the FBS's 50-year jubilee, consistent CPI series have been constructed that show the price developments over half a century.

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

The CPI is consistent with the national accounts in the sense that the index data are used to deflate the national accounts household final consumption expenditure.

4.4 Revision policy and practice

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

Thus far, the CPI has been revised with a periodicity of every ten years, which is a bit long. A reduction to every five years is being considered. The most extensive report on the change of the base year (the one by the Experts Group) is available to the public.

4.4.2 Preliminary data are clearly identified

In principle, the monthly data of the CPI are not revised; as a consequence, there are no preliminary data. If a mistake is rectified, all the detail as previously published is again disseminated, accompanied by a note explaining the reason for the change.

4.4.3 Studies and analyses of revisions are made public

Users are informed of the causes of revisions in the statistical series. The report of the Experts Group on the change of the base year is made public (after approval by the Minister of Finance).

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 first release regarding prices, the *Monthly Review of Price Indices*, has a clear layout of text and tables. Data for the CPI, SPI, and WPI are presented side-by-side, allowing a good analysis of various indices. The tables give the changes for the most recent period in comparison with one month back and one year back. A short commentary is included. The tables provide information on the index weights. Some publications include a few graphs.

The Family Budget Survey 2000-2001, from which the weights for the CPI were derived, has not been published, and the CPI metadata contain few details on this survey. However, a five-page description of the sample design can be obtained from the FBS Sampling section on request.

5.1.2 Dissemination media and formats are adequate

The data are first released in the five-page *Monthly Review of Price Indices*, which is followed by several publications, some of which (including the *Monthly Bulletin of Statistics*, which is free and available on the Internet) present extensive detail.

5.1.3 Statistics are released on a preannounced schedule

The CPI is released on the 11th of the month following the reference month according to a preannounced schedule.

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

Hardcopies of the data are released to selected users within the government as well as to the press shortly before they are published on the FBS website.

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

Nonpublished (but nonconfidential) subaggregates are made available upon request. This opportunity is not widely publicized, but main users have been made aware of it in a letter.

5.2 Metadata accessibility

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

Metadata on the FBS price indices are published on the Statistical Division's website, in the annual *Brochure of FBS*, the *Pakistan Statistical Yearbook*, the July and December issues of the *Monthly Statistical Bulletin*, and on the IMF Data Standards Bulletin Board. The level of detail given is sufficient for most users. A detailed methodological note is available on request.

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

There exist slightly different versions of the metadata. The one in the annual *Brochure of FBS* is best suited for a general public.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

Most publications of the FBS contain general contact information, and some include name and telephone numbers of directors. The *Monthly Bulletin of Statistics* includes no names or telephone numbers of specialists in price statistics. Nevertheless, prompt and knowledgeable support is available to users of the CPI.

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

A catalog of publications and some other documents, such as training notes, are available, including on the Internet. A catalog of other documents and services does not exist. Assistance with placing orders is available from the National Book Foundation, which is the agency responsible for the sale of statistical publications. The catalog includes many very old publications and is not in all cases kept up-to-date.

Table 2. Pakistan ROSC: Data Quality Assessment Framework—Summary of Results for the Consumer Price Index
(Compiling Agency: Federal Bureau of Statistics)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment		X					Legislation to give more autonomy to the FBS (short term).
0.2 Resources			X			There is room for improvement of staff motivation and computer resources.	
0.3 Quality awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions		X					
2.2 Scope			X				
2.3 Classification/Sectorization			X			CPI is not all-urban. Rural areas are not covered. COICOP not used.	Adoption of COICOP in the short run.
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			Housing recorded on basis of costs.	
3.4 Assessment and validation of intermediate data and statistical outputs		X					
3.5 Revision studies		X					
4. Serviceability							
4.1 Relevance		X					
4.2 Timeliness and periodicity		X					
4.3 Consistency		X					
4.4 Revision policy and practice		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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5. Accessibility							
5.1 Data accessibility			X			Some users receive data shortly in advance of public dissemination.	
5.2 Metadata accessibility			X			Family Budget Survey not published.	
5.3 Assistance to users			X			Contact persons not always publicized. Catalog of services not available.	

RECOMMENDATIONS FOR PRICE INDICES

Prerequisites of quality

- Study measures to improve the low response rates to statistical questionnaires, for instance by indexing the relevant fines set by the General Statistics Act, 1975 and bringing a number of extreme cases of refusal to court.
- Keep a file that contains letters from enterprises in which they agree with the publication of individual wholesale price information.
- Search for ways to improve staff motivation, such as by giving more weight to individual performance in the promotion procedures.
- Modernize the computer system to allow for (i) maintaining a computer-stored database for price statistics, (ii) introducing electronic data transmission by all field offices, and (iii) compiling the producer price index on PCs.

Integrity

- Pursue with vigor the implementation of the autonomous statute of the Statistics Division, among other things, to improve efficient allocation of resources and to mitigate outside criticism.
- Improve the opportunities for staff to follow training on the theory and implementation of the new CPI and PPI manuals organized by international organizations.
- From time to time, remind staff of the ethical standards expected from them.

Methodological soundness

- Consider expanding the scope of the CPI to represent of all urban areas (such as the Family Budget Survey 2000-2001 allows to do), and eventually to represent all of Pakistan by including information on rural areas.
- Implement the planned introduction of the COICOP as soon as possible.

Accuracy and reliability

- Consider using geometric averages instead of arithmetic averages of price quotations to calculate all elementary level indices.
- Review the treatment of housing in the CPI, preferably by changing the present estimate of rentals on the basis of construction costs, by an index reflecting the cost of purchasing and maintaining dwellings.
- Make sure, for instance by occasional visits to direct reporting enterprises, that the wholesale prices they provide are actual transaction prices and not mere list prices.
- In the next change of base year for the WPI, search for better information to establish the value of “marketable surplus,” in particular regarding smaller manufacturing enterprises.

Serviceability

- Implement the decision to rebase the CPI and the WPI every five years.

Accessibility

- Take measures to ensure that price index data are disseminated to all users simultaneously, for instance, by setting a specific hour at which the press release is sent out by e-mail or facsimile and is posted on the Internet.
- Publish more technical information on the Family Budget Survey 2000-2001 from which the weights for the CPI have been taken.
- Make sure that all publications of the CPI and WPI are accompanied by the contact information of a person from which further information can be obtained.
- Provide the FBS library with a copy of the *Monthly Review of Price Indices*.
- In the CPI tables, explain with a note what the “combined” index stands for.
- Disseminate information on the availability of unpublished data, such as disaggregations and long time series, and detailed metadata. Update the information in the FBS catalog.
- Improve the printing facilities of the publication service.

III. WHOLESALE PRICE INDEX

0. Prerequisites of quality

See section on the consumer price index.

1. Integrity

See section on the consumer price index.

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 wholesale price index (WPI) is designed to measure the directional movement of prices in the domestic primary and wholesale markets. The overall structure of the WPI concepts and definitions are in accordance with internationally accepted standards.

2.2 *Scope*

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

The scope of the WPI covers the full country and five main commodity groups:

- food;
- raw materials;
- fuel, lighting & lubricants;
- manufactures, and
- building materials.

Owing to practical difficulties, the weights for manufacturing are based on enterprises with 10 or more workers.

2.3 Classification/sectorization

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

The classification used is the Pakistan Standard Industrial Classification, which is derived from the International Standard Industrial Classification of All Economic Activities (ISIC), Rev.2. It has been decided to change to ISIC Rev. 3 in the near future.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

The prices collected are those realized by primary sellers or going at organized wholesale markets. They normally include applicable transportation costs and (local) taxes, except for the national sales tax, which is considered a tax imposed on final customers. For agricultural products, an adjustment for transportation may be made to bring the observed wholesale prices closer to the price received by the farmer in the primary market. The prices recorded should reflect cash transactions with immediate delivery. In several cases, list prices are accepted (see section 3.1.1).

2.4.2 Recording is done on an accrual basis

All prices used for the calculation of the WPI for a particular month are collected during the 13th through the 15th of that same month.

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

Not applicable.

3. Accuracy and Reliability

3.1 Source data

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

The WPI weights reflect the value of marketable surplus in the base year, marketable surplus being defined as the sum of output value (less final consumption of own-account production in the case of agricultural products) and imports, less exports. In principle, not only final consumption should be subtracted from output, but also other output that does not appear on the market, namely, goods used for intermediate consumption, fixed capital formation, and net additions to inventories. In practice, however, the influence of these flows may not seriously impair the quality of the weights.

The principal sources for the weights are statistics on agriculture, the Census of Manufacturing Industries (CMI), and foreign trade statistics. Unfortunately, the CMI is limited to establishments with more than 10 workers; it was considered less appropriate to add the estimates for small manufacturing that are prepared in the framework of the national accounts. The accuracy of the agricultural statistics is, on the whole, considered adequate, even if the part of output used in the producers' households is difficult to estimate. The CMI, although sound in design, suffers from low response rates that affect the robustness of the grossed-up data. Foreign trade statistics adequately record imports and exports declared to customs. However, it is generally accepted that considerable smuggling takes place in certain types of commodities, which is not reflected in foreign trade statistics.

In total, the basket includes 106 commodities and 425 items, which are satisfactory numbers for compiling the WPI.

The monthly price collection survey is mainly based on observations during personal visits of FBS enumerators to primary wholesale markets in 18 cities. For each item, four quotes are collected, but only in the principal market for the item in question. The prices for certain items are directly reported by producers or importers (petroleum products, cars, etc.), or obtained from trade associations (cotton, timber, etc.). The markets have been selected on their trade volumes; the items on their trade volumes and general availability. No random sampling techniques have been used for this purpose.

If prices are collected from producers rather than markets, only a single quote is available. This is because the selected item is very specific (a certain brand of medicine, type of electric appliance, trade name shoe, etc.). Usually list prices are accepted. This not only generates concerns about the protection of individual data if publication takes place at item level,⁶ but also requires great care in ensuring that the responses reflect actual market prices. Because several of the prices directly provided by producers have shown no changes for long periods (up to eight years), it is likely that sometimes not actual prices have entered the index.

No ad hoc surveys are conducted to supplement the regular survey program.

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

The source data reasonably approximate the definitions, time of recording, etc., required in the WPI. An exception is noncoverage of the manufacturing enterprises in which less than ten workers are employed.

⁶ The FBS states that the list prices in question are in the public domain.

3.1.3 Source data are timely

The source data are timely for the purposes of the monthly WPI calculation.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The level of detail at which the WPI calculations take place is sufficient.

To calculate the elementary level indices, the simple arithmetic averages of the prices observed in all markets where the items are traded are compared with the average price in the base year. A geometric mean is taken if the prices fluctuate importantly, which is, for instance, the case for cotton. An appropriate index formula is used to aggregate the elementary indices to higher levels, namely the fixed-based Laspeyres. The weight reference period and the price reference period are the same, that is, the full year 2000-2001. The use of a full year as price reference period is acceptable practice, but most countries prefer to choose a particular month (say June 2001) as the price reference period. This avoids a certain jump in the series between the end of the base year and the start of the next year (so, in the Pakistan case between June and July 2001).

The weight reference year is very recent. When new weights are introduced, the FBS constructs backward series for main categories and the overall WPI by way of splicing over the annual data.

Temporarily missing prices are appropriately handled by carrying the last reported price forward for a short period. If the item is unavailable for more than two months, a close substitute is selected. In case of substitution, which is rather exceptional for the WPI, a base year price for the new item is imputed by applying the price change since the base year for the old item to the current price of the new item. If called for, appropriate adjustments are made for quality differences in the items. The FBS does not add new products into the sample between changes of the base year.

With respect to the seasonal products in fruits and vegetables, monthly weighting schemes have been developed that leave the weight for the total product group unaffected.

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

Reportedly, the proportion of domestically traded goods falling in the definition of the WPI that is not covered by the index is about 20 percent. This is a satisfactory percentage.

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 no sampling error; the results of the assessments are monitored and made available to guide planning

The influence of outliers in the price quotations is fairly limited. Still, high-value transactions and other unlikely quotations are verified, and if no satisfactory reason is found they are deleted from the further calculations.

At the regional and field offices, supervisors are obliged to verify each month 15-20 percent of the recorded price quotations. Their findings are laid down in written reports. The accuracy of individual price data also is verified in the Karachi office of the FBS. The computer-assisted verification concentrates on temporal and geographical consistency. For this purpose, among other things, standard deviations are computed. Consistency with other data sources, such as newspaper reports, is reviewed as well. Inspection visits are undertaken to the regional or field offices in cases where persistent problems are noted, but no external audits take place.

Source data are especially scrutinized in the context of a change in the base year.

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 WPI is compared with the results of the SPI and the CPI. Validation is also done with other sources, such as the data from the Bureau of Supply and Prices, market committees in different urban centers, and newspapers.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Once the prices have been verified as described above, they are sent to the computer service for the calculation of the indices. The indices thus prepared are then checked by a number of agents before being submitted to the Director-General for final decision.

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

See above (3.4.2).

3.5 Revision studies

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

On occasion of the change of the base year, the Experts Group analyzes of the revisions carried out. The relative report is printed and available for interested users. Occasionally, if errors are found, the WPI is revised. In the past, this has happened to the data for three months back. This informs the statistical processes in the sense of being a warning to be more vigilant in certain areas.

4. Serviceability

4.1 Relevance

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

Monitoring of the relevance and practical utility of the WPI takes largely place in the framework of the Experts Group and the Panel for Price Statistics. These bodies comprise users as well other public and private stakeholders. From time to time, also feedback is received on the occasion of workshops and seminars, or from user questionnaires. The WPI also is a standard item on the agenda of the monthly meetings of the Economic Coordination Committee of the Cabinet, in which the secretary of the Statistics Division and the FBS Director-General participate.

To a limited extent, the FBS participates in international meetings in which the relevance of price indices is discussed. Normally, the Director-General attends such meetings.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The timeliness of the WPI is in accordance with the GDDS as well as the SDDS.

4.2.2 Periodicity follows dissemination standards

The periodicity of the WPI is in accordance with the GDDS as well as the SDDS.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Estimates produced are internally consistent.

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

The WPI is published in the *Pakistan Statistical Yearbook* over a consistent period of ten years, which is satisfactory.

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

The WPI is consistent with the national accounts in the sense that the index data are used to deflate various items in the accounts.

4.4 Revision policy and practice

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

Thus far, the WPI has been revised with a periodicity of every ten years, which is a bit long. A reduction to every five years is being considered. The most extensive report on the change of the base year (the one by the Experts Group) is available to the public.

4.4.2 Preliminary data are clearly identified

The monthly data of the WPI are seldom revised; as a consequence, there are no preliminary data. If a mistake is rectified, all the detail as previously published is again disseminated, accompanied by a note explaining the reason for the change.

4.4.3 Studies and analyses of revisions are made public

Users are informed of the causes of revisions in the statistical series. The report of the Experts Group on the change of the base year is made public (after approval by the Minister of Finance).

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 first release regarding prices, the *Monthly Review of Price Indices*, has a clear layout of text and tables. Data for the CPI, SPI, and WPI are presented side-by-side, allowing a good analysis of various indices. The tables give the changes for the most recent period in comparison with one month back and one year back. A short commentary is included. The tables provide information on the index weights. Some publications include a few graphs.

5.1.2 Dissemination media and formats are adequate

The data are first released in the five-page *Monthly Review of Price Indices*, which is followed by several publications, some of which (including the *Monthly Bulletin of Statistics*, which is free and available on the Internet) provide extensive detail.

5.1.3 Statistics are released on a preannounced schedule

The WPI is released on the 11th of the month following the reference month according to a preannounced schedule.

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

Hardcopies of the data are released to selected users within the government as well as to the press shortly before they are published on the FBS website.

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

Nonpublished (but nonconfidential) subaggregates are made available upon request. This opportunity is not widely publicized, but main users have been made aware of it in a letter.

5.2 Metadata accessibility

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

Metadata on the FBS price indices are published on the Statistical Division's website, in the annual *Brochure of FBS*, the *Pakistan Statistical Yearbook*, the July and December issues of the *Monthly Statistical Bulletin*, and on the IMF Data Dissemination Bulletin Board. The level of detail given is sufficient for most users. A detailed methodological note is available on request.

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

There exist slightly different versions of the metadata. The one in the annual *Brochure of FBS* is best suited for a general public.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

Most publications of the FBS contain general contact information, and some include names and telephone numbers of directors. The *Monthly Bulletin of Statistics* includes no names and telephone numbers of specialists in price statistics. Nevertheless, prompt and knowledgeable support is available to users of the WPI.

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

A catalog of publications and some other documents, such as training notes, is available, including on the Internet. A catalog of other documents and services does not exist. Assistance with placing orders is available from the National Book Foundation, which is the agency responsible for the sale of statistical publications. The catalog includes many very old publications and is not in all cases kept up-to-date.

Table 3. Pakistan ROSC: Data Quality Assessment Framework—Summary of Results for the Wholesale Price Index
(*Compiling Agency: Federal Bureau of Statistics*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment		X				Legislation to give more autonomy to the FBS (short term).	
0.2 Resources			X			There is room for improvement of staff motivation and computer resources.	
0.3 Quality awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions		X					
2.2 Scope		X					
2.3 Classification/Sectorization		X					
2.4 Basis for recording		X					Publish Producer Price Index (short term).
3. Accuracy and reliability							
3.1 Source data			X			Lack of robustness in the sources for the weights.	
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					
4. Serviceability							
4.1 Relevance		X					
4.2 Timeliness and periodicity		X					
4.3 Consistency		X					
4.4 Revision policy and practice		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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5. Accessibility							
5.1 Data accessibility			X			Some users receive data shortly in advance of public dissemination.	
5.2 Metadata accessibility		X				Contact persons not always publicized.	
5.3 Assistance to users			X			Catalog of services is not available.	

Note:

Recommendations regarding the Wholesale Price Index can be found on the pages directly following Table 2.

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)⁷ for the consolidated general government sector.

However, the MOF has accepted responsibility for compiling GFS for the budgetary sector under the general provisions of the federal government Rules of Business 1973⁸ for the Finance Division, which require that the Ministry of Finance (MOF) provide advice on economic policies, and promotion of economic research. This is interpreted as including the responsibility for producing fiscal statistics. The MOF role in producing and disseminating fiscal statistics is not challenged by other agencies. The MOF compiles and disseminates, for analytical purposes, quarterly and annual GFS, for the budget sectors for all levels of government in the *Economic Survey*, and on its website. Quarterly data on central government gross debt are published on the SBP website. To date, MOF has not taken responsibility for compiling GFS for non-budget agencies.

There is no dedicated division in the MOF responsible for the compilation of GFS, which is carried out by staff in addition to their regular responsibilities.

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

Responsibility for preparation of government accounts lies with the Accountant General for Pakistan Revenue (AGPR) for the central (federal) government, and the provincial accountant generals (AGs) at the provincial and local government level. AGPR compiles GFS revenue and expenditure statistics for the central government budget and provides these data to MOF on a monthly basis. MOF and AGPR cooperate closely in monitoring government receipts and expenditure, and data sharing arrangements work smoothly.

⁷ In this report, “GFS” refers to those fiscal data compiled and disseminated, for analytical purposes, according to internationally accepted standards or guidelines.

⁸ These are regulations derived from the constitution and have the force of law.

Provincial government data are similarly compiled by provincial AGs agencies and provided to MOF and AGPR on a monthly basis. Provincial GFS include local government data down to the district level.⁹

GFS domestic financing data¹⁰ are compiled by the State Bank of Pakistan (SBP) and provided to MOF monthly.¹¹ These arrangements also work satisfactorily. External financing data are compiled by the External Affairs Division of MOF.

GFS debt data are compiled by the Debt Management Unit (for domestic debt) and External Affairs Division (for external debt) of MOF.

The Economic Advisor wing of MOF coordinates the provision of government finance data to the Federal Statistical Bureau for use in national accounts compilation.

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

Only budget sector accounting or administrative data are used in compiling GFS and, therefore, confidentiality issues do not arise.

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

Provision of revenue and expenditure data by AGPR/AGs, and financing data by the SBP, is based on informal arrangements between the agencies. No legal mandate is present, or seen as necessary, to obtain these data.

There is no legal mandate and/or measures to encourage reporting of data for extra-budgetary units 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

No staff in MOF, AGPR, or SBP are assigned specifically to GFS compilation, which is done in addition to their regular tasks.

⁹ This covers the bulk of local government receipts and expenditures.

¹⁰ Except for National Savings Scheme securities, which are compiled by the Central Directorate of National Savings of MOF.

¹¹ But with a lag of two months.

Sufficient staff and computing resources are available in MOF to compile GFS on the current limited basis. However, a need exists for more extensive statistical training of staff, who presently rely on on-the-job training, which focuses mainly on learning processing procedures. MOF staff retention is not a problem, in part because of the existence of a merit awards program.

A need exists in AGPR and provincial AGs for better computer resources and systems to carry out their role in compiling GFS aggregates from accounting entries. AGPR and AG staff also need extensive GFS statistical training

While existing resources are sufficient for current GFS compilation—that is, covering the summary operations of the budgetary government—these resources would not be sufficient for the compilation of consolidated general government data covering the full range of GFS classifications.¹² A dedicated GFS group is also required to effectively develop an output and user focus, to improve the serviceability and accessibility of GFS.¹³

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, AGPR/AGs, and the SBP.

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. GFS compilers follow established procedures and use the best available accounting data. However, they lack a user perspective on the outputs of this process, and therefore the quality focus is on procedures rather than products.

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

Processes are in place to monitor the quality of data collection and processing. Accounting data are produced monthly by AGPR and the provincial AGs, and then provided to the

¹² NOTE: The imminent introduction of a new budget chart of accounts aligned with the *GFSM 2001* classifications, as part of the Project for the Improvement of Financial Reporting and Auditing (PIFRA), provides an opportunity to introduce a computerized system to automatically generate detailed fiscal statistics using the *GFSM 2001* classifications, and at the same time reduce the cost of compiling GFS.

¹³ See comments under the serviceability and accessibility dimensions.

various agencies to validate the accounting data (called the reconciliation process). The process of reconciliation is overseen by the Fiscal Monitoring Committee (FMC).¹⁴ The FMC checks that data are reconciled within a reasonable timeframe, and examines major revisions to data resulting from this process.

Fiscal data are initially compiled using preliminary and un-audited data, but are subsequently recompiled against audited data. The discrepancy between the deficit/surplus derived from revenue and expenditure data and that derived from financing data is monitored and reconciled as far as possible.

Planned improvements to government accounting standards have taken account of international accounting standards (IFAC)¹⁵ and are generally consistent with the *GFSM 2001* classification structure.

No systematic process is in place to for obtain feedback from users of GFS, but note is taken of comments that are made in the public arena (e. g. press comments, various economic forums). Contact details are provided in Pakistan's GDDS website but not in the *Economic Survey* or on the MOF website.

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

No specific processes are in place to deal with quality considerations or statistical planning. Improvement in fiscal statistics is being addressed in the context of improvements to accounting standards and processes. Trade-offs in quality between timeliness and accuracy are implicitly taken into account in disseminating preliminary statistics, followed by statistics based on audited data. Because of the procedural focus referred to above, compilers are generally unaware of new and emerging data requirements.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

No specific laws establish the professional independence of the staff responsible for producing and disseminating GFS. However, the AGPR and provincial AGs have autonomy

¹⁴ Which comprises representatives from MOF, AGPR, SBP, Central Board of Revenue (CBR), External Affairs Division of the MOF (EAD), and the National Savings Schemes (NSS).

¹⁵ International Federation of Accountants.

under law in carrying out their accounting functions, and there is a longstanding convention of independence of the MOF in providing and publishing fiscal data.

Users can expect that the GFS on the MOF website are published within a regular timeframe (two months after the end of the reference quarter). This timeframe is stated on the GDDS website, but not on the MOF website.

There are no professional statistical staff in the MOF, and to date there have not been systematic efforts to promote professionalism of GFS compilers.

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

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. The administrative sources used in compiling GFS are obvious and appropriate, and the content and format of the statistics are based on IMF recommendations.

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 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. While explanations can be provided to enquiries concerning GFS, explanatory material is not provided to assist in interpretation of published statistics.

1.2 Transparency

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

No restrictions prevent public access to GFS. The compilation of existing GFS is implicitly governed by laws and regulations related to the budgeting and planning process (Rules of Business, 1973), and also by administrative decisions and arrangements, which are not made public. However, closely related material is made public. For example, exposure drafts on the proposed changes to accounting standards have been issued, and public comments invited.

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 the GDDS website but not in other dissemination media.

No political approval process needed for publication of GFS, which are released as soon as validation processes are complete.

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

GFS are not produced by a statistical unit as such and are merely identified in the *Economic Survey* as products of the Budget Wing of MOF. GFS disseminated on the MOF website are not explicitly sourced.

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 and compilation techniques to compile GFS for many years. However, a major change to the source data used (i. e., the use of AGPR/AGs accounting data) was made after an IMF mission in 2000. This resulted in substantial revisions to previously published data, but users were not informed about the change to methodology or alerted to the consequent revisions.

No specific changes are planned in the foreseeable future. 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 Pakistan civil servants are governed by a published code of conduct that makes them responsible for proper application of laws and regulations. Also, the Rules of Business 1973 specifically applies (rule 14) to instructions that contravene a law, rule, or policy, requiring that fact to be pointed out to the authority giving the instruction.

2. Methodological soundness¹⁶

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 quarterly 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 (GFSM 1986)*. However, in the treatment of privatization receipts the analytic framework resembles the methodology of the *Government Finance Statistics Manual 2001 (GFSM 2001)*.

The description of published external government debt indicates that it includes government guaranteed debt.¹⁷ This treatment is not in line with internationally accepted standards, which require that outstanding government debt should be identified separately from debt guaranteed by government. The composition of government debt figures needs to be clarified, and any guaranteed debt shown separately from government debt.

No specific plans to migrate to the *GFSM 2001* framework. The authorities are, however, keen to improve the existing framework and classification. Presenting the existing cash GFS data in the *GFSM 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 *GFSM 1986* and *GFSM 2001*, GFS should be compiled for the general government sector and its subsectors. The GDDS standard is to compile GFS for all the units of the consolidated central government sector, that is, the budgetary central government, extra-budgetary funds, and social security fund(s).

¹⁶ An interim period is provided for countries that have yet to adopt *GFSM 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 *GFSM 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 *GFSM 2001*.

¹⁷ However, it is not clear whether guaranteed debt includes debt of non-government entities (including public corporations) guaranteed by government (the correct meaning of guaranteed debt), or debt of government on-lent to other agencies, which should be included in government debt.

In Pakistan, GFS cover the budget sectors for the three levels of government. There are no separate social security funds in Pakistan, but some extra-budgetary funds exist at the central government level and are not covered in GFS. Although extra-budgetary funds are relatively small in Pakistan, they are not insignificant,¹⁸ and their exclusion from GFS results in incomplete coverage of central government transactions.

Coverage of local government extends only to the local government district level, but because only relatively minor transactions are generated at lower levels of local government, this does not entail significant loss of information.

Because the budget sectors in Pakistan cover more than 90 percent of central government transactions and more than 95 percent of general government transactions, data coverage is adequate for fiscal analysis.

Data are available on the stocks and flows between budget units (levels of government), and payments and receipts between these units are reconciled by AGPR. This allows consolidated statistics to be produced for provincial governments and the whole of general budgetary government for Pakistan.

Data are available covering revenue items to approximately the level specified in *GFSM 1986*. However, expenditure data are not provided at the level of detail required by *GFSM 1986*. Specifically, expenditure is classified on a mixture of economic and functional classification, with defense and government administration expenditures being shown as separate lines with no economic detail. No other functional detail is provided, and the economic detail is far less than required by *GFSM 1986*. Financing information is classified only to broad counterparty institutional sectors, and little instrument detail is provided.

Debt data also cover the budget sectors, but any borrowing by extra-budgetary units is likely to be done through the budget sectors, so the whole of general government is effectively covered, at least under present arrangements.

2.3 Classification/sectorization

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

Institutional sectors are not explicitly defined. As noted above, only the budget sectors for each level of government are included in GFS. GFS are produced for both the central and provincial levels of government, as well as for consolidated budgetary government.

¹⁸ The most significant extra-budgetary fund is ZAKAT, which handles transactions related to Muslim religious observance (providing aid to the poor) but is controlled by the government.

However, the local government sector is not distinguished from provincial governments. The lack of separate data for the local government sector within each province is particularly unfortunate given recent government initiatives to devolve more power over resources to the local government sector.

Pakistan railways and Pakistan Post are regarded as budget enterprises. Although the gross operations of these agencies are not included in the budget, substantial transfers are made from the budget (especially to Pakistan Railways) for both capital and current purposes, and are classified as grants in GFS. The current transfers (the largest component) should be classified as subsidies to public corporations in accordance with *GFSM 1986/2001*.

Public corporations carry out some quasi-fiscal activities (e. g., the provision of goods and services to the poor at below-market rates). However, in most cases, the additional costs or loss of revenue incurred by these quasi-fiscal activities are explicitly covered by subsidies from the budget sector, and therefore no additional action is required to bring quasi-fiscal activities into the scope of GFS.

Revenue, lending minus repayments, and financing are broadly classified using the methodology set out in the *GFSM 1986*. However significant differences from *GFSM 1986* exist for grants and expenditure, as follows:

Revenue and grants: At an aggregate level, all transactions are appropriately classified as revenue and grants according to international standards, except that foreign grants received are classified as financing, rather than being included in revenue and grants (1986 standard) or revenue (2001 standard), and central government loans to provincial governments are included in provincial government revenue.

A distinction is made between tax revenue and nontax revenue. At the consolidated government level, tax revenue is classified by whether it is (i) taxes on income and profits; (ii) taxes on property; (iii) taxes on goods and services; (iv) taxes on international trade; or (v) other taxes. These main tax categories are almost fully consistent with GFS methodology, except for the category “other taxes,”¹⁹ which include motor vehicle taxes that should be classified as *taxes on goods and services*. Non-tax revenues are defined broadly according to the *1986 GFS* methodology.

About one quarter of total non-tax revenue is classified as other miscellaneous revenue (September quarter 2003). Although more details are available in the source data, no additional information on miscellaneous revenue is available in GFS.

Expenditure: At an aggregate level, all transactions are appropriately classified as expenditures according to international standards. The classification of expenditures broadly

¹⁹ This tax category consists of stamp duties, motor vehicle tax, and other taxes.

follows the framework used by the IMF for its operational work, but falls far short of what is required by either the *1986 GFSM* or *2001 GFSM*.

Expenditures are classified according to whether they are current or “development and net lending.” Current expenditures are classified into central (“federal”) and provincial, with no further detail given for provincial expenditures, which comprise approximately one quarter of the total. For central government expenditures, only very summary detail is provided, with “defense and security” and “general administration and services” as separate items, and interest payments, grants, and subsidies the only economic items shown.

For development and net lending, the only distinction made is between capital expenditure—the public sector development program (PSDP)—and net lending (lending minus repayments). No details of capital expenditure by type of nonfinancial asset are provided. A full classification of expenditures by function of government (COFOG) is not available. As noted above, grants include substantial amounts that should be reclassified as subsidies to public corporations (railways).

In summary, the classification of expenditure departs from *GFSM 1986* methodology, both because the economic and functional classifications are not clearly distinguished, and because the level of classification detail falls far short of what is required.

Lending minus repayments: Lending minus repayments are appropriately classified. Data for government lending are not 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 *GFSM 1986* methodology, recording of sales of equity (privatization) below-the-line—as the disposal of financial assets—is in accordance with the *GFSM 2001*.

Financing: Financing is classified as foreign (external) and domestic. Domestic financing is further classified by sector of the counterparty (bank/nonbank), with limited instrument detail provided for nonbank financing.

Proceeds from privatization are classified as part of financing, which is in accordance with the *GFSM 2001*.

As noted above, foreign grants are classified as financing, and central government loans received by provincial governments are classified as provincial government revenue rather than financing. Neither treatment is consistent with either the *GFSM 1986* or *GFSM 2001*.

Government debt: Data on government debt are classified, in accordance with international standards, by currency, type of debt instrument,²⁰ and type of debt holder,²¹ and domestic debt are shown separately from foreign debt.

²⁰ But with limited detail.

2.4 Basis for recording

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

Prices used to value transactions reflect actual or expected cash payments as required by *GFSM 1986* guidelines.

In accordance with the *GFSM 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. External debt is valued in foreign currency (U.S. dollar). GFS requires amounts denominated in foreign currency to be converted to domestic currency using the mid-point exchange rate at the end of each period.

2.4.2 Recording is done on a cash basis

All budgetary central government revenues, expenditures and lending minus repayments transactions are recorded on the basis of documentation authorizing transfer of funds to or from the consolidated fund (for example, checks paid or received, authorization to the SBP to transfer funds to provincial or local governments)—which should be a close proxy for cash receipts and payments. However, in some cases considerable time may elapse between when the authorization to transfer funds is issued, and the actual transfer itself.

Also, corrections to accounting errors (miss-postings) are entered into the period in which the correction is made, rather than the period in which the error occurred.

Financing data are recorded on the basis of administrative information on the incurrence or redemption of liabilities, and SBP accounting information on changes to holdings of cash. This is equivalent, or close to, the cash basis recommended by *GFSM 1986*.

As a result of the difference between the recording of the above- and below-the-line data, a small statistical discrepancy is expected between the overall deficit/surplus and total financing data, reflecting the differences in the timing of recording of above-the-line and below-the-line transactions (i. e., float). In practice, the deficit/surplus is adjusted to agree with financing by adding an additional expenditure item (“unidentified expenditure”) irrespective of whether it is positive or negative. The “unidentified expenditure” item appears to be larger and more volatile than would be expected, considering that all transactions are nominally on a cash basis.

There are no plans at present to move to an accrual basis of recording.

²¹ Type of debt holder classification is based on information on the initial take up of securities.

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 correctly classified as (negative) revenue transactions—but are not recorded in the period in which the original transaction is recorded. Although these amounts are usually small, such treatment is not in line with internationally accepted standards because refunds should always be netted against the taxes in the period in which they were originally recorded.

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 (including lending minus repayments) data for all levels of government are available on a monthly basis from the AGPR/AGs accounting systems.

The AGPR provides accounting services for central budgetary government, and AGs provide equivalent services to provincial governments, using the same chart of accounts. The provincial AGs for each province provide monthly accounting data to the Finance Division and AGPR. AGPR uses this data to compile monthly and quarterly GFS (“fiscal”) tables.

For financing, timely and comprehensive domestic financing data are available from the SBP for (i) government accounts at the SBP (daily); (ii) government accounts at other banks (monthly); and (iii) domestic issue and redemption of securities²² (monthly)—except for National Savings Schemes (NSS) securities, which are reported monthly by the Central Directorate of National Savings (part of MOF).

Data on foreign (external) loans are obtained quarterly from the Economic Affairs Division of MOF (which reconciles its data with information provided to SBP by foreign loan providers).

No data are collected from extra-budgetary agencies.

²² The SBP is the custodian for the issue of these securities and compiles the data from its administrative records.

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

The central and provincial budget classification for revenue and expenditure—the main source data—broadly aligns with the *1986 GFSM* definitions, classifications, time of recording, and valuation. With regard to the classification of proceeds from privatization, the methodology of the *GFSM 2001* is followed. The source data for compiling financing data are also in accordance with the *GFSM 1986* definitions, classifications, valuation, and time of recording.

GFS aggregates are not automatically derived from accounting data, but this could be done once the new chart of accounts comes into operation.

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 *Economic Survey* and on its website.

3.1.3 Source data are timely

Federal budget data are timely, being supplied within 15 days of the end of the reference period. Data for provincial and district governments are also sufficiently timely, notwithstanding problems owing to a lack of full computer automation in provincial and district government administrations.

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

3.2 *Statistical technique*

3.2.1 Data compilation employs sound statistical techniques

GFS are compiled directly from accounting and administrative data, and no statistical techniques are applied in the compilation process.

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

There are no material gaps in the coverage or completeness of GFS source data. The balance between accuracy and timeliness is addressed by using preliminary data for initial publication. These data are sufficiently accurate for fiscal policy development and analysis. Preliminary data are subsequently revised once audited data become available.

A statistical discrepancy exists between the overall deficit/surplus and total financing, and efforts are made to keep this discrepancy to a minimum. Every year, preliminary data are replaced by actual, audited data 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 “reconciliation” process—vetting of accounting data by line agencies under the supervision of the FMC—and benchmarking of preliminary data to audited data for all budgetary agencies. However, data corrections are posted in the period in which they are discovered, not the period in which the original data were posted. This currently only affects annual data, because the quarterly data are cumulative, but would be more significant if quarterly data were discrete.

Deviations between preliminary and final data are usually small but are not highlighted or explained when the revised data are disseminated.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

Not applicable.

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

The deficit/surplus derived from revenue and expenditure data is reconciled, as far as possible, with that derived from financing data. Nevertheless, a substantial discrepancy remains in most quarters. The assumption is made that financing data are more reliable and the discrepancy between the two values is shown as unidentified expenditure in the published data. No systematic reconciliation process is followed to ensure that GFS are consistent with corresponding data derived from other sources.

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 systematic analyses are made of the revisions resulting from this process, but deviations between preliminary and final data are examined to ensure that significant revisions are explained.

When actual historical data were revised in 2000 to reflect a new methodology used to compile GFS (i.e., the use of AGPR/AGs data), the revised data were simply published without explanation.

4. Serviceability

4.1 Relevance

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

While only quarterly and annual data are published, monthly GFS are available to the authorities and IMF staff. Monthly, quarterly, and annual GFS, covering the budgetary central and general government, are used by both the MOF and IMF in the process of determining, monitoring, and evaluating central and general government fiscal policy.

Monthly, quarterly, and annual GFS are compiled on a timely basis—within two months after the end of the reference period for monthly and quarterly data, and within seven months after the end of the fiscal year for the final accounts—and are available in time to be used for fiscal policy formulation.

The fiscal tables produced as GFS output were designed for use by the authorities and IMF advisors to establish the basic parameters of fiscal policy and are extensively used for that purpose. In addition, information obtained from the user survey conducted as part of the ROSC indicates that wide use is made of GFS by private sector organizations, universities, and the press to monitor and comment on government policy. MOF monitors press comments and comments arising at various economic forums, but receives almost no direct feedback from users of the statistics, and there is no systematic attempt to ascertain the relevance and practical utility of GFS in meeting users' needs.

Since Pakistan's GFS currently is narrowly defined to meet IMF operational requirements, it is not well suited for more general analytical use.

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):

- Quarterly budgetary central and general government operation (revenue, expenditure and lending minus repayments, and financing) are disseminated within two months after the end of the reference period. (GDDS recommendation: quarterly central government aggregates within one quarter after the end of the reference period.)
- Monthly budgetary central and general government domestic debt data are disseminated within two months after the end of the reference period. Quarterly budgetary central and general government foreign (external) debt are disseminated two months after the reference period. (GDDS recommendation: annual central government debt data within one-two quarters after the end of the reference period.)
- Annual budgetary central and general government data (sum of four quarters) are disseminated two 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 GDDS standards (see also *Methodological Soundness: Scope* in section 2.2 above):

- Budgetary central and general government aggregates are disseminated quarterly and annually (GDDS recommendation: quarterly and annual central government aggregates);
- Budgetary central and general government debt statistics (including, not separately identified, government guaranteed debt) are disseminated monthly (domestic debt) and quarterly (external debt)—(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 within the dataset

GFS transaction data are internally consistent, with the exception of the discrepancy between deficit/surplus (derived from revenue, expenditure, and lending minus repayments) and financing data.

The overall deficit/surplus can differ from financing for mainly two reasons. Firstly, revenue and expenditure²³ are recorded on the basis of documentation authorizing transfer of funds to or from the consolidated fund (for example, checks paid or received, authorization to the SBP to transfer funds to provincial or local governments). Financing data relating to these operations, on the other hand, would be expected to more closely reflect the actual cash receipts and payments, thus resulting in a timing difference (float) between the two measures.²⁴ The second main reason for the difference between the deficit/surplus and financing relates to the difficulties in obtaining accurate information for revenue and expenditure, and/or financing.

While the discrepancy between the deficit/surplus and financing is examined and reconciled as far as possible for each period, no systematic analysis is done to determine whether the discrepancy cancels out over time (which would be the case if it were due purely to timing differences), or whether more significant consistency problems are present. Although it is possible that large timing differences cause the discrepancy, a thorough investigation should be carried out to establish whether this is the case and to devise procedures to bring the deficit/surplus and financing into closer agreement.

Also, the discrepancy (whether positive or negative) is at present included in expenditure as “unidentified expenditure.” It would more appropriately be explicitly identified as a separate discrepancy item.

Government domestic and foreign borrowing data at the end of each accounting period are derived by adding the face value²⁵ of new loan contracts incurred during the period, less amortization of existing loan contracts, to the face value of existing loan contracts at the start of a period. Financing data are based on the cash flows associated with the issuing and amortization of loan contracts. Therefore, the change in gross debt from the opening to the closing debt balance would be expected to be similar to, but not the same as, loan financing

²³ Including lending minus repayments.

²⁴ On occasion, the timing difference between the authorization to transfer funds, and the actual transfer, can be quite lengthy.

²⁵ i.e., the value owing at maturity of the securities/loan contract.

during the period.²⁶ However, no studies have been carried out to determine whether loan financing is consistent with the change in debt stocks.

Quarterly and annual data are compiled by adding data for the component periods.

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

The MOF has compiled a GFS time series covering the period from 1996/97 onward. Revenue and expenditure appear to be reasonably consistent as a percentage of GDP over that period. However, no studies have been conducted to determine whether the time series is consistent with fiscal policy over that period.

The MOF does not publish a quarterly GFS time series on its website, which shows only the cumulative quarterly data for the current year.

An annual time series is published in the *Economic Survey*,²⁷ but with little transaction detail.

The MOF is aware that it will need to document and explain changes in 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

No GFS cover the operations of the general government in Pakistan. The Statistics Bureau compiles general government data for the national accounts using MOF budgetary general government data.

Domestic debt statistics are derived from, and therefore are consistent with, monetary and financial statistics.

GFS transaction data are not reconcilable 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 usually follows a regular and well-understood schedule whereby initial data are preliminary, and are subsequently replaced by final data.

²⁶ Excluding any guaranteed debt.

²⁷ Also on the MOF website.

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*

Corrections owing to data errors are made to data in the period in which the error is discovered, rather than being shown as revisions to the original data. The annual series published in the *Economic Survey* show revised estimates, but with no indication of the size of the revisions.²⁸ There is no published analysis or explanation of revisions.

Preliminary figures are usually close to final figures, and can be relied upon for analytical purposes.

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 on the MOF website, and in more summary (but time series) form in the statistical appendix to the printed *Economic Survey*.²⁹ GFS tables reflect the particular needs of IMF and MOF operational staff, and do not have a clear logic or consistent structure. No explanations or charts accompany the data.

No time series of sub-annual data are provided. Quarterly data for the current year are shown as cumulative data, which obscures the data for individual quarters.

5.1.2 *Dissemination media and formats are adequate*

The MOF publishes GFS in its annual *Economic Survey*, and on its website, in English. This provides adequate, but not ideal, dissemination media and formats.

Similar annual data derived from budget documents are also published in the SBP's monthly *Statistical Bulletin*, which could lead to some confusion as to which are the 'official' fiscal statistics.

²⁸ In the future, MOF plans to publish both the original and revised data whenever data are revised.

²⁹ Also available on the MOF website.

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 (on the MOF website) two months after the end of the reference month.

The MOF acknowledged that the inclusion of this release information 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

Not applicable. All available GFS data are published on the 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 does not exist. Information in this regard is only available—in summary format—on the IMF's Data Standards Bulletin Board (DSBB). This information is not published elsewhere. The MOF intends to provide a hyperlink on its website to the DSBB website to improve accessibility to these summary GFS metadata.

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

Detailed technical descriptions on concepts, sources, and methods do not exist sufficient to allow expert users to assess the strengths and weaknesses of GFS. Less detailed information on concepts, sources, and methods to allow general users to understand the basic framework under which the statistics are produced is only available on the DSBB.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

Very little user assistance is provided for GFS. The contact person for GFS is publicized, including telephone and facsimile numbers, but not e-mail address, only on the DSBB. Neither the MOF website, nor the *Economic Survey*, include a contact name or telephone number.

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

Catalog of publications containing government finance statistics are not available.

Table 4. Pakistan—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		
0. Pre-requisites of quality						
0.1 Legal and institutional environment			X		Responsibility for collecting, processing, and disseminating statistics is not clearly specified in legislation.	
0.2 Resources			X		MOF and AGPR/AG staff would benefit from wider statistical training. Lack of computer automation in AGPR/AGs places constraints on GFS processing.	
0.3 Quality Awareness			X		GFS compilers lack a user perspective, and therefore the focus is on processes rather than products. No specific processes are in place to deal with quality considerations.	
1. Integrity						
1.1 Professionalism		X				
1.2 Transparency			X		The production and dissemination of GFS are based on administrative decisions and arrangements that are not made public.	
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X		The concepts and definitions follow the analytical framework used by the IMF for its operational work, which is largely based on the methodology prescribed in <i>GFSM 1986</i> . There are no plans to migrate to the <i>GFSM 2001</i> standard.	
2.2 Scope			X		The scope of Pakistan's GFS is budgetary general government, which does not cover the activity of extrabudgetary units in central government, and does not show local government separately from provincial government.	

Table 4. Pakistan—Data Quality Assessment Framework: Summary of Results for Government Finance Statistics
(Compiling Agency: Ministry of Finance)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
2.3 Classification/Sectorization				X	Classifications broadly accord with <i>GFSM 1986</i> , except: little detail for expenditure, revenue and financing misclassifications, no detail for capital expenditure, and confusion of functional and economic classification of expenditure.	The MOF has expressed the intention to adopt the <i>GFSM 2001</i> (medium term)
2.4 Basis for recording			X		The basis of recording is on, or close to, a cash basis. There are no plans to migrate to an accrual basis, as required by the <i>GFSM 2001</i> .	
3. Accuracy and reliability						
3.1 Source data		X				The MOF plans to implement a revised chart of accounts and new accounting model that are compatible with the eventual implementation of accrual accounting and reporting (medium term)
3.2 Statistical techniques		X				
3.3 Assessment and validation of source data			X		Assessment and validation of source data are limited to internal accounting checks.	
3.4 Assessment and validation of intermediate data and statistical outputs			X		The validation of statistical output relies solely on the reconciliation of AGPR/AGs accounting data with SBP administrative data.	
3.5 Revision studies			X		Revisions are due to routinely benchmarking preliminary to final data, and no revision studies are done.	

Table 4. Pakistan—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		
4. Serviceability						
4.1 Relevance			X		GFS are used to set fiscal policy parameters, and monitor fiscal policy, but there is no systematic attempt to ascertain the relevance and practical utility of GFS.	
4.2 Timeliness and periodicity		X				The MOF plans to disseminate monthly GFS with a lag of one month (short term)
4.3 Consistency			X		GFS are not reconcilable with monetary and financial statistics, or BOP.	
4.4 Revision policy and practice			X		There is no published analysis or explanation of revisions.	
5. Accessibility						
5.1 Data accessibility			X		GFS tables do not have a clear logic or consistent structure. No explanations or charts are provided, and no time series of subannual data.	
5.2 Metadata accessibility				X	Detailed documentation of concepts, scope, classifications, basis of recording, data sources, and statistical techniques do not exist. Summary metadata is provided on the GDDS website, but not linked to the MOF website.	The MOF plans to develop and disseminate metadata (short term).
5.3 Assistance to users				X	No contact information or catalog of publications containing fiscal information is publicized.	

RECOMMENDATIONS FOR GOVERNMENT FINANCE STATISTICS

Prerequisites of quality³⁰

- Set up a small group within the MOF whose main task is the compilation and dissemination of GFS. Provide GFS staff with expert training, and encourage them to develop greater quality awareness based on output and user perspectives.
- Develop computer systems to allow automatic generation of GFS items from accounting entries, using the revised chart of accounts. This would support the MOF plan to implement a revised chart of accounts and a new accounting model that are compatible with the eventual implementation of accrual accounting and reporting.
- Develop awareness of GFS among potential users, and actively seek feedback on the strengths and weaknesses of published data.

Integrity

- Provide advanced notice of expected changes, and alert users to significant changes or discontinuities in published statistics.

Methodological soundness

- Adopt the *GFSM 2001* classification structure, as far as possible, as a first step in the MOF plan to adopt the *GFSM 2001*.
- Separate the local government sector from the provincial government sector.
- Correct the classification of grants paid to Pakistan Railways, grants received from foreign sources, and loans received by provincial governments.

Serviceability

- Examine the statistical discrepancy between the deficit/surplus (net lending/borrowing under *GFSM 2001*) and financing each quarter,³¹ and reconcile and/or explain the differences.

³⁰ These are recommendations on which most other recommendations depend. There is little chance of substantial improvement in the range and quality of GFS under the current arrangements, where staff responsible for GFS have many other competing responsibilities. Likewise, compilation of detailed GFS aggregates cannot be done unless the linkage between the accounting and GFS data is automated.

³¹ This task should be monitored by the Fiscal Monitoring Committee (FMC).

- Develop processes to compile and disseminate data monthly, with timeliness of one month, as part of the MOF plan.
- Identify the discrepancy between the deficit/surplus and financing explicitly, and consider including it in the financing category.

Accessibility

- Provide the classificatory detail specified in *GFSM 2001* in GFS tables, as far as possible, and provide a time series of discrete (noncumulative) quarterly data.
- Develop and disseminate the MOF methodology statement for government operations, documenting the concepts, scope, data sources, classifications, basis of recording, compilation processes, and major differences from international standards and posting it on the MOF website.
- Develop and disseminate a similar methodology statement for general government debt on both the MOF and SBP websites.
- Add contact names, phone numbers, and e-mail addresses to the MOF and SBP websites, and to the *Economic Survey* statistical appendix.
- Include a schedule of expected publication dates on the MOF website.

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 State Bank of Pakistan (SBP) is given the legal authority and responsibility for the collection of banking statistics in Section 36 of the State Bank of Pakistan Act of 1956 (the SBP Act).³² Section 36 (3) states that “Every scheduled bank shall send to the Bank [SBP] returns...containing such information as may be deemed necessary for carrying out the purposes and object of this Act at such periods of time as the Bank may from time to time direct.” According to Section 38 of the SBP Act, the SBP may also require any corporation with which it is carrying out business transactions to furnish returns in the same manner as if the corporation were a scheduled bank.³³ All scheduled banks are required to prepare and submit to the SBP half-yearly returns prescribed in the Banking Companies Ordinance (LVII of 1962), Section 32 (1). In addition, Section 32 (2) of the Banking Companies Ordinance gives the SBP the power to “call for information at such intervals as the SBP may deem necessary.”

The SBP Act, Section 39, requires the SBP to compile and publish a consolidated statement of the central bank in such manner and at such time as the Federal Government may direct. Section 40 of the SBP Act specifies that the SBP must prepare for the Federal Government a weekly account of the SBP’s Issue Department and Banking Department by notification in the official Gazette, which is available to the general public. SBP’s legal mandate to publish the scheduled banks’ statistics is specified in Section 33 of the Banking Companies Ordinance of 1962, which states that the SBP “may publish any information ... in such consolidated form as it thinks fit.”

Although the responsibility for producing monetary statistics is not explicitly mentioned in the SBP Act, the SBP has compiled and disseminated monetary statistics since its establishment in 1948. This long established practice is covered implicitly by the legislation insofar as the SBP requires timely and accurate financial information of the banking system to accomplish one of its objectives, that is to maintain monetary stability in Pakistan.

³² State Bank of Pakistan Act, Act No. XXXIII of 1956.

³³ The SBP Act, Section 17, 2.(e), permits the SBP to purchase, sell, and rediscount debentures issued by a company or corporation.

The working arrangements between the Banking Supervision and Accounts Departments and the Statistics Department are consistent with the role of the SBP as the sole statistical agency in Pakistan to collect, process, and disseminate monetary statistics.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Within the SBP there are arrangements in place to ensure the smooth flow of information between the departments that collect, process, and disseminate data. Scheduled banks submit weekly and monthly balance sheet data with additional detailed schedules to the Banking Supervision Department and Statistics Department, respectively. The reported data are used for supervisory and monetary statistics compilation purposes only. In accordance with a formal agreement and an agreed upon timetable, the Banking Supervision Department, in turn, forwards the banks' aggregated weekly data to the Statistics Department. The Accounts Department provides the Statistics Department with the central bank's accounting records. Based on this financial information, the Statistics Department compiles and disseminates the analytical accounts of the SBP and scheduled banks. It also compiles and disseminates a monetary survey in the required format for publication and operational purposes of the International Monetary Fund (IMF). The Economics Policy Department compiles and publishes in the *Statistical Bulletin* data on reserve and broad money, as well as the causative factors for changes in these aggregates. Regular meetings are held between these departments to ensure the proper understanding of the data requirements and adequate data sharing and coordination among them. The Statistics Department also seeks the views of the Research and Economic Policy Departments on the relevance and quality of the compiled data.

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

Provisions for safeguarding the confidentiality of individual reporters' data are in place. The SBP Act states in Section 53 (1) that any information related to individual units, persons, or authorities obtained by SBP staff in the performance of their duties must be treated as confidential ("preserve secrecy"), and (2) that penalty can be imposed on anyone violating confidentiality. Such penalties may range from a fine of up to 500 Pakistani rupees (Prs) to imprisonment of up to six months. Also, the Banking Companies Ordinance and SBP Staff Regulations (2001) stipulate the confidentiality and nondisclosure of data, with penalties for noncompliance.

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

The SBP Act, Section 36 (3), provides the SBP with the legal authority to collect information from scheduled banks required for the compilation of monetary statistics. Currently, banks are required to report weekly and quarterly (where end-of-week dates and end-of-quarter dates fall on different days) balance sheet data to the Banking Supervision Department—these data are also utilized for compiling the analytical accounts of the scheduled banks—and monthly and half-yearly balance sheet information to the Statistics Department.

The SBP Act also specifies in Section 36 (6) that any scheduled bank failing to comply with the data reporting requirements should be liable to pay to the SBP a penalty of PRs 100 for each day during which the failure continues. In addition, the Prudential Regulation 25 (Circular 21 of June 9, 1999) states that officials of scheduled banks are liable to pay PRs 20,000 per case and/or PRs 1,000 per day for the period of the irregularity, and/or disciplinary action may be taken against them. In Section 36 (7), the SBP Act stipulates the legal consequences of willfully or recklessly making false statements in the banks' returns.

0.2 Resources

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

The number of qualified staff working on the compilation of monetary statistics is adequate. Fourteen of the 76 staff in the SBP's Statistics Department are charged with primary responsibility for monetary statistics work. Employment in the Statistics Department is competitive. All statistical officers, assistant directors, junior joint directors, the joint director, and the director have at least master's degrees in the field of statistics, three of which hold a Ph.D. degree, and some officers have additional qualifications of master's degrees in economics and/or business administration. Staff members are regularly rotated within the department. In addition to on-the-job training, staff are given the opportunity to participate in courses conducted by the IMF and in seminars offered by central banks, such as the Bank of China and the Central Bank of the United Arab Emirates. Out of the 14 staff that are involved in monetary statistics, three staff attended the IMF Monetary and Financial Statistics Course. Nominations to these courses are made by a selection committee of the SBP. In view of the Statistics Department's objective to implement the *Monetary and Financial Statistics Manual (MFSM)*, staff need more training in statistical methodology and compilation practices.

Computer resources utilized in the collection and compilation of monetary statistics are broadly adequate. Plans for equipping every staff with a computer and replacing older hardware with Pentium IV computer processing units are contemplated in the department's budget plan for 2004. There are no budgetary constraints impeding data collection and compilation activities.

0.2.2 Measures to ensure efficient use of resources are implemented

The new business planning and budgeting framework ("Business Plan") of the SBP is considered to be a key instrument in the successful transformation of the SBP into a proactive, efficient, and dynamic institution. It was first implemented for the fiscal year 2002–2003. The statistical program for the compilation of monetary statistics is subject to the departmental Business Plan. It describes the objectives of the Statistics Department and the operational and developmental projects required to achieve these goals. The Business Plan determines the human, computing, and financial resources that are needed for realizing these projects within the fiscal year. It also outlines the key performance indicators and key result areas for the individual staff members and divisions. The key performance indicators are

important benchmarks for the periodic reviews of staff performance. The efficient allocation of the resources is assessed in a midyear review undertaken by the Audit Department of the SBP. The SBP Governor reviews the implementation of quarterly projects by the Statistics Department. The Director of the Statistics Department is made accountable to optimally manage the resources allocated to the department.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Processes and procedures in the Statistics Department are guided by the Vision Statement of the SBP (“To transform the State Bank of Pakistan into a highly professional, efficient and modern institution which is fully equipped to play a meaningful role in the economic development of Pakistan”), which is included in the *Statistical Bulletin*. The SBP considers the qualitative improvement in data collection as an important element in translating the Vision Statement into reality.³⁴ The SBP considers the setting up of the Data Warehouse as an important step for enhancing the quality of data. The SBP also recognizes that official statistics must have the confidence of their users. Accordingly, all data compiled by the Statistics Department are checked by the immediate supervisor of the data producing unit, and the accuracy of the data is certified prior to publication.

The reliability and accuracy of the SBP and scheduled banks’ balance sheets—the primary source data for monetary statistics—are enhanced by external auditing required by the SBP Act and Banking Companies Ordinance. For the SBP, Sections 43 and 45 of the SBP Act stipulate that the SBP’s annual balance sheets and related accounts shall be examined by two auditors whose appointments and remunerations shall be fixed by the SBP board of directors. For scheduled banks, Section 35 of the Banking Companies Ordinance stipulates that banks’ balance sheet and profit and loss accounts shall be audited by a person who is duly qualified to be an auditor of companies and is on the panel of auditors maintained by the SBP for the purposes of auditing banks.

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

The Statistics Department, in collaboration with the Banking Supervision Department, reviews the reported source data for accuracy. Validation procedures for assessing the plausibility or reasonableness of reported data are undertaken both automatically and visually, on a bank-by-bank basis. The Statistics Department (for monthly source data) and the Banking Supervision Department (for the weekly and quarterly returns) consult with the reporting scheduled banks to verify the data for possible misclassifications. SBP’s internal users of monetary statistics comment on the accuracy, timeliness, and comprehensiveness of

³⁴ SBP, *Annual Report—Volume II, Performance Review (2002-2003)*, page 71.

the data, as well as on possible discrepancies before the official data are released. For example, the Economic Policy Department of the SBP reviews the monetary survey compiled by the Statistics Department for possible adjustments. Banks are provided the software by the Statistics Department for reporting the data. Built-in validity checks are applied at this initial stage. Cross-sectional validation is made when the Statistics Department receives the data.

At present, the Statistics Department does not utilize formal 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 trade-offs within quality, and to guide planning for existing and emerging needs

Within the Statistics Department, the Planning and Development Division monitors, among other things, data quality issues and new developments in the area of monetary and financial statistics and provides proposals and/or prepares concrete steps for implementing statistical methodology in accordance with international standards.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Under the relevant provisions of the SBP Act, the SBP has been entrusted with the responsibility of regulating the monetary and credit system of the country, with a view of securing monetary stability. The SBP was granted autonomy in February 1997 and there is no evidence of interference from others, including other government agencies, in the compilation and/or dissemination of statistical information.

Recruitment in the Statistics Department is based on relevant aptitude, expertise, and merit. Eligible candidates need at least a master's degree in statistics and are recruited through an open and competitive process. The introduction of the new Performance Management System in July 2002 has further refined the promotion system at the SBP.

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

The choice of source data (balance sheet records) and statistical techniques (e.g., for validation and processing of the data) are based on measurement objectives and data requirements.

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

The Research Department and the Corporate and Media Affairs Department (Public Relations Division) maintain the records of press articles that comment on data disseminated by the SBP. These articles are sent to the relevant departments for comments. If necessary, the SBP publicly clarifies erroneous interpretations or misuse of the statistics in 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

The public has access to the SBP Act and Banking Companies Ordinance that contain very broad legal provisions concerning data collection, dissemination, and data confidentiality. The SBP directives and regulations on data collection issued in the form of circulars to banks were posted on the SBP website, included in the Statistical Bulletin, and made available to the general public after the ROSC mission took place.

Pakistan's GDSD metadata, which are hyperlinked to the SBP website, provide information on the processing and dissemination of the monetary statistics. Information posted on the IMF's Data Standards Bulletin Board (DSBB) includes identification of a contact person at the SBP for users requiring additional guidance on Pakistan's monetary statistics.

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

There is no internal government access to statistics compiled by the SBP prior to the release to the public.

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

Monetary statistics disseminated by the SBP are clearly identified as such. When data produced by other agencies are published, the source is indicated in the footnotes.

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

The Statistics Department has recently modified the classification of assets and liabilities in the statements for scheduled banks in line with the *International Standard Industrial Classification (ISIC, Rev. 3.1)*. In this context, the SBP has conducted several briefing sessions with banks. More recently, the Statistics Department has undertaken a number of steps to improve the methodology and data sources, including changes in the classification of assets and liabilities to align them with ISIC Rev. 3.

1.3 Ethical standards

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

The *State Bank of Pakistan Staff Regulations (2001)* provides broad ethical guidelines for employees of the SBP. 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 State Bank of Pakistan compiles two sets of data on monetary statistics with different formats and objectives. The first is the Monetary Survey, compiled by Statistics Department, which is used for the presentation of monetary statistics under the framework recommended by the IMF. The survey is compiled and disseminated to IMF, the World Bank, and the Economic Policy Department of the SBP on a monthly basis. The survey covers the accounts of all scheduled banks and the SBP, in line with the guidelines provided by IMF. The survey is based on month-end stocks of assets and liabilities of scheduled banks and the SBP. The format of the returns closely follows the *MFSM* guidelines on sectorization and classification of instruments. The data on these returns are collected electronically. The banks provide data through floppy diskettes and e-mails directly to the Statistics Department. At the time of the mission, steps were underway to disseminate the monetary survey regularly in the *Statistics Bulletin* and the SBP website.

In addition to the monthly Monetary Survey, the SBP also prepares monthly monetary data that are published in the *Statistical Bulletin*. The data are compiled by the Economic Policy Department, based on information received from the Accounts and Banking Supervision Departments on a weekly basis. These data are used for money market management, monitoring and supervision purpose. The data provide information on monetary indicators and changes in the assets and liabilities of the SBP and scheduled banks. As such, the format of the data is not in accordance with the recommended format for analytical accounts of SBP, scheduled Banks and Monetary Survey. Since the monetary survey compiled by the Statistics Department was not published in any publication of SBP at the time of the ROSC mission, the assessment under the DQAF was based on the monetary statistics published in the monthly *Statistical Bulletin*.

The analytical framework used by the SBP in compiling the data currently published in the *Statistical Bulletin* reflects concepts and principles that are based on the IMF's draft *Guide to Money and Banking Statistics in International Finance Statistics* (December 1984).³⁵

The SBP publishes in its *Statistical Bulletin* the balance sheets of the SBP and scheduled banks. In conformity with the requirement stipulated in the SBP Act, Section 26—that issuing of bank notes should be conducted by the Issue Department, which should be separated and wholly distinct from the Banking Department—the SBP compiles and publishes separate balance sheets for the Issue and Banking Departments (*Statistical Bulletin*, Tables 2.3 and 2.4). The consolidation of both SBP sub-balance sheets with the aggregated asset and liability positions of the scheduled banks produces the *monetary survey* of the banking system.³⁶ For publication in the *Statistical Bulletin*, the SBP does not disseminate such a consolidated balance sheet of the banking system in one analytical framework. Instead, the Economics Policy Department disseminates and publishes two different tables. Table 2.1, *Monetary Statistics*, comprises the following analytical instruments: (1) *Reserve money (M0)*, comprising currency in circulation, other deposits with SBP, currency in tills of scheduled banks, and banks' deposits with SBP; (2) *Narrow money (M1)*, comprising M0 (excluding currency in tills of scheduled banks and banks' deposits with SBP) plus scheduled banks' demand deposits; (3) *Broad money (M2)*, consisting of M1 plus scheduled banks' time deposits and resident foreign currency deposits; and (4) *Money multiplier*, defined as the ratio M2/M0. All positions in Table 2.1 are shown as monthly stock data.

The counterpart components for M0 and M2 are shown as flow data in Table 2.2, *Analysis of Causative Factors for Changes in Monetary Statistics*, and grouped into the following sectors and instruments: (1) Public sector (Budgetary support, Commodity operations, Effect of Zakat Fund, etc.); (2) Non-government sector (Autonomous bodies and Net credit to Private sector, Public sector corporations other than autonomous bodies, and Public sector corporations' special accounts—debt repayment with SBP); (3) Counterpart funds; (4) Other items (net); and (5) Foreign assets (net).

³⁵ Following the publication in September 2000 of the *Monetary and Financial Statistics Manual (MFSM)*, the SBP 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 SBP has yet to make changes to comply with the new methodological standard.

³⁶ The term *monetary survey* is not used in the *Statistical Bulletin*. However, the Tables 2.1 to 2.4 are commonly used by the authorities to describe the consolidation of the accounts of the SBP and scheduled banks. The format of these tables is designed as per the requirements of the Federal Government.

The aggregates presented in the *Statistical Bulletin* are not consolidated in an analytical framework in which the broad money liabilities of the SBP and scheduled banks as a group (depository corporations) are linked to the claims of these corporations on the resident and nonresident sectors of the economy.³⁷ While the building blocks exist to construct this depository corporations survey in which the respective claims and liabilities within the depository corporations subsector (SBP and scheduled banks) could be netted out, the absence of this framework makes the interpretation of the monetary statistics difficult. In fact, the Statistics Department already produces a monetary survey in a balance-sheet format and in an analytical framework for monthly reporting of monetary statistics to the IMF and internal use within the SBP. However, this monetary survey was neither published in the SBP publications nor posted on the SBP website through end-December 2003 (that is, the reference period of the data ROSC assessment). During February 2004, the SBP published for the first time Pakistan's *monetary survey* (for the reporting month of December 2003) on its website.

The sectorization and instrument classification applied in Table 2.2 are not consistent with the *System of National Accounts 1993 (1993 SNA)* or *MFSM* (see details in section 2.3.1). The stocks and flows in the tables do not consistently refer to month-end data. Only the quarter-end data relate to the last working day of the reference month, whereas the other end-period data relate to the last Saturday of the reference month. However, the Statistics Department has started implementation of the *SNA 93* for the compilation of flow of funds accounts for Pakistan. The revised sectorization will also be used for the compilation of monetary statistics, in line with the recommendations of the *MFSM*. Furthermore, the weekly data are used for monitoring purposes. The Statistics Department is collecting month-end data to be used for the compilation of the monetary survey.

2.2 *Scope*

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

For analytical purposes, the *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 broad money. Thus, in Pakistan, all financial institutions issuing liabilities meeting the definition of broad money (M2) should be included in the monetary statistics.

³⁷ The framework for the monetary statistics recommended in the *MFSM* is the *depository corporations survey*. It covers the accounts of all depository financial institutions and is a consolidation of the *central bank survey* and *other depository corporations survey*. The *MFSM* describes in detail the framework and presentation of monetary statistics in Chapter VII.

The ODC subsector of Pakistan comprises 40 scheduled banks, of which 8 are public sector banks,³⁸ 16 private domestic banks, and 16 foreign banks. According to the SBP Act, Section 37, “scheduled bank” means a bank operating in Pakistan with paid-up capital and reserves of not less than PRs 1 billion, as of January 2003, and conducting its operations in a manner not detrimental to the interest of its depositors. The institutional coverage of monetary statistics includes the scheduled banks’ domestic headquarters and their domestic branches, and domestic branches of foreign banks operating in Pakistan. Balance sheets of banks in liquidation are also included in the monetary survey.

The data for Non-Bank Financial Institutions (NBFI), some of which accept deposits from the public, are not included in the monetary statistics. NBFIs encompass development financial institutions, investment banks, leasing companies, mutual funds, housing finance companies, discount houses, venture capital companies, and modaraba companies.³⁹ Since deposits held with some depository non-banks represent only about 1 percent of the banks’ total liabilities, their exclusion is not material for the compilation of monetary aggregates at this time.

The SBP and Securities Exchange Commission of Pakistan—which, with the exception of the development financial institutions, is regulating and supervising the NBFIs—have developed a new model of Non-Bank Financial Companies (NBFC), allowing NBFCs to undertake all financial services except banking functions.⁴⁰ These services comprise corporate advisory services, leasing, housing finance, venture capital, investment advice for managing closed-end mutual funds, and asset management advice for open-end mutual funds. According to the *MFSM*, financial corporations offering such services should be classified either as *other financial intermediaries* or *financial auxiliaries*.⁴¹ Hence, the classification of the non-depository NBFIs as other financial corporations is in line with the *MFSM* guidelines.

³⁸ One of these eight banks has recently been privatized but is still classified in the monetary statistics as a public sector bank.

³⁹ The financing policy of these investment companies is compatible with the Islamic Shariah.

⁴⁰ *SBP Annual Report 2002-2003, Volume II—Performance Review*, page 42.

⁴¹ Other financial intermediaries generally raise funds by accepting long-term or specialized types of deposits and by issuing securities and equity (e.g., finance companies, financial leasing companies, investment mutual funds). Financial auxiliaries’ activities are closely related to financial intermediation but do not act as intermediaries. Their activities may comprise exchange-related services (e.g., public exchanges, securities markets) or trading in financial securities not on their own account (e.g., brokers and agents). See *MFSM*, pages 19-22.

As a result, the monetary statistics published in the *Statistical Bulletin* provide an almost complete coverage of financial institutions issuing broad money liabilities in Pakistan.

2.3 *Classification/sectorization*

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

The SBP 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 criterion in the *Balance of Payments Manual*, fifth edition, *1993 SNA*, and *MFSM*.

The **sectoral classification** of resident units recommended in the *MFSM*, for the purpose of compiling monetary statistics, refers mainly to the following subsectors: (1) central bank; (2) other depository corporations; (3) other financial corporations; (4) central government; (5) state and local governments; (6) public nonfinancial corporations; (7) other nonfinancial corporations; and (8) other resident sectors (households and nonprofit institutions serving households). The sectorization shown in the publications of the SBP is not in full accordance with the *1993 SNA* and *MFSM* guidelines.⁴² Proper sectorization of institutional units, however, is crucial in the compilation and presentation of monetary statistics and, as the *MFSM* emphasizes, also key to constructing financial statistics—in particular, flow of funds—which deals with intersectoral financial stocks and flows.⁴³

In the *Statistical Bulletin*, Table 2.2, *Analysis of Causative Factors for Changes in Monetary Statistics*, *Credit to public sector* does not clearly differentiate between central (federal) government and state and local (provincial) governments. *Budgetary support* data relate to central government transactions and are not consistently designated as ‘net’ data in the subsections for the monthly and accumulative flows. Federal and provincial governments’ commodity operations are indistinguishably included in one aggregate. The *MFSM* recommends the separate compilation and dissemination of the components *Net claims on central government* and *Claims on state and local governments* in the central bank and depository corporations surveys. The claims on the other resident sectors are overall not consistent with the sectoral classifications recommended in the *MFSM*. *Claims on private sector* include credit to private nonfinancial corporations and households. The counterpart

⁴² The classification and sectorization of the *monetary survey* compiled by the Statistics Department for IMF reporting and SBP internal purposes—and since February 2004 also published on SBP’s website (see Section 2.1.1.)—are broadly in line with the recommendations of the *MFSM*.

⁴³ *MFSM*, Chapter III, pages 15-25.

sectors of sub-positions *Counterpart funds* and *Public sector corporations other than autonomous bodies* are not defined.

In Table 2.3, *Liabilities and Assets of the State Bank of Pakistan*, some of the assets, such as *Bills purchased and discounted*, are classified as domestic rather than nonresident claims (foreign assets). The annual balance sheet of the SBP, which is being compiled at the end of each fiscal year (end-June), provides information that facilitates the proper classification of the SBP's assets and liabilities. The Banking Department's *Other loans and advances* are not sectorized at all.⁴⁴ As recommended in the *MFSM*, SDRs held with the IMF represent foreign assets of the SBP whereas SDR allocations should be classified as *Shares and other equity*. At present, SDR holdings and SDR allocations are not allocated to any sector in the balance sheets. Loans received from the IMF are included in *Other deposits*, although they represent liabilities to nonresidents (foreign liabilities). In fact, no data are explicitly identified as foreign assets and foreign liabilities in the balance sheet of the SBP. The Table 2.3 is prepared on the basis of the weekly statements, which is not in line with the recommendations of the *MFSM*. However, the balance sheet of the SBP, which is prepared on a financial-year base, provides information on most of the issues raised here.

In Table 2.4, *Scheduled Banks' Position based on Weekly Returns*, the following positions are not sectorized although some of them show significant values (e.g., Advances other than those to banks represent 99 percent of total advances): (1) Demand liabilities—Others; (2) Time liabilities—Others; (3) Balances—Others; (4) Advances—Others; (5) Bills purchased and discounted; and (6) Investment in securities and shares—Others.

The **classification of financial instruments** used in Pakistan's monetary statistics deviates from the classification scheme for financial instruments recommended by the *MFSM*. The *MFSM* scheme is based on the liquidity of financial instruments and the legal characteristics that describe the form of the underlying creditor/debtor relationship. It includes the following groups: (1) Monetary gold and SDRs; (2) Currency and deposits; (3) Securities other than shares; (4) Loans; (5) Shares and other equity; (6) Insurance technical reserves; (7) Financial Derivatives, (8) Other accounts receivable/payable. In the published balance sheets of the SBP and scheduled banks, assets and liabilities are not grouped into securities other than shares, loans, or shares and other equity. Data on *Other assets* and *Other liabilities* represent, respectively, about 19 and 14 percent of total assets and liabilities; thus, there is room for improving the sectorization/classification of the accounts.

⁴⁴ The current classification of *Other loans and advances* is based on the requirements of the Banking Supervision Department. However, the monthly data collected for the compilation of the data compiled for internal use and for reporting to the IMF provide details on sectorization.

At present, there is no trading in financial derivatives.⁴⁵ Securities repurchase agreements (repos) are conducted by the SBP and among the banks. At present, repo transactions in Pakistan are treated in the balance sheets of the SBP and scheduled banks as outright sales of securities, which is a departure from the *MFSM* guidelines. The *MFSM* recommends that repos should be treated as collateralized loans. In the case of liquidity injecting repo transactions by the SBP, the securities should remain on the asset side of the scheduled banks, and a new financial asset—i.e., a loan—should be recorded as an asset of the cash provider (i.e., the SBP), and a liability of the cash taker (i.e., the scheduled bank).

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.

The financial statements of the SBP are prepared in accordance with the requirements of the International Accounting Standards. In the case of the scheduled banks, the SBP has deferred the applicability of IAS 39 (Financial Instruments: Recognition and Measurement) and IAS 40 (Investment property) until further notice. The scheduled banks are obliged to record their securities in line with the provisions set out in SBP's Circular No. 20 (issued by Banking Supervision Department on August 4, 2000), which requires that all security holdings—government as well as quoted corporate debt and equity securities—are to be adjusted weekly in the banks' financial accounts with market values irrespective of their purpose (that is, held to maturity or for trading or other purposes). The source for revaluing holdings in government securities is the Reuters quotations (PKRV) and for quoted corporate securities the prices listed at the Karachi Stock Exchange.

Monetary and non-monetary gold are revalued on an annual basis of the closing London bullion rates. Holding of SDRs with, and SDR liabilities to, the IMF are revalued on a weekly, monthly, and annual basis by the SBP.

Consistent with the recommendations of the *MFSM*, the loan portfolio and deposits on the balance sheets of the SBP and scheduled banks are recorded at book value. Also in line with

⁴⁵ The *MFSM* recommends that financial derivatives be recorded at market prices as a separate category in the balance sheets of the depository corporations, disaggregated according to counterparts/sectors.

the recommendations of the *MFSM*, loan valuation is not adjusted for expected loan losses. Provisions for loan losses are recorded in *Other liabilities*, as called for in the *MFSM*.

In accordance with the *MFSM*, the SBP and scheduled banks translate all foreign-currency denominated stocks and flows into Pakistani rupees at the market exchange rate prevailing at the time they are entered in the accounts. In weekly and quarterly statements for scheduled banks, unrealized gains and losses arising from revaluation changes of financial assets and of outstanding liabilities are recorded in other liabilities on a net basis. However, the *MFSM* recommends that the net counterpart to changes in the value of assets and liabilities be shown on the liability side of the balance sheet in the position *Shares and other equity* (in subitem *valuation adjustment*).

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 Pakistan, banks do not provide financial information on flows, and the SBP does not derive transactions from stock data for monetary statistics purposes. The counterpart components for M0 and M2, as shown in Table 2.2, *Analysis of Causative Factors for Changes in Monetary Statistics*, reflect total flows and not transactions; in other words, these flows comprise revaluation changes and other changes.

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 this 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 be treated as part of other accounts receivable/payable (other assets/other liabilities).

In line with this recommendation, the balance sheets of the SBP 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.

In line with international practice, scheduled 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.

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

In line with the general principles of the *MFSM*, assets and liabilities of the SBP and scheduled banks are collected and compiled on a gross basis. Data presented on a net basis (e.g., “Foreign assets (net),” “Budgetary support (net),” and “Net credit to private sector and

public sector corporations”) are also shown with the underlying gross data. The monetary survey is obtained by canceling out all outstanding claims and liabilities between the SBP and scheduled banks and between the scheduled 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 of the central bank are the accounting records prepared by the SBP’s Accounts Department on a weekly basis. The Accounts Department generates these accounting records from a newly established chart of accounts for the SBP that provides real-time data—disaggregated as well as consolidated—on functions, departments, divisions, and on various categories of the balance sheet (e.g., assets, liabilities, income, and expenses). The Accounts Department prepares a weekly *Statement of Affairs of the State Bank of Pakistan* (or “accounting statement”), which comprises a separate balance sheet for the Issue Department and the Banking Department, and forwards it in hardcopy to the Statistics Department. These accounting statements do not contain sufficient detail to enable the classification of all financial instruments and economic sectors for statistical purposes as defined in the *MFSM*. Additional information is obtained from the Accounts Department to enable the classification of financial instruments and economic sector according to the recommendations of the *MFSM*.

The source data for compiling the analytical accounts of scheduled banks are the individual returns developed by and collected from the Banking Supervision Department. Items in these returns are derived from the banks’ accounting records. The reporting forms (comprising the banks’ balance sheets, income statements, off-balance-sheet items, and various other supplementary forms) capture almost the full range of financial information. However, the Statistics Department does not receive the aggregated source data with all available details as provided by the reporting banks. Instead, the Banking Supervision Department provides the Statistics Department with the two-page hardcopy *Weekly Statement of Position of All Scheduled Banks*, which does not contain sufficient details to enable the classification of all financial instruments and economic sectors for statistical purposes as defined in the *MFSM*. For this reason, the Statistics Department obtains more detailed information from the relevant departments.

To significantly improve the availability of comprehensive and accurate source data on banks, the SBP introduced with Circular No. 2 of March 16, 1993 entirely new monthly report forms for scheduled banks. The complete set of these forms comprises the statement of liabilities and assets, classification of credit by borrowers, deposits distributed by deposit holders, and memoranda items. There are the following main differences between the monthly and weekly returns underlining the advantages of the new data collection system: (1) all scheduled banks report their monthly forms directly to the Statistics Department, thus

permitting in-depth analyses and cross-checks without delay; (2) the reported data refer to the last working day and not the last Saturday of the reference month as in the case of the weekly returns, thus further reducing discrepancies between net foreign assets compiled in monetary statistics and in balance of payments statistics, which utilizes month-end data; (3) the report forms provide data on banks' foreign liabilities (mainly foreign currency deposits held by nonresidents), which are not available in the weekly returns; and (4) brief guidance notes are available for the banks on the classification of resident and nonresident accounts as well as selected instruments. The monthly reports, by and large, provide sufficient detail to compile monetary statistics in conformity with the *MFSM* guidelines (see Section 3.1.2).

Despite the availability of more detailed monthly source data, the SBP continues to compile the analytical accounts of the central bank and the scheduled banks for publication in the *Statistical Bulletin* on the basis of the weekly returns. The monthly data are used only as supplementary data to allow at least a somehow meaningful classification and sectorization of the weekly source data. For the dissemination of the analytical accounts of the central bank and the scheduled banks to the IMF, however, the SBP's Statistics Department solely utilizes the source data retrieved from the monthly report forms.

Meetings are not common with financial market participants and the business community to identify new developments that need to be taken into account in the data collection system for compiling monetary statistics.

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

The accounting statement of the SBP and the weekly returns of the scheduled banks are used primarily for banking supervisory purposes and, therefore, do not reasonably approximate the definitions and classifications required for the compilation of a central bank survey, other depository corporations survey, and depository corporations survey (or monetary survey), as outlined in the *MFSM*. For this reason, the SBP's Statistics Department makes extensive adjustments when compiling the monetary authorities accounts and the monetary survey for IMF purposes (see Section 3.2.2). However, these adjustments are currently not employed to improve the sectorization and classification in the balance sheets of the SBP and scheduled banks as disseminated in the *Statistical Bulletin*.

The unclassified items recorded in *Other assets* of SBP's accounting statement constitute about 20 percent (end-November 2003) of SBP's total assets. *Other liabilities* in the scheduled banks' weekly statement constitute 30 percent (end-October 2003) of the scheduled banks' total liabilities. These relatively high ratios indicate that further adjustments of source data are necessary to approximate the relevant instruments and sectors for compiling sound monetary statistics.

As for the monthly report forms of the scheduled banks, the item *Other private sector* for various asset and liability positions indistinguishably includes private nonfinancial corporations and households (including nonprofit institutions serving households). The

Statistics Department is aware of these shortcomings and plans to revise the monthly report form after the SBP has implemented the 1993 SNA and MFSM guidelines.

3.1.3 Source data are timely

The weekly balance sheet data of the SBP are available 10 days after the reference week. The Statistics Department needs 2-3 days to generate the analytical accounts of the central bank. However, the end-of-fiscal-year accounting data (end-June) of the SBP are available for monetary statistics purposes only after the financial statements of the SBP have been approved by the Central Board of Directors of the SBP, which meets every year before the 24th of August. The delay of SBP's accounting data could mean that data on the central bank aggregates cannot be disseminated within the GDDS timeliness specification of 1-2 months. To avoid this delay the SBP has recently decided that preliminary data will be used in the future for the compilation of the monetary statistics for the period June–August.

The aggregated weekly data for the scheduled banks are provided by the Banking Supervision Department 10 days after the reference week (Saturday). The reporting date for the banks' monthly report forms is the 20th day after the end of the reference month. After the data are received, the Statistics Department requires about 7-10 days to finalize the analytical accounts for the scheduled banks.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

Computerized data collection started in the SBP's Statistics Department in March 1993 with the introduction of the new monthly report forms for scheduled banks. The software for data entry and diskette formatting was developed by the Statistics Department. Data are reported on diskettes, which are accompanied by the completed hardcopy report forms, and entered into the electronic database of the Statistics Department. The potential for processing errors is minimized by the use of electronic reporting and processing procedures.

In the case of the source data for the central bank provided by the Accounts Department and the scheduled banks' aggregated weekly statements provided by the Banking Supervision Department, the Statistics Department only receives hard copies, although both datasets are available in electronic format. Thus, the Statistics Department has to manually enter these data into its database. 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 Statistics Department reclassifies the source data for the compilation of the monetary authorities' accounts and the monetary survey that are provided to the IMF. For example, foreign currency balances of the SBP that have been transferred to resident scheduled banks

and financial institutions are recorded in the statement of the Accounts Department in *Other assets*. Since these balances (*sinking funds*) still represent foreign currency reserves of the SBP (they are earmarked to meet specific foreign currency liabilities and commitments of the SBP) the Statistics Department re-routes these balances to foreign assets. Loans received from the IMF, which are recorded in the accounting statement as other deposits, are reclassified as foreign liabilities in the IMF presentation of the monetary authorities accounts. These data adjustments are currently not applied to the SBP data published in the *Statistical Bulletin*. However, the Statistics Department is considering compiling and publishing a central bank survey in line with the IMF format and *MFSM* recommendations, thus employing the same extensive adjustment procedures.

For the dissemination of the scheduled banks' balance sheet in the *Statistical Bulletin*, the Statistics Department makes various data adjustments to the source data of the scheduled banks, which are provided by the Banking Supervision Department through the weekly statements. The adjustments are conducted by utilizing important information from the scheduled banks' monthly report forms. These procedures mainly refer to the (1) deduction of capital assigned by resident banks to their branches operating abroad from *Balances with banks abroad*, (2) sectorization of various asset and liability positions, including the identification of government deposits held with the scheduled banks, and (3) calculation of the banks' foreign liabilities.

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

Queries regarding the balance sheet data of the SBP are resolved between the Accounts and Statistics Departments. The Banking Supervision Department reviews the weekly data for the scheduled banks and discusses any questionable data directly with the responding bank. The Statistics Department uses computerized procedures to monitor the accuracy of the banks' source data provided through the monthly report forms. Validation checks built into the electronic report forms enable the respondent to rectify errors at the time of data entry. Formal data inconsistencies and out-of-trend values are confirmed with respondents. Only the Statistics Department is authorized to make revisions in the monthly report forms. Source data are analyzed in the context of revisions.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

If deemed necessary, the accuracy of the monthly source data submitted by banks is checked against other data sources, such as the Statistics Department's half-yearly returns on scheduled banks, which contains balance sheet data and detailed information on deposits,

advances and bills, and investment in securities. In general, however, most queries concerning monetary statistics are resolved by the Statistics Department directly with the scheduled banks by telephone or e-mail.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The Statistics Department investigates statistical discrepancies (e.g., discrepancies in inter-bank positions) and their possible causes.

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 has been introduced. The Economic Policy Department currently investigates the reasons for the fluctuations of the time series *Other items (net)*.

3.5 Revision studies

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

No mechanisms are in place to conduct routine revision studies since the data on the SBP and scheduled banks are considered final when first released (see also 4.4.2 ahead). 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 used internally to inform statistical processes.

4. Serviceability

4.1 Relevance

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

The relevance of monetary statistics is largely monitored in the context of interdepartmental meetings within the SBP. There is no established process of consultation with representatives from the private sector, including academia, or through other forms of communication with users (especially user surveys). However, user requests for additional statistical information are noted and considered when the SBP reviews its statistical work program.

The Director of the SBP's Statistics Department and the division chiefs involved in the compilation process of monetary statistics participate in international and regional meetings and seminars.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

Monthly data for the SBP and scheduled banks are disseminated within four weeks after the end of the reference period, consistent with the GDDS recommendation for timeliness (that is, one to two months). However, in the case of the SBP, the end-of-fiscal-year balance sheet in June is only disseminated with a three month lag. The authorities expect to fulfill GDDS recommendations using provisional data.

4.2.2 Periodicity follows dissemination standards

The balance sheet of the SBP and the consolidated balance sheet of the scheduled banks are disseminated on a monthly basis, which meets the recommended monthly periodicity of the GDDS and meets SDDS requirements.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Inconsistencies exist between the data on SBP's loans and advances to scheduled banks and the data on scheduled banks' borrowings from the SBP. The reconciliation of stock with flow data, which are compiled and published only in the table *Analysis of Causative Factors for Changes in Monetary Statistics* of the *Statistical Appendix* (see Section 2.4.1), is essentially not possible because the different classification, level of aggregation, and sectorization in both tables do not permit any meaningful comparison.

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

The monetary statistics are consistent over time. Modifications of source data and methodology are indicated in the *Statistical Bulletin* in brief footnotes, such as the introduction of a new report form for banks in December 2001 to collect information on the distribution of deposits by category of holder and type of accounts.

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

The monetary statistics are, in principle, reconcilable with balance of payments statistics. However, in the case of data on *Net foreign assets* (NFA), there are some inconsistencies between NFA derived from the balance of payments database and the NFA calculated on the basis of monetary statistics. According to the authorities, the main reasons for these discrepancies are the different exchange rates that are used for different end-reference periods to convert foreign-currency-denominated stocks into national currency amounts. For balance of payments purposes, the Statistics Department receives data from the scheduled banks on their foreign currency holdings and deposits in the respective currency (that is,

holdings of U.S. dollars are reported in U.S. dollars, etc.), which it translates into Pakistani rupees by using the midpoint exchange rate of the end-reference period. For monetary statistics purposes, the Statistics Department directly uses the Pakistani rupee amounts for foreign-currency holdings and deposits as converted by the banks, which use the exchange rate prevailing at the time the transactions are made. The other source of discrepancy is that the end-reference period for balance of payments refers to the last day of the month whereas in monetary statistics it is the last Saturday of the week.

The Statistics Department regularly checks the consistency of the monetary statistics with balance of payments statistics. Consistency checks between government finance statistics and monetary statistics are not conducted. On the basis of publicly available data, monetary data are currently not reconcilable with government finance statistics.

4.4 Revision policy and practice

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

The SBP's Statistics Department has no formal revision policy for monetary statistics. The published data for the SBP and scheduled banks are final when first disseminated (see Section 3.5.1). Banks may send revisions in their next return. In practice, however, such revisions are very rare and insignificant. The *Statistical Bulletin* only shows revisions and explanatory notes for the data on the causative factors explaining the changes in broad money liabilities. Users are not informed that the SBP does not conduct routine data revisions.

4.4.2 Preliminary data are clearly identified

Only the initially published data on reserve money, broad money liabilities, and the causative factors for changes of broad money are identified as preliminary. Revised data are disseminated with the same level of detail as previously published, but are not explicitly identified in the *Statistical Bulletin*.

4.4.3 Studies and analyses of revisions are made public

Given the sporadic nature of the revisions to monetary data, no studies and analyses of revisions are made public. However, errors and 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 balance sheet of the SBP, as published in the *Statistical Bulletin*, is presented in a format approved by the Federal Government and not designed for monetary statistics purposes. This presentation does not provide information on SBP's foreign liabilities. In addition, loans and advances to the government of former East Pakistan (Bangladesh)⁴⁶ are classified as *Internal assets* and loans from the IMF are included in *Other domestic deposits*, which does not facilitate proper interpretation of the central bank's claims and liabilities. The *Statistical Bulletin* contains charts presenting the yearly development of currency in circulation and the monthly growth of the scheduled banks' demand and time deposits. Seasonally adjusted monetary data are not compiled.

5.1.2 Dissemination media and formats are adequate

Monetary statistics are disseminated on a weekly and monthly basis in hard copy and on SBP's website. Data on the SBP website are only disseminated as PDF files; however, user-friendly Excel files are provided on request.

5.1.3 Statistics are released on a preannounced schedule

There is no advance release calendar, but internal production schedules provide reasonably predictable release dates for monetary statistics.⁴⁷

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

Data are released 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.

⁴⁶ The settlement of these balances is subject to final agreement between the governments of Pakistan and Bangladesh.

⁴⁷ Beginning in February 2004, a publicly announced advance release calendar is available on the SBP website. In addition, internal production schedules provide reasonably predictable release dates for monetary statistics.

5.2 Metadata accessibility

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

Metadata on monetary statistics is only provided in summary form through Pakistan's GDDS web pages posted on the Dissemination Standards Bulletin Board (DSBB) of the IMF. The SBP provides a hyperlink to the GDDS metadata on its website.

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

The SBP publications, website, and GDDS metadata provide alternative levels of detail on the methodology employed in compiling Pakistan's monetary statistics. A comprehensive sources and methods document to inform analysts and other users of monetary statistics about how the data are produced exists only as an internal document (Working Manual) circulated within the Statistics and Economic Policy Departments.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The statistical publications do not identify contact points for enquiries by mail, telephone, facsimile, or by e-mail. Contact points are available on the departmental pages of the SBP website. However, the information service of the SBP sends queries on monetary statistics from interested users to the concerned divisions of the Statistics Department for answers and clarifications. Users are provided with contact persons of the Statistics Department in the SBP website.

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

A list of statistical publications with charges and their periodicity is included in all SBP publications. The *Statistical Bulletin* and *Annual Report* of the SBP along with other publications are also available on the SBP's website.

Table 5. Pakistan: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(Compiling Agency: State Bank of Pakistan)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment		X				Monetary statistics compilers need training in statistical methodology.	
0.2 Resources			X				
0.3 Quality awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X			Published monetary and credit aggregates for the SBP and scheduled banks are not presented in a consolidated analytical framework. Published data are not compiled on an end-month basis.	SBP plans to (i) publish an internally consistent analytical framework for monetary statistics as already provided to the IMF (short-term), and (ii) compile the monetary survey using end-month data (short-term). ⁴⁸
2.2 Scope		X				Instrument classification, sectorization, and recording of repos and financial instruments are not according to <i>MFSM</i> .	SBP plans to fully implement the <i>MFSM</i> guidelines on the sectorization, classification of instruments, and accounting (short-term).
2.3 Classification/sectorization				X		Accrued interest is not included in the underlying instrument. Gold balances are only revalued on an annual basis.	SBP plans to incorporate accrued interest in the outstanding values of financial instruments (medium-term).
2.4 Basis for recording							

⁴⁸ Beginning in June 2004, the SBP disseminates monetary statistics based to a large extent on the *MFSM* on the web site and the *Statistical Bulletin*.

Table 5. Pakistan: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(Compiling Agency: State Bank of Pakistan)

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			Banks' weekly data overall do not reasonably approximate instruments and sectors.	SBP plans to compile monetary statistics based on data collected through the monthly report forms rather than the weekly statements provided by the Banking Supervision Department (short-term). ⁴⁹
3.2	Statistical techniques		X				Weekly data on SBP and banks are entered manually into the database, which can be a source of errors.	SBP has already initiated a data warehouse project to improve data capturing procedures for SBP and banks' weekly balance sheet data (short-term).
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					
4. Serviceability								
4.1	Relevance			X			No formal procedures for consultations with users, such as periodic meetings or user surveys, to solicit feedback.	SBP plans to formally seek feedback from users on the relevance and usefulness of data on a regular basis (medium-term).
4.2	Timeliness and periodicity		X				SBP data for end-fiscal year (June) are disseminated with a three-month lag.	SBP has already decided to use provisional data to improve the timeliness of SBP data for end-fiscal year (short-term).
4.3	Consistency			X			Large discrepancies exist in the positions between the SBP and scheduled banks. Monetary data are not reconcilable with government finance statistics.	SBP plans to improve data consistency between the central bank and scheduled banks, and between monetary statistics and government finance statistics (short-term).
4.4	Revision policy and practice		X				There is no formal revision policy. Revisions are infrequent and made when needed. Users are not informed of this revision policy for monetary statistics.	SBP plans to inform users of its revision policy and practice, and to include documentation of revisions in the statistical publications (short-term).

⁴⁹ Beginning in June 2004, the SBP publishes monetary statistics based on month-end data.

Table 5. Pakistan: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(Compiling Agency: State Bank of Pakistan)

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		
5. Accessibility						
5.1 Data accessibility			X		Dissemination of foreign liability data and improved instrument classification and sectorization required to facilitate sound analysis. ⁵⁰	SBP plans to publish monetary data in a clear manner to facilitate accurate interpretation and analysis (short-term).
5.2 Metadata accessibility			X		Metadata are available only on IMF's Dissemination Standards Bulletin Board.	SBP plans to publish comprehensive metadata for monetary statistics (short-term).
5.3 Assistance to users			X		Contact points are not identified in the <i>Statistical Bulletin</i> .	SBP plans to identify contact points for enquiries by mail, telephone, facsimile, or by e-mail (short-term). ⁵¹

⁵⁰ Data disseminated from June 2004 onwards follows more closely the *MFSM* recommended format.

⁵¹ This information is being provided since early 2004.

Recommendations for Monetary Statistics

Based on the results of the data quality assessment for monetary statistics and discussions with officials of the State Bank of Pakistan, the following measures are proposed for the prerequisites of quality, methodological soundness, accuracy and reliability, serviceability, and accessibility to increase further Pakistan's monetary statistics' adherence to international statistical standards.⁵²

Prerequisites of data

- Continue to increase resources dedicated to training in monetary statistics methodology and compilation methods, including international statistical guidelines.

Methodological soundness

- For publication in the *Statistical Bulletin*, compile and disseminate an internally consistent analytical framework that would consolidate the analytical accounts of the SBP with the scheduled banks. Such a framework (monetary survey) is already being provided to the IMF for surveillance and publication purposes. (In February 2004, the SBP disseminated on its website a monetary survey broadly along the *MFSM* lines).
- Use month-end data for compiling the analytical accounts of the SBP and scheduled banks.
- Implement the *MFSM* guidelines on the sectorization of institutional units, classification of financial instruments, and the recording of securities repurchase agreements (repos) and financial derivatives.
- Incorporate accrued interest in the outstanding values of financial instruments, as recommended in the *MFSM*.

Accuracy and reliability

- Compile monetary statistics based on the data collected through the monthly report forms rather than the weekly statements provided by the Banking Supervision Department.
- Improve the data capturing procedures for the SBP and banks' weekly balance sheet information by using electronic means to enter these data into the database. (This

⁵² The authorities have reported that significant progress has been achieved in the implementation of several recommendations during 2004.

recommendation is being gradually implemented with the ongoing progress of putting into service the data warehouse project of the SBP.)

Serviceability

- Improve the data consistency between the SBP and scheduled banks.
- Establish a regular mechanism to verify the consistency between monetary and government finance statistics.
- Inform users of SBP's revision policy and practice and include a documentation of revisions in the statistical publications.

Accessibility

- Publish monetary data in a clear manner, especially by improving the clarity of the tables, to facilitate accurate interpretation and analysis (e.g., publish foreign liabilities and disaggregate the nonpublic sector in line with the *MFSM* guidelines).
- Publish comprehensive metadata on the concepts and methodology used to collect and compile monetary statistics.
- Identify contact points for enquiries by mail, telephone, facsimile, or by e-mail.

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 State Bank of Pakistan (SBP) is the sole official agency in charge of collecting, compiling, and disseminating balance of payments statistics. The mandate is based on the provisions of the Foreign Exchange Regulation Act 1947, which empower the SBP to formulate and regulate foreign exchange policy and its operations in Pakistan. In addition, the MOF issued a notification mandating the SBP to compile the balance of payments. In Pakistan, notifications issued within the framework of the law are equivalent to the law itself. Within the SBP, the Balance of Payments Division (BOPD) of the Statistics Department is in charge of compiling balance of payments statistics. The Planning and Development Division of the Statistics Department is responsible for bringing balance of payments statistics in line with international standards.

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

The existing data-sharing arrangements between the SBP and other data producers and agencies are adequate, and data are received in a timely fashion. The Federal Bureau of Statistics (FBS) sends a monthly advance release of trade statistics, based on customs data, in hard and soft copy. In addition, monthly data on exports of crude oil and quarterly data on land borne trade are also provided. The Ministry of Petroleum provides monthly data on oil imported under the Saudi Oil Facility. The MOF provides exhaustive quarterly data on foreign grants and loans, including inflows and outflows of short-and medium-term commercial loans. The customs authorities provide data on personal baggage, imports of private cars, and imports under the Non-repatriable Investment Scheme. To foster co-operation, a Standing Committee on Balance of Payments meets annually for the reconciliation and finalization of the annual balance of payments data. It comprises representatives from the MOF, the SBP, and the Planning Division.

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

Section 53.1 of the SBP Act 1956 and Staff Regulation SBP 2001, paragraph 21, specifically mention that staff need to maintain the confidentiality of any information received in the course of performing their duty. Within the SBP, access to data on individual respondents is restricted to staff requiring them in the performance of their duties. Staff are personally liable for the disclosure of information. Within the BOPD, data are stored in Excel files, which have no links to other database source files. Access to the Excel database is gained by passwords, and access rights are granted only to the officers of the BOPD. An audit team of

the Audit Department and Information Services Department of SBP audits the system regularly to ensure the checks and controls. Confidentiality of data exchange is provided by the Information Services Department, which is responsible for the safety of the data. Under the Banking Companies Ordinance 1962, Section 33, the SBP, if it considers it in the public interest to do so, may publish any information obtained under this ordinance in such consolidated form as it thinks fit. Under the same ordinance, banks are required not to disclose information, except as otherwise required by law.

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

The Foreign Exchange Regulation Act 1947 empowers the SBP to formulate and regulate foreign exchange policy and regulates certain payments, dealings in foreign exchange, securities, and import/export of currency and bullion. Under the provisions of this Act, the SBP may, under subsection (3) of Section 20, direct authorized dealers, travel agents, carriers, stock-brokers, and other authorized persons to make payments and other acts in the course of their business. The Exchange Policy Department of the SBP exercises the administration of the foreign exchange policy for the collection, processing, and dissemination of all external sector data, including the balance of payments. Chapter XXII on the “Return of all foreign exchange transactions” of the *Foreign Exchange Manual (2002)* provides detailed guidelines for the preparation, coding, and submission of various reports, forms, and foreign exchange returns from banks, Pakistani and Foreign Shipping/Airline Companies, insurance companies, travel agents, enterprises, and individuals engaged in the receipts or payments of foreign exchange transactions.

The legal mandate to obtain information through surveys rests on the power conferred to the SBP by subsection (1) of Section 4 of the International Monetary Fund and Bank Act, 1050 (XLIII of 1950), and the Government of Pakistan, Ministry of Finance Notification No.3(3)-IMF/56, dated October 4, 1956.

All balance of payments survey report forms are supported by instructions for facilitating the respondents to provide accurate data. The covering letter accompanying the survey report forms clearly specifies the legal obligation, and the purpose and nature of the enquiry. The respondent can contact the SBP through telephone, fax, e-mail, or personally seek assistance or clarifications. Copies of circulars/letters, codes, guides, and frequently asked questions are also posted on the SBP’s website for reference. Software is provided for the convenience of respondents. Under the Banking Companies Ordinance 1962, penalties are applicable for willfully making a statement that is false, consisting of fines or imprisonment for a term that may extend to three years.

0.2 Resources

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

The task to compile the balance of payments is distributed among three divisions within the SBP, namely the Balance of Payments Division, the Exchange Accounts Division, and the Foreign Investment and Loans Division, and staff resources to meet this task appear to be adequate. These three divisions comprise 27 individuals, who are all well qualified. All individuals have advanced degrees, mostly in statistics, and several have attended IMF balance of payments courses or participated in courses on macroeconomic statistics. After attending courses, the trainee has to give a presentation to the other members of the team. The conceptual knowledge of *BPM5* is a prerequisite for every newly posted staff. The SBP has the policy of rotating jobs every three years.

All divisions are well equipped with computers. Each officer has a PC and the equipment is periodically upgraded. The computers are linked to the network of the SBP and outlook and Internet access facilities are available and used for the timely compilation of data.

0.2.2 Measures to ensure efficient use of resources are implemented

Each year, a development plan is prepared in which the requests for the additional allocation of resources are formulated. The SBP carries out an annual review of each department in which the department's activities and expenditures are audited. In addition, there is a Performance Management System, under which each division has to submit a business plan. At the individual level, each staff member has to outline the tasks, including some goals for development the member intends to perform, thus eliminating the possibility of duplication of efforts. The system includes performance indicators, and incentives are provided if goals are achieved efficiently or tasks are completed.

Balance of payments compilers make extensively use the computerized system and databases. In view of the nature of the job, most of the software is developed in-house. *Fox Pro for Windows* and *DOS* are widely used, and arrangements are underway to migrate to *Oracle* with *OLAP* tools. The Balance of Payments and Exchange Rate System, a database warehouse, is in the final stages of implementation. In addition, the Mindscape Acquisition Gateway is going to be implemented for web-based data acquisition from respondents.

The Department of Statistics also has monthly meetings in which divisional outputs are discussed. There is also an ongoing process for the review of publications/outputs in an effort to improve the quality. During the review process, major users from outside and within the SBP are consulted. Consultation with major users takes place if the SBP plans to introduce new information, and training/user guides are provided to all data providers.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

The Standing Committee on Balance of Payments and BOPD continuously monitor the quality of balance of payments data and periodically undertake initiatives to verify the quality of the data, including (i) redesigning the forms for obtaining data of Outstanding Export Bills, (ii) direct connectivity to the MOF Data Management FAS system with SBP, (iii) monthly reconciliation of official debt service payments with the MOF, (iv) monthly reconciliation of reserves with the Accounts and Exchange Debt Management Department, and (v) cross-checking of ITRS coding with the respective forms. In addition, the Export Reconciliation Committee verifies the trade data compiled by the Federal Bureau of Statistics (customs records) and the SBP (exchange records).

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

The management of the SBP and the Statistics Department regularly monitor the quality of the balance of payments data and take steps, such as noted above, to improve quality. Procedures for data entry checks, mismatching, out-of-range records, validation listings, etc., have been in place for many years. A mechanism is in place under which the immediate supervisor of the data compiler is required to thoroughly check the accuracy of the data produced and provide a certificate to that effect. Code guides along with answers to frequently asked questions for electronic data collection are also available on the SBP website. Banks are regularly guided for the coding of complex transactions.

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

The management of the Statistics Department is aware of the trade-offs between the accuracy and timeliness of the data. These trade-offs are reviewed on an ongoing basis with management, setting time limits within which data of adequate quality can be produced. Data need to be reported within a cutoff date and, depending on the relevant time series, various cutoff dates are used.

The management has created a Planning and Development Division in the Statistics Department with the responsibility to review the existing compilation framework, including the publications of the department. In addition, it provides guidelines for the implementation of international standards and emerging needs. Even though there are no users surveys to obtain feedback to guide planning for existing and emerging needs, the preface of the SBP publications invites comments for improvements. Comments have been received mostly from researchers undertaking in-depth analysis of the economy using SBP data, which are duly taken into consideration.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Government officials do not comment on or regulate the release of any data by the SBP, irrespective of the advance release of balance of payments data to the MOF. At no time in the past have revisions been requested by any government official. Information collected for statistical purposes may not be used by other agencies for any other purpose. The SBP is independent of the government with respect to its statistical activities.

Staff are hired on the basis of appointment policies of the SBP and are expected to adhere to official standards of professional conduct. Vacancies are advertised publicly and filled competitively. The SBP attaches great importance to research and has organized training to promote forecasting capabilities. Incentives are provided for staff who write papers. Staff are also encouraged to continue education through scholarships provided by the SBP for studies either abroad or in Pakistan.

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

The choice of source data (e.g., direct collection, surveys, or administrative records), processing, and validation techniques is based solely on statistical considerations.

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

A media advisor has been appointed by the SBP in the Corporate Affairs Department, who is responsible for dealing with comments/reports on economic activity related to the SBP. When the media publish erroneous comments on the balance of payments data, the SBP follows up with a notice providing the correct interpretation.

1.2 Transparency

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

The annual publication *Pakistan's Balance of Payments* contains information on the methodology for the collection, processing, and dissemination of data. The Code guide of the ITRS, used by the authorized banks and other dealers, containing the conceptual framework of the balance of payments in accordance with *BPM5*, is available on the SBP website. In compliance with GDDS, this methodology is also available on the IMF website.

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

Provisional data are released on the SBP website without any prior access by the government. However, the final data are referred to the MOF prior to its release only for the reconciliation of data on official foreign economic assistance and associated debt service. This is considered an internal process that does not require a notification to the public.

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

Data released to the public by the SBP are clearly identified as such. The SBP 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

For data users, a commentary on the revision of data and changes in the methodology is provided at the time of introduction. For data suppliers, advance notice is given on major changes in methodology, primarily to enable the data providers to make the necessary adjustments to comply with the changes or new methodology on time. For instance, banks were notified in advance of the impending changes when the International Standard for Industrial Classification (ISIC) was implemented for the ITRS for *BPM5* reporting.

1.3 Ethical standards

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

Guidelines for staff behavior are outlined in the State Bank of Pakistan Staff Regulations (2001), which must be witnessed and signed by all staff members.

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 framework of Pakistan's balance of payments generally follows the guidelines and recommendations of *BPM5*. While the format of the balance of payments presentation in on the SBP website and publications still follow the guidelines of the fourth edition of the *Balance of Payments Manual (BPM4)*, the standard components of the balance of payments have been compiled on the basis of *BPM5* since July 2003, using mapping and bridging procedures to correlate *BPM5* standard components as close as possible with *BPM4* components. The SBP plans to aggregate and present the monthly balance of payments data in accordance with *BPM5* format beginning in January 2004 for internal purposes, and in July 2004 for dissemination to the public.

2.2 Scope

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

While the definition of residents and nonresidents is in accordance with *BPM5*, exceptions are noted with respect to enterprises operating in export processing zones (EPZs), offshore banks, and Pakistani nationals who are residing abroad, but have a dwelling in Pakistan. Enterprises operating in the EPZs and offshore banks are regarded as nonresidents, while Pakistan nationals residing abroad, owning a dwelling in Pakistan, are regarded as residents. According to the residency criteria of *BPM5*, enterprises operating in export processing zones and offshore banks should be regarded as residents, while Pakistani nationals residing abroad irrespective of owning a dwelling in Pakistan should be regarded as nonresidents.

2.3 Classification/sectorization

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

The classification/sectorization in the balance of payments, in anticipation of the official implementation date for the implementation of *BPM5* in January 2004, is in accordance with *BPM5*. The classification systems comprise (i) the current account, including the goods, services, income, and current transfers account, (ii) the capital account, and (iii) the financial account, including direct investment, portfolio investment, other investments, and the reserve assets account. The four sectors in *BPM5* are clearly identified, namely (i) the monetary authorities, comprising the SBP and the State Bank of Pakistan Banking Services Corporation (SBPBSC); (ii) the general government sector, comprising all federal and provincial ministries, including defense; (iii) deposit money banks, comprising all commercial banks; and (iv) other sectors, comprising nonbank financial institutions, enterprises, and individuals. For the moment, classification and sectorization still follow the *BPM4* guidelines. The following describes the main accounts compiled in accordance with *BPM5*.

Goods: The goods account includes goods for processing by enterprises operating in the EPZs of Pakistan. Data on goods procured in ports by carriers, such as supply of fuels, foodstuff, etc., and repair of goods are also compiled.

Services: This account includes the transportation of goods and passengers, travel, and other services. The latter includes communications, construction, insurance, financial services, computer and information services, royalties and license fees, and other business services. The transportation account includes the earnings and expenditures of Pakistani airlines, shipping, and tanker companies. Freight earnings on exports and imports and passenger fare earnings of foreign shipping companies, airlines, and sales agents are also included.

Travel: This account includes payments by residents through exchange companies operating in Pakistan.

Income: This account includes the compensation of employees, direct investment income, reinvested earnings, portfolio investment income, and other investment income. Reinvested earnings comprise amounts issued as bonus shares. Also included is the counterpart to the exports of crude oil in accordance with the production sharing agreements between the oil companies and the government.

Current transfers: This account includes taxes and duties, cash grants received by government, workers' remittances, the counterpart to the inflows and outflows of foreign currency accounts of residents, donations, and other transfers.

Capital transfers: This account includes migrants' transfers and official aid received in the form of capital goods.

Financial account: The definitions for direct investment and portfolio investment are in accordance with the guidelines of *BPM5*.

Other investment: This account includes trade credit assets and liabilities, loans (including the Use of Fund credit), currency and deposits, and other accounts receivable and payable. The accounts are further sectorized between the monetary authorities, general government, banks, and other sectors. Data on loan assets cover loans, mainly extended by the general government. Banks are not authorized to extend loans abroad, but foreign assets of banks not classified as currency and deposits are classified as other assets. Data on loan liabilities cover loans received by general government, including guaranteed loans received by the public sector and military debt.

Currency and deposits: This account includes foreign assets and liabilities of residents under foreign currency accounts. Also included in this account are the counterparts of private transfers settled through exchange companies and land borne trade to Afghanistan.

Reserves: This account includes SDRs, the reserve position in the Fund, and foreign exchange reserve assets in the form of currency and deposits, and securities. Balances with banks of commercial banks under the authority of the SBP are also included.

The main deviations are:

Goods account: Since the enterprises in the EPZs are not considered to be part of the domestic economy (outside the tariff wall), goods exports exclude goods exported by enterprises operating in the EPZs. Goods leaving the domestic economy into the EPZs are included in goods exports and classified as goods for processing. Similarly, goods imported by enterprises in the EPZs are not included in goods imports. Goods entering the domestic economy are considered goods imports and classified as goods for processing.

Income account: The counterpart to exports of crude oil under product-sharing agreements is included in the income account. Conceptually, the counterpart is a mixture of direct investment income and the recuperation of capital invested by direct investors. The latter should be classified in the financial account.

Reinvestment of earnings: The inflow of reinvested earnings is underestimated, as it is limited to those earnings intended to be paid in the form of bonus shares. Other earnings retained by the enterprise and allocated to other reserves accounts are excluded.

Loans: Loans guaranteed by the government are classified in the general government sector. The classification of these loans should be determined by the status of the beneficiary of these loans.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Transactions included in the ITRS are settled at market prices. Official grants in kind are included at prices determined by foreign donors. Equity contributions in kind of foreign direct investors are valued at prices determined by the customs authorities.

2.4.2 Recording is done on an accrual basis

The balance of payments is compiled on an accrual basis. Application of the accrual principal implies that, as far as feasible, adjustments to account for timing differences are made to ensure a uniform recording of transactions. The BOPD makes such adjustments with respect to trade transactions.

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

The recording of current, capital, and financial account transactions follow the guidelines of *BPM5*. Current account items are recorded on a gross basis, while financial items are recorded on a net basis, separately for assets and liabilities.

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 main data sources for the compilation of the balance of payments are the returns of banks, reports from enterprises, and information provided by the government.

Under the International Transactions Reporting System (ITRS), monthly foreign exchange returns from the authorized dealers (ADs) submitted to the SBP are the main source for data on goods exports and imports, services, current transfers, direct investment, portfolio investment, debt servicing, and other items. These data are compiled on a cash basis. A Code Guide containing instructions for the coding, classification, and preparation of these returns is provided to all ADs. Software is prepared and provided to banks to enable them to supply the data electronically. There are at present more than 1,700 ADs operating in Pakistan. The ITRS is comprehensive, providing complete information on all cash inflows and outflows between residents and nonresidents settled through the banking system, broken down by currency and country. The transactions are classified on the basis of *BPM5* guidelines. Under the ITRS, data are received through floppy disks received from the head offices of the banks.

Data on goods procured in ports by carriers, transportation services, and data needed to adjust goods exports on an f.o.b. basis are derived from monthly reports on earnings and expenditures abroad, submitted by foreign and Pakistani shipping and airline companies. In addition, the reports also contain stock data on the foreign assets and liabilities of these companies.

Data on flows and stocks of foreign assets and liabilities are derived from monthly reports on the receipts and payments of Pakistan's diplomatic missions abroad.

Statements on the amounts of outstanding export bills are collected from banks in order to reconcile customs data on exports with data on goods exports derived from the ITRS. The contra- entries are included in trade credits.

Data on direct investment flows are compiled from the ITRS. Data on capital equity contributions in kind by foreign direct investors and reinvestment of earnings are derived from the annual enterprise survey of foreign investment in Pakistan (581 enterprises in 2001). Data on the equity capital of foreign banks are derived from the SBP Abstract of Accounts.

Data on portfolio investment flows are compiled from the ITRS. Data on official Special U.S. dollar bonds, euro bonds, and government securities are derived from the SBP Abstract of Accounts and other administrative records.

Data on trade credits are derived from the statement of Outstanding Export Bills, submitted by the banks. Data on bills discounted by banks are derived from the Statement of Affairs, obtained from the Banking Supervision Department of the SBP. Data on pre-shipment and post-shipment export loans and on imports are derived from the ITRS. Data on inflows of loans received by the private sector are derived from agreements provided by enterprises to the Exchange Policy Department of the SBP. In addition, in July/August 2002 an annual the SBP initiated a survey of loans received by the private sector settled through the banks. Data on Exchange Entitlement Certificates (EECS) are also used. The EECs entitle the loan recipients to obtain the foreign exchange when servicing the loans becomes due. Data on long-term loans received by the government are obtained from the Economic Affairs Division and include military debt. Data on guaranteed loans are obtained from the Finance

Division. Cash disbursements on loans received are derived from the ITRS and the SBP Abstract of Accounts.

Data on inflows of foreign economic assistance, official debt servicing, and inflows and outflows on loans received are obtained from the MOF. For the private sector, data on loans are received from the Exchange Policy Department and the ITRS.

Software has been developed for computerized cross-checking of enterprise data with cash flows through the banks and the SBP. All data are processed through a computerized system for timely and accurate data dissemination.

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

Goods obtained from the ITRS are either on an f.o.b. basis or a cost and freight basis. Data from airline, shipping, and tanker companies are used to adjust exports to an f.o.b. basis. Imports derived from the ITRS are on a c.i.f. basis. A c.i.f./f.o.b. ratio of 8 percent is used to adjust goods imports to an f.o.b. basis. Coverage adjustments are made for imports under the non-repatriable investment scheme, sales of duty free shops, imports under foreign economic assistance, military imports, exports of crude oil, land-borne trade, and oil imports under the Saudi oil facility.

With the liberalization of foreign exchange regulations, the data for travel payments became underreported, because money changers were excluded. From April 2003, with the inclusion of the exchange companies, data on travel improved significantly.

The contra entries for reinvested earnings, direct payments of loans of public enterprises, and the export of oil are adjusted for coverage and accrual.

Separate survey data are collected on inflows and outflows to improve the coverage of loans. Direct financing and utilization of loans received for the purchase of aircraft by PIA are also included.

Deposits in foreign currency accounts are reclassified from banks to foreign currency and deposits of other sectors.

Reserves are reduced with the foreign exchange assets that commercial banks maintain as reserve requirements with the SBP. These foreign exchange assets are classified as currency and deposits of banks.

3.1.3 Source data are timely

All source data are timely and received on schedule. In case of delays, reminders and follow-ups are made by SBP staff through telephone, fax, letters, or e-mails.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

Software has been prepared to check for completeness, consistency of opening and closing balances, coding validations, period of reporting, etc. of the primary data. For ITRS, complete software with online search of codes is provided to automatically perform the routine checks and highlight errors at punching level. The data are not accepted unless all checks are validated.

New forms are designed by the BOPD, taking into account the needs of both users and data providers, after completion of research on availability of information, frequency of reporting, clarity of items, unit of currency, etc., and items are matched with balance of payments standard components. Respondents are briefed through workshops or on a case by case basis. Most current forms have been in use for many years and respondents are well aware of its objectives. Respondents are informed of any amendments or additions prior to finalization of the revised report form, and necessary training for providing accurate data is provided to all potential respondents.

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

Moving average percentages of imports by routes compiled by the Federal Bureau of Statistics (ten years data) are used for the distribution of freight on imports by sea, air, and other modes of transportation.

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*

Verification of data pertains to consistency checks within the survey forms, ensuring the quality and reliability of the information provided, and further enhanced by linking the data at subsequent levels. Accuracy is also promoted by ensuring for all items that stocks reported at the end of the period are equal to stocks reported at the beginning of the period plus transactions and other changes during the period; as noted above, most SBP report forms are based on a closed system.

For banks, electronic reporting is required on software provided by the SBP. This software has built-in validation checks, enabling the respondent to rectify the error at the time of data entry. Particular high-value or unusual transactions are investigated and confirmed with respondents. All transactions reported by the banks are backed by forms, filled out by the remitter or beneficiary, containing relevant details of both parties. It is mandatory for banks

to submit hard copies of foreign exchange returns to the foreign offices of the SBPBSC. These offices validate the classification of transactions as per guidelines and the code guide of the balance of payments.

Whenever a revision is required, owing to structural or policy changes, source data are analyzed in the context of factors necessitating the revisions. Report forms are revised and/or the population of respondents is enlarged and altered appropriately.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

All items that have second-source data or can be cross-checked are regularly validated. Exports and imports data are reconciled with data from the Federal Bureau of Statistics. Debt service data of official, guaranteed, and commercial loans are cross-checked with similar data from the MOF. Data on private sector debt are validated with the annual survey of companies through banks. Official reserves are verified with data from the Accounts and Exchange Debt Management Departments. Stocks of foreign currency accounts reported by banks and their treasury departments are cross-matched. The financial press is followed consistently, and information gleaned from it is used to identify high-value direct investments and other transactions for subsequent checking against reports that have been, or should be, submitted.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Data reported by banks for supervisory and monetary policy management purpose are reconciled with balance of payments data reported by banks. In the ITRS, high values or unusual items are investigated and ascertained. A form has been introduced to assess export bills, providing links with new export bills and the realization of existing bills during the month. Data on stocks of foreign accounts are cross-checked with data reported by the head-office with data reported by its main branch offices. Payments advices for official debt servicing are cross-checked by computer with transactions of the banks and the SBP. Monthly discrepancies are referred to the MOF for rectifications. Outflows of the private sector settled through banks and direct payments from funds held abroad by enterprises are cross-checked with the agreements and repayment schedules maintained in the Exchange Policy Department and the Statistics Department.

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

Differences in exports in the balance of payments and customs data increased significantly during the late nineties. Studies in coordination with the banks and the customs authorities led to the introduction of a revised form in July 2000. This resulted in the elimination of the differences between the two sets of data.

Reporting of inflows and outflows in the new foreign currency accounts with the banking system was not required. This led to an underreporting of transactions settled through these accounts. The BOPD proposed the inclusion of external transactions settled through these accounts, which became part of the ITRS in April 2003.

In 2002, banks were authorized to utilize balances held in the new foreign currency for the settlement of various external transactions, such as pre-shipment and post-shipment export credits, import credits, swaps, placements in Pakistan and abroad, etc. This resulted in mismatches in various items of the balance of payments. In consultation with banks and the Exchange Policy Department, the BOPD introduced a new statement on the utilization of these deposits in early 2003. This statement is the basis for a number of adjustments in the monthly balance of payments statement.

3.5 Revision studies

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

Studies and analyses of revisions are not conducted. However, large revisions are explained when they occur.

4. Serviceability

4.1 Relevance

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

The MOF, the SBP, and other official agencies are the main users of statistics and, as such, their needs for information are met. This is effected through the Balance of Payments Standing Committee, where needs for changes or additional information are voiced. Sometimes, ad-hoc requests are made by students focusing in most cases on additional information. There are no users' surveys, but data users can address questions electronically to the e-mail address: bop.query@sbp.org.pk.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

Quarterly balance of payments statistics are disseminated within one quarter after the reference period, thus meeting SDDS requirements. Annual balance of payments statistics are disseminated within three months after the end of the reference period.

4.2.2 Periodicity follows dissemination standards

Balance of payments statistics are disseminated within three months after the end of the reference period, in accordance with SDDS requirements.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The concepts, definitions, and classifications for producing quarterly and annual balance of payments statistics are identical. Annual data are the sum of quarterly data.

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

Available data are consistent over time. Every effort will be made to present data in a consistent manner when the changeover from the *BPM4* to the *BPM5* is effectively implemented, provided the information from earlier periods is available to permit the maintenance of consistency. Footnotes will be used to indicate a break in the series or the introduction of the new methodology.

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

The BOPD adjusts the data received from various data sources to reconcile of similar data available from more than one data source. These adjustments include the reconciliation of the goods account derived from the ITRS and the customs returns and the reconciliation of external debt flows with similar data from the ITRS. Contra-entries are incorporated to account for the inflows and outflows in the foreign currency accounts, exports of crude oil, and travel flows settled through exchange companies.

BOP data are reconciled with monetary statistics but not with government finance data.

4.4 Revision policy and practice

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

The revision practice is predetermined and is made know to the public. The annual timing of revisions aims at facilitating the regular cycle of economic policy decision making. Provisional balance of payments data are compiled monthly for supervisory and monetary policy management. The data are revised when final data are received. Revised and final data are released quarterly. Changes are highlighted for major differences between provisional and final data. Revised data are always disseminated with the same level of detail.

4.4.2 Preliminary data are clearly identified

Preliminary data are clearly identified. Users are alerted that initially published data are subject to revision for up to one year.

4.4.3 Studies and analyses of revisions are made public

There are no studies or analysis of revisions. However, revised data are identified in the database, which is accessible to users.

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 balance of payments data are presented in a clear manner that facilitates proper interpretation and meaningful comparisons. Four quarterly periods are presented in both rupees and U.S. dollars in *Pakistan's Balance of Payments July 2001-June 2002*. Also presented are regional data, reflecting Pakistan's balance of payments with its most important partner countries. Clarity of text, tables, and definitions facilitates the understanding of balance of payments developments during the periods under consideration.

Four annual periods are presented, in U.S. dollars, in the *Statistical Bulletin*. There are no text, tables, or definitions accompanying the data.

5.1.2 Dissemination media and formats are adequate

Balance of payments data are published in *Pakistan's Balance of Payments* and in the *Statistical Bulletin* of the SBP, and also available on the SBP website. The website is used to disseminate the latest data. Data will be presented in the format recommended in the *BPM5* from January 2004 onward

5.1.3 Statistics are released on a preannounced schedule

The balance of payments statistics are released in accordance with a well-established schedule, which is known by the users. No formal preannounced schedule is made available to the public.

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 website. In addition, analytical tables are sent to the MOF for publication in the *Economic Survey*.

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

Unpublished but nonconfidential data or tabulations are made available upon request, but their availability 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

The description of Pakistan's balance of payments methodology and data sources is published in *Pakistan's Balance of Payments* and posted on the website. It is also published in the IMF's *Balance of Payments Statistics Yearbook* and hyperlinked to the DSBB.

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

No subsets of metadata pertaining to concepts, scope, classifications, basis of recording, data sources, and statistical techniques are available. However, less detailed information on the balance of payments is available in the GDDS metadata on the DSBB.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

An e-mail address (www.sbp.org.pk) is included in the *Statistical Bulletin* for requests of information, but no specific contact information for balance of payments data is provided. The queries are transmitted to the relevant department. In addition, a contact person is identified on the DSBB.

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

A list of publications of the SBP is available in the *Statistical Bulletin* and in the *Balance of Payments July 2001-June 2002*. Most of the publications are available at a charge, but some are complementary or available on the SBP website.

Table 6. Pakistan: Data Quality Assessment Framework—Summary of Results for Balance of Payments Statistics
(*Compiling Agency: State Bank of Pakistan*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment		X					
0.2 Resources		X					
0.3 Quality awareness		X					
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X			Presentation format is based on <i>BPM4</i> .	Format of <i>BPM5</i> will be adopted in January 2004 for internal use, and in June 2004 for dissemination.
2.2 Scope			X			Enterprises in export processing zones and offshore banks in Pakistan are treated as nonresidents. Pakistani nationals residing abroad, but owning a dwelling in Pakistan, are treated as residents.	External transactions of enterprises operating in the export processing zones and offshore banks will be treated as residents of Pakistan. Pakistani nationals residing abroad, but owning a dwelling in Pakistan, will be treated as residents (short term).
2.3 Classification/sectorization			X			Loans guaranteed by the government are classified as government, instead of the sector of the beneficiary of the loan.	Government-guaranteed loans will be reclassified from the general government sector to the sector of the beneficiary of the loan (short term). ⁵³
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					

⁵³ This recommendation was adopted in early 2004.

Table 6. Pakistan: Data Quality Assessment Framework—Summary of Results for Balance of Payments Statistics
(Compiling Agency: State Bank of Pakistan)

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		
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies				X	Revision studies are not carried out.	Studies of revisions will be carried out in the near future.
4. Serviceability						
4.1 Relevance			X		Needs of official users are met through the Balance of Payments Standing Committee. There are no user surveys to obtain feedback on usefulness of data from private sector.	
4.2 Timeliness and periodicity		X				
4.3 Consistency			X		Data are not reconciled with GFS.	Efforts will be made to reconcile data with GFS.
4.4 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users			X		An e-mail address through which enquiries can be made is available	Assistance to users will be improved by providing specific contact information for balance of payments statistics.

Recommendations for Balance of Payments⁵⁴

Methodological soundness

- Compile data on the external transactions of enterprises operating in the export processing zones and offshore banks and treat them as residents of Pakistan.
- Disaggregate the counterpart of exports of crude oil under product sharing agreements into (i) an income component, to be classified in the direct investment income account, and (ii) a component for the repatriation of direct investment capital, to be classified in the account for foreign direct investment in Pakistan of the financial account.
- Strengthen the procedures to estimate reinvested earnings to include, in addition to earnings capitalized as bonus shares, all earnings capitalized in various other reserve accounts.
- Reclassify government-guaranteed loans from the general government sector to the sector of the beneficiary of the loan.

Accuracy and Reliability

- Conduct revision studies.

Serviceability

- Develop and disseminate an advance release calendar.
- Establish regular procedures to verify consistency between BOP and GFS.

Accessibility

- Improve assistance to users by providing more detailed contact information in the publications and on the website.

⁵⁴ The SBP reports significant advances in the implementation of the recommendations during 2004.

Pakistan: Data Dissemination Practices against the Special Data Dissemination Standard

Coverage		Periodicity		Timeliness		Comments
		SDDS	Current Practice	SDDS	Current Practice	
REAL SECTOR						
GDP						
Prescribed: GDP by major expenditure category and/or by productive sector.	National accounts are compiled, to a large extent, according to the recommendations of the <i>SNA 1968</i> . Annual data are published at current and constant prices of 1980/81. The estimates of GDP are derived using the production and expenditure methods. Private final consumption expenditure is estimated as a residual.	Quarterly	Annual	Quarterly	11 Months	Meets SDDS coverage requirement only. Annual national accounts have all the required components. Dissemination of quarterly national accounts is planned for the end of 2003. Rebasings of GDP from 1980/81 to 1999/2000 is being finalized.
Encouraged: Saving, gross national income	Same as above	Quarterly	Annual	Quarterly	11 Months	
Production Index						
Prescribed: Industrial, primary commodity, or sector, as relevant.	Data are disseminated on the monthly "quantum index numbers of large-scale manufacturing industries" (QILSM), a Laspeyres index (1980-81=100) which measures changes in physical output volumes (quantity) of a fixed set of products for large scale manufacturing industries. The QILSM refers exclusively to large-scale enterprises (according to a benchmark year list, 1980-81) and covers nearly 91 items contributing 72 percent of value added to the large-scale enterprises on the basis of 1980-81 Census of Manufacturing Industries (CMI) results.	Monthly	Monthly	6 Weeks (Monthly encouraged)	6 Weeks	Meets all SDDS requirements. Quantum index of large scale manufacturing industries. The index excludes mineral and electricity production.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
<i>Encouraged: Forward-looking indicator(s), e.g., qualitative business surveys, orders, composite leading indicators index.</i>	<i>Not available</i>	<i>Monthly or Quarterly</i>	<i>Not available</i>	<i>Monthly or Quarterly</i>	<i>Not available</i>	<i>Does not meet SDDS requirements.</i>
Labor Market						
<i>Prescribed: Employment</i>	Data are disseminated on the total labor force and number of employed persons in the country. The “Employed” comprises all persons ten years of age and over who worked at least one hour during the reference period, which is one week, and were either “paid employed” or “self employed.” Data are obtained from a sample survey conducted through four quarters of the year. The overall sampling fraction is about 0.02 percent of the total population, the sample covering about 19,000 households.	Quarterly	Annual	Quarterly	2 Quarters	Meets SDDS coverage requirement only.
<i>Prescribed: Unemployment</i>	Data are disseminated on the total labor force and number of unemployed persons in the country. The “unemployed” comprises all persons ten years of age and over who, during the reference period, were: (i) “Without work”, (ii) “Currently available for work”, (iii) “Seeking work.”	Quarterly	Annual	Quarterly	2 Quarters	Meets SDDS coverage requirement only.
<i>Prescribed: Wages/Earnings</i>	Not available.	Quarterly	Not available	Quarterly	Not available	Does not meet SDDS requirements. The use of “As relevant” flexibility option is pending further investigation for source data to develop acceptable wages indicator.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
Price Indices						
	Consumer Price Index	Monthly	Monthly	Monthly	On the 11 th day of the following month	Meets all SDDS requirements.
	The CPI measures changes in the cost for households of buying a representative fixed basket of goods and services. The CPI series are Laspeyres indices (2000-01=100) and covers 52 urban centers (large, medium, and small) that represent about 68% of the total population.					
	Producer Price Index or Wholesale Price Index.	Monthly	Monthly	Monthly	On the 11 th day of the following month	Meets all SDDS requirements. Wholesale price index. Producer price index is being developed.
	The WPI is a Laspeyres index (2000-01=100) measuring price changes for a set of selected items in the primary and wholesale markets. Data are disseminated on the general WPI and for five commodity levels. The index covers 96 commodities and prices are collected each month in 16 cities.					
FISCAL SECTOR						
General Government Operations						
	Revenue, expenditure, balance, and domestic (bank and non-bank), and foreign financing.	Annual	Quarterly	2 Quarters	2 Months	Meets all SDDS requirements. Data is available monthly and resources are being made available to improve periodicity.
	General government transactions data are organized for analytical purposes broadly using the system of definitions and classifications in the <i>GFSM86</i> for the major fiscal aggregates—revenue, expenditure, deficit/surplus, and breakdown of financing. While some nonfinancial public enterprises outside the framework of general government also carry out some quasi-fiscal activities, these transactions are funded by transfers from the budget.					
	<i>Same as above.</i>	Annual	Quarterly	2 Quarters	2 Months	Meets all SDDS requirements.
	<i>Interest payments.</i>					

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
Central Government Operations						
<i>Prescribed:</i> Budgetary accounts: revenue, expenditure, balance, and domestic (bank and non-bank) and foreign financing.	Data cover the budgetary federal (central) government, and the public sector development program and exclude budgetary fund (the Zakat Fund), social security funds, and locally financed operations of district and local governments. The system used to classify the components of the major fiscal aggregates are broadly consistent with the IMF's <i>Manual on Government Finance Statistics, 1986 (GFSM86)</i> . Data on interest payments are shown separately with breakdowns into the domestic and foreign.	Monthly	Quarterly	Monthly	2 Months	Meets SDDS coverage requirement only.
<i>Encouraged:</i> Interest payments	Same as above.	Monthly	Quarterly	Monthly	2 Months	Meets SDDS coverage requirements only
Central Government Debt						
<i>Prescribed:</i> Domestic and foreign, as relevant, with a breakdown by currency (including indexed), as relevant, and a breakdown by maturity; debt guaranteed by central government, as relevant.	Debt data refer to stock of recognized, direct liabilities of the central government to the rest of the economy and world, as defined in <i>GFSM86</i> . Quarterly data on domestic debt with breakdowns by original maturity have been disseminated on the SBP website. The total gross outstanding external debt is the amount of disbursed and contractual liabilities of central government to nonresidents. Data include public and publicly guaranteed debt.	Quarterly	Domestic debt: Monthly External debt: Quarterly	Quarterly	Domestic debt: 2 month External debt: 1 quarter.	Meets SDDS periodicity and timeliness requirements only. Needs maturity breakdown of medium and long-term debt. Data need to be shown separately for government and government-guaranteed debt.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
<i>Encouraged: Debt service projections: Interest and amortization on medium and long-term debt (Quarterly for the next 4 quarters and then annual) and amortization on short-term debt (Quarterly).</i>	Not available.	Quarterly		Quarterly		
FINANCIAL SECTOR						
Accounts of the Banking Sector						
<i>Prescribed: Money aggregates, domestic credit by public and private sector, external position.</i>	The analytical framework used by the SBP in compiling and disseminating the analytical accounts of the banking sector reflects concepts and principles that are based on the IMF's draft <i>Guide to Money and Banking Statistics in International Finance Statistics</i> (December 1984). All SDDS prescribed components are disseminated.	Monthly	Monthly	Monthly	Monthly	Meets all SDDS requirements.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
Analytical Accounts of the Central Bank						
Prescribed: Reserve money, domestic claims on public and private sector, external position.	The analytical framework used by the SBP in compiling and disseminating balance sheet data of the SBP reflects partially concepts and principles that are based on the IMF's draft <i>Guide to Money and Banking Statistics in International Finance Statistics</i> (December 1984). However, most SDDS prescribed components are disseminated, with the notable exception of foreign liabilities. Furthermore, other components, such as reserve money and foreign assets, have to be calculated because they are not clearly identified.	Monthly <i>(Weekly encouraged)</i>	Monthly	2 Weeks <i>(Weekly encouraged)</i>	2 Months	Coverage and timeliness do not meet SDDS requirements. A new presentation for the analytical accounts of the SBP that meets SDDS requirements will be disseminated beginning on January 15 th , 2004, with December 2003 as the reference month. Classification of claims on non-government sector aggregates data on non-financial public enterprises and non-bank financial institutions.
Interest rates						
Prescribed: Short-term and long-term government security rates, policy variable rate, deposit rate, lending rate.	Rates disseminated include: (i) The repurchase rate; (ii) SBP's policy rates of returns by instruments or by purposes of loans, effective dates of the rates; (iii) Scheduled banks' minimum rates of return on deposits for various deposit types; (iv) Scheduled banks' ceiling rates of return on advance (maximum lending rates) by instruments; (v) Yields on 3-, 5-, and 10-years government bonds; (vi) The 3-months, 6-months, and 1-years Treasury Bill rates; and (vii) Interest rates on deposits and lending. <i>See prescribed rates.</i>	Daily	Daily (T-Bill auction rate only, other rates are monthly)	Daily	Daily	Meets all SDDS requirements.
Encouraged: Money or interbank market rates and a range of representative deposit and lending rates.		Daily	Daily	Daily	Daily	<i>Meets all SDDS requirements.</i>

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
Stock Market						
	There are 2 indices (2000-2001=100) available on the Karachi Stock Exchange (KSE), including the overall index and the sensitive (comprising 100 companies) index. The KSE indices are calculated every 2 minutes during the trading session and the data are refreshed automatically.	Daily	Daily	Daily	Daily (on the news media)	Meets all SDDS requirements.
EXTERNAL SECTOR						
Balance of Payments						
	Prescribed: Goods and services, net income flows, net current transfers, selected capital (or capital and financial) account items (including reserves).					
	Encouraged: Foreign direct investment and portfolio investment.					
	Data are compiled by the SBP according to the concepts and definitions of the fourth edition of the IMF's <i>Balance of Payments Manual</i> .	Quarterly	Quarterly	1 Quarter	1 Quarter	Meets all SDDS requirements.
	Data is disseminated for net inflow of foreign private investment (direct and portfolio) by principal countries in millions of US dollars.	Quarterly	Monthly	Quarterly	Monthly	Meets all SDDS requirements.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
International Reserves and Foreign Currency Liquidity						
Prescribed: 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.	Data are based on the accounting records of the SBP and follow the methodology recommended in the fourth edition of the IMF's <i>Balance of Payments Manual</i> . Data are disseminated in millions of US dollars.	Monthly (Weekly encouraged)	Monthly	Weekly	Weekly	Meets all SDDS requirements.
Encouraged: Reserve-related liabilities, as relevant.	Data is disseminated in accordance with the IMF's <i>International Reserves Template</i> ⁵⁵	Monthly	Monthly	Monthly	Monthly	Meets all SDDS requirements.
Merchandise Trade						
Prescribed: Exports and imports.	Imports are valued at cost, insurance, freight (CIF) and exports at free on board (FOB). Data are based on customs documents and cover parcel post, barter trade, and aid goods, but exclude military goods and sales from duty free shops. Data collection includes type of goods, value, quantity, country of consignment for imports and country of final destination for exports.	Monthly	Monthly	8 Weeks (4 to 6 weeks encouraged)	5 days	Meets all SDDS requirements.
Encouraged: Major commodity breakdowns with longer time lapses	Exports and imports by commodity groupings based on the Harmonized Coding System (HS-02).	Monthly	Monthly	8 Weeks (4 to 6 weeks encouraged)	5 days	Meets all SDDS requirements.

⁵⁵ See the *Data Template on International Reserves and Foreign Currency* (www.dsbm.imf.org/appendix.pdf) and *Operational Guidelines* (www.dsbm.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.

Coverage		Periodicity		Timeliness		Comments
SDDS	Current Practice	SDDS	Current Practice	SDDS	Current Practice	
International Investment Position (IIP)						
<i>Prescribed:</i> Direct investment; portfolio investment; including equity and debt; other investment; and (for assets), reserves.	Not available	Annually (Quarterly encouraged)	Not available	2 Quarters (Quarterly encouraged)	Not available	Not yet compiled. Data are available for major components and can be used for IIP compilation.
Exchange rates						
<i>Prescribed:</i> Spot rates and 3- and 6-month forward market rates, as relevant.	Same coverage as prescribed.	Daily	Daily	Daily	Daily	Meets all SDDS requirements.

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 1 of the main report).
- **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
<p>Prerequisites of quality⁵⁶</p>	<p>0.1 Legal and institutional environment – <i>The environment is supportive of statistics.</i></p> <p>0.2 Resources – <i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Quality awareness – <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>1. Integrity</p> <p><i>Firm adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics.</i></p>	<p>1.1 Professionalism – <i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency – <i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards – <i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are 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>

⁵⁶ 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>2. Methodological soundness</p> <p><i>The conceptual basis for the statistics follows international standards, guidelines, and agreed practices.</i></p>	<p>2.1 Concepts and definitions – <i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope – <i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization – <i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording – <i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices: 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.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>

Quality Dimensions	Elements	Indicators
<p>3. Accuracy and reliability</p> <p><i>Source data and compilation techniques are sound, and disseminated data sufficiently portray reality.</i></p>	<p>3.1 Source data – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Statistical techniques – <i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p>3.3 Assessment and validation of source data–<i>Source data are regularly assessed and validated.</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs–<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies – <i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are 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
<p>4. Serviceability</p> <p><i>Statistics are relevant, timely, consistent, and follow a predictable revisions policy.</i></p>	<p>4.1 Relevance – <i>Statistics cover relevant information on the subject field.</i></p> <p>4.2 Timeliness and periodicity – <i>Timeliness and periodicity follow internationally accepted dissemination standards.</i></p> <p>4.3 Consistency – <i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.4 Revision policy and practice – <i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 The relevance and practical utility of existing statistics in meeting users’ needs are monitored.</p> <p>4.2.1 Timeliness follows dissemination standards. 4.2.2 Periodicity follows dissemination standards</p> <p>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.</p> <p>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.</p>

Quality Dimensions	Elements	Indicators
<p>5. Accessibility</p> <p><i>Clear data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility – <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility – <i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users – <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).</p> <p>5.1.2 Dissemination media and 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>

Users' Views

Summary of Results of Survey of Data Users

1. With the assistance of the authorities, and to complement the IMF staff's own assessment of the quality of Pakistan's macroeconomic statistics, the mission that visited Islamabad and Karachi during December 1-16, 2003 conducted an informal survey of academics, the media, business associations, banks, public sector agencies, international organizations, and embassies. Public sector agencies included government ministries, the State Bank of Pakistan, and publicly funded research institutes. The survey asked users to evaluate nine different aspects of national accounts, prices, labor market, fiscal, monetary, and balance of payments statistics.
2. Fifty-two of the 112 contacted users responded. In comparison with similar surveys conducted in other countries, the response rate was about average: 46 percent. Of the responses, 35 percent were submitted by the private sector; 25 percent from embassies and international organizations; 17 percent by public sector agencies; 19 percent by academics; and 4 percent by the media.
3. The table below shows that these respondents' views were very mixed. On a five point Scale (1 meaning poor and 5 excellent) respondents rated the overall quality of the official statistics a 3.16 (slightly above average). Users from international organizations, banks, and public sector agencies generally consider official statistics to be above average for overall quality, while users in academia and the press rate it as below average or of poor quality.
4. A large margin of users were particularly satisfied with the ease in accessing official data. To a lesser degree, they were also satisfied with the coverage, timeliness, and access to explanatory notes. Users were critical of the absence of an advance release calendar and lack of information on revisions to the data. Notwithstanding these critical assessments, users considered Pakistan's statistics to be about the same as than those of other countries in the region.
5. Many respondents took the opportunity to provide some comments and suggestions on Pakistan's statistics; these are summarized below. Users expressed the need to produce more disaggregated and more frequent statistics, for example, quarterly GDP, provincial level breakdown of economic statistics, improved labor market indicators, greater breakdown of fiscal data, and a broader range of on social and environmental data. Some users asked that the coordination among statistical agencies be strengthened, and that the compiling agencies disseminate the methodological information on the data and the revision policies.
6. The selected comments below are grouped into five categories: (i) coverage; (ii) periodicity and timeliness; (iii) accessibility; and (iv) overall assessment and suggested improvements.

Comments of Respondents to the Users' Survey

Coverage

- National accounts and production indices are severely under reported and under covered.
- Fiscal data should contain greater breakdown on budgetary accounts and debt servicing.
- Data on exports and imports released monthly do not provide sufficient detail (variety/quality) to facilitate trend analysis.
- Economic data of the provinces are insufficient (i.e. provincial contribution to GDP, total and by sectors, and labor market).
- Statistics on social and environmental indicators are not sufficiently available at the provincial and national level.
- Coverage of health and education data is sporadic and requires much improvement and regularity.
- Insufficient coverage of services sector, micro-economic trends (corporate sector performance), production, and price trends.
- Data coverage for on nonbank financial institutions, including leasing companies, insurance companies, etc., needs improvement.

Periodicity and timeliness

- Data frequency being provided serves analytical purposes.
- Periodicity should be improved for most statistics.
- Most of the statistics on domestic economic indicators are available on an annual basis, but their frequency should be increased.
- National income accounting could improve. GDP numbers are annual and released with a significant lag. Quarterly data should be published and methodology made more transparent.
- Timeliness of data on consumption, saving, employment, and inflation must be presented less than one month after the reference period.
- The lag in providing national accounts and fiscal data is excessive.
- Agricultural statistics are released with almost one year's lag, which is unduly long.

Accessibility

- Accessing methodology information through websites is appropriate for decision making.
- Most of the publications do not carry methodological descriptions. When available, explanatory notes are inadequate and methodological descriptions are vague and difficult to understand.

- Government sources do not often explain the methodology used to compute such numbers. Therefore, it is important to cultivate internal sources to get a better handle on the data.
- Data definitions are missing and no methodological details are given.
- The absence of an advanced release calendar makes it difficult to explore information.
- The revision policy for production and national accounts data is not disseminated.
- Revisions to GDP numbers are not always explained, which undermines the credibility of the data.
- The revision policy is not disseminated. Indeed, revisions to government finance figures reflect more than poor forecasting. They show a historical pattern of large revisions, with underestimated expenditures and overestimated revenues.
- It is difficult to get data specifically requested. There is no concept of accepting e-mail requests in the government.
- At times, it can be difficult to obtain official statistics from the websites of government departments. They are not easily and swiftly accessible or regularly updated.
- The data should be more comprehensive with reasons and explanations for trends or large changes.
- There should be methodological notes with the data (e.g. definitions, compilation information, etc.).
- All data sets should be on the government websites, regularly updated and downloadable.

Overall assessment and suggested improvements

- Statistics in general are of reasonably high quality and detail.
- Financial and debt statistics from the SBP are accurate, comprehensive, and timely.
- SBP data appear to be unbiased but MOF data credibility is of concern.
- Official statistics contain too many revisions, final figures are announced too late, and actual data are not reported with appropriate timeliness.
- Statistics may be adequate, but data commentary is generally biased, particularly with respect to GDP per capita.
- The official statistics lack consistency. For example, the FBS trade data are different than those released by the SBP or maintained by Pakistan Customs. The FBS sources do not follow the harmonized system codes.
- Procedures for data collection of official statistics are highly unsatisfactory and its accuracy doubtful.
- Independent agencies and institutions should be established to ensure an unbiased, rational, and nonaligned view regarding the official data.
- Academic institutions and researchers from public and private sectors should be involved in the data collection and design of datasets.
- Methodologies for official statistics are appropriate; main problems relate to coverage, frequency, and timeliness.

- National accounts committee must be independent and composed of private sector experts.
- Labor market data are distorted by the Planning Commission.
- Labor force statistics are highly unsatisfactory on occupational categories and child labor.
- There is need for improving the quality of GDP estimates of various sectors. In case of small scale manufacturing and livestock, production estimates are mainly periodic surveys/census, which are carried out after long intervals.
- Disseminate an advanced released calendar, giving all relevant details, and make the public aware of it via print media, principally newspapers.
- Considerable duplication of statistics could be eliminated if government agencies improved coordination and then publicized this information to the public.
- Periodic surveys to determine the size and composition of the informal economy are needed.
- Statistics given by the Pakistan *Economic Survey*, *Statistical Yearbook*, and other sources differ from each other.
- Government considers the statistical dissemination not a responsibility but an undue favor. They consider it a weapon against them, not a way of greater understanding.
- National accounts statistics are based on old methodologies, which need to be updated. The base year is old and there is no direct model to estimate the growth of different sectors of the economy.
- Labor market data are extremely inadequate. Labor force survey should be undertaken annually (currently, it is every three years). As it is, the unemployment rate for the economy is not known.
- The Federal Bureau of Statistics needs serious reforms: survey methodology, scope, and frequency need to be improved.
- There is room for improvement in certain fields like livestock, poultry, development indicators, rural-urban migration, and income disparity.
- Poverty data have serious problems and require improvement.

Results of Pakistan's User Survey
(number of responses in each category)

	Banks	Embassies	International Organizations	Press	Public sector analysts	Universities	Private Sector Analysts	Total	Percentage
<i>Questionnaires sent out</i>	18	17	8	5	9	39	16	112	100
<i>Responses (excl. not applicable)</i>	8	7	6	2	9	10	10	52	46
GENERAL INFORMATION ON USES OF OFFICIAL MACROECONOMIC STATISTICS									
1. Which official statistics do you use regularly?									
National accounts	7	6	5	2	7	10	7	44	85
Production Indices	5	6	3	2	5	7	6	34	65
Prices	5	3	3	1	6	9	9	36	69
Labor market	1	3	2	2	5	6	4	23	44
Balance of payments	8	7	6	2	8	8	7	46	88
Merchandise trade	6	5	4	2	5	6	7	35	67
International reserves and foreign liquidity	7	7	6	2	7	7	6	42	81
External debt	7	7	6	2	7	7	9	45	87
International investment position	1	6	4	2	5	7	7	32	62
Government/Public sector operations and debt	8	5	6	2	6	7	6	40	77
Monetary and financial statistics	7	7	6	2	7	8	9	46	88
Other	0	0	1	0	1	4	0	6	12
2. Where do you obtain the national official statistics?									
Official press releases and publications	8	7	6	2	8	8	9	48	92
Private sector summaries and analyses	5	5	4	2	1	6	3	26	50
Official policy papers	5	6	5	2	7	7	5	37	71
Publications from international organizations	6	7	6	2	7	10	7	45	87
Other sources (including websites)	4	2	4	0	4	3	0	17	33
3. Do you refer to official descriptions of the sources and methods?									
Yes	4	4	4	1	8	9	3	33	63
No	4	3	1	1	1	1	5	16	31
No opinion	0	0	1	0	0	0	2	3	6
4. For what purposes do you use official statistics?									
Analysis of current developments for short-term decision making	6	5	6	2	7	5	9	40	77
Analysis of trends for longer-term policy formulation	7	5	5	2	7	7	8	41	79
Econometric model building and forecasting	2	1	1	0	5	8	4	21	40
Economic research	5	1	3	0	8	10	7	34	65
Comparison with economic developments in other countries	4	3	5	2	7	9	8	38	73
General economic background	8	6	6	2	5	8	8	43	83
Other	1	2	1	0	0	3	1	8	15
QUALITY ASPECTS OF THE OFFICIAL MACROECONOMIC STATISTICS									
5.1 Are you satisfied with the coverage of official statistics?									
Yes	4	4	2	1	6	4	7	28	54
No	3	3	4	1	2	5	3	21	40
No opinion	1	0	0	0	1	1	0	3	6
5.2 Are you satisfied with the level of detail of official statistics?									
Yes	4	3	2	1	7	5	5	27	52
No	3	3	4	1	2	5	5	23	44
No opinion	1	1	0	0	0	0	0	2	4

	Banks	Embassies	International Organizations	Press	Public sector analysts	Universities	Private Sector Analysts	Total	Percentage
6.1 Are you satisfied with the frequency of official statistics?									
Yes	3	7	2	0	5	6	4	27	52
No	3	0	4	2	4	3	5	21	40
No opinion	2	0	0	0	0	1	1	4	8
6.2 Are you satisfied with the timeliness of official statistics (the time lag in dissemination)?									
Yes	4	5	2	0	6	3	6	26	50
No	1	2	3	2	3	5	2	18	35
No opinion	3	0	1	0	0	2	2	8	15
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dissemination dates for official statistics?									
Yes	0	2	2	0	1	2	0	7	13
No	8	4	4	2	8	8	9	43	83
No opinion	0	1	0	0	0	0	1	2	4
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?									
Yes	0	2	2	0	3	2	1	10	19
No	2	2	1	2	4	4	3	18	35
No opinion	6	3	3	0	2	4	6	24	46
7.3 Is there enough information about revisions to official statistics below?									
Yes	0	2	1	0	2	3	3	11	21
No	4	2	3	2	6	5	3	25	48
No opinion	4	3	2	0	1	2	4	16	31
8.1 Can you easily access the official statistics?									
Yes	3	5	5	0	8	6	9	36	69
No	1	1	1	2	1	4	1	11	21
No opinion	4	1	0	0	0	0	0	5	10
8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, etc.)?									
Yes	3	3	2	1	6	6	6	27	52
No	4	2	3	1	3	4	3	20	38
No opinion	1	2	1	0	0	0	1	5	10
8.3 Is the information on methodology sufficiently clear?									
Yes	2	1	2	0	4	3	5	17	33
No	2	2	3	1	4	6	1	19	37
No opinion	4	4	1	1	1	1	4	16	31
8.4 How you get access to official statistics?									
Hard copy	0	0	0	0	2	3	2	7	13
Electronic form	0	1	0	0	0	0	2	3	6
Both	8	6	6	2	7	7	6	42	81
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?									
Yes	2	2	2	2	4	1	7	20	38
No	3	0	2	0	4	8	1	18	35
No opinion	3	5	2	0	1	1	2	14	27
9.2 In general, do you consider the official statistics to be unbiased and accurate?									
Yes	5	4	2	0	8	2	3	24	46
No	3	1	3	2	0	7	5	21	40
No opinion	0	2	1	0	1	1	2	7	13
9.3 How do you compare the quality of official statistics of the country with those of other countries in the region?									
Excellent	1	0	1	0	0	0	0	2	4
Good	0	0	1	0	3	0	1	5	10
About the same	1	1	2	1	6	2	4	17	33
Poor	1	0	0	0	0	0	0	1	2
Inadequate	0	0	0	0	0	2	1	3	6
No opinion	5	6	2	1	0	6	4	24	46
9.4 How do you access the overall quality of the official statistics (1 rated as poor and 5 excellent)?									
Overall weighted average rating	3.29	3.50	3.60	2.00	3.57	2.60	3.00	3.16	

