Pakistan: Report on the Observance of Standards and Codes—Data Module, Reassessment of Monetary Statistics; Response by the Authorities; and Detailed Assessment Using Quality Assessment Framework (DQAF)

This Report on the Observance of Standards and Data Module, Reassessment of Monetary Statistics 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 February 2, 2007. The views expressed in this document are those of the staff team and do not necessary reflect the views of the government of Pakistan or the Executive Board of the IMF.

The Response by the Authorities to 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 Reassessment of Monetary Statistics

Prepared by the Statistics Department

Approved by Robert W. Edwards and Mohsin S. Khan

February 2, 2007

The Report on the Observance of Standards and Codes (ROSC) data module provides an assessment of Pakistan's monetary statistics against the recommendations of the General Data Dissemination System (GDDS) complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework (DQAF July 2003). The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data producing agencies to practices specific to datasets.

The dataset covered in this report is monetary statistics. The agencies that compile the dataset is the State Bank of Pakistan (SBP).

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

SBP website (http://www.sbp.org.pk)

This report is based on information provided prior to and during a staff mission from 11/01/06-11/15/06 and publicly available information. The mission team was headed by Ulhas Gunjal (STA).

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ACRONYMS

1993 SNA System of National Accounts 1993

BPM5 Balance of Payments Manual, fifth edition

BSC Banking Services Corporation
DFI Development Financial Institution
DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

FBS Federal Bureau of Statistics

GDDS General Data Dissemination System

MFSM Monetary and Financial Statistics Manual

MOF Ministry of Finance

NBFI Nonbank Financial Institution

NFA Net Foreign Assets
NLT Not Later Than

NIBF National Institute of Banking and Finance

Rs. Pakistani Rupees PC Personal Computer

ROSC Report on the Observance of Standards and Codes

SDR Special Drawing Right
SBOT State Bank Officers' Training

SBP State Bank of Pakistan STA Statistics Department, IMF

I. Introduction

- 1. A reassessment of the monetary statistics dataset of the Report on the Observance of Standards and Codes (ROSC) Data Module was conducted during November 1–15, 2006. The original ROSC Data Module for Pakistan was undertaken during December 1–15, 2003. For that purpose, the July 2003 version of the Data Quality Assessment Framework (DQAF) developed by the International Monetary Fund's (IMF's) Statistics Department (STA) was used to conduct the assessment of the monetary statistics data. The resulting report, response by the authorities, and detailed assessments were posted on the IMF's website in December 2004.
- 2. Following the publication of the 2003 ROSC Data Module, the authorities redesigned the framework and the procedures for compiling and disseminating monetary statistics, and introduced improved source data for other depository corporations. The new data compilation framework is broadly consistent with the *Monetary and Financial Statistics Manual (MFSM)* recommendations and includes detailed sectoral balance sheets and aggregated surveys. As a result of these improvements, there was a need to update the assessment of the financial sector in the ROSC Data Module.
- 3. The reassessment of the monetary statistics data was conducted using the July 2003 Data Quality Assessment Framework (July 2003 DQAF). This report is based on the information provided prior to and during November 1–15, 2006, as well as publicly available information, and does not reflect any changes in the data compilation and dissemination procedures that might have taken place after mid-November 2006. The mission expresses its appreciation for the excellent cooperation received from the authorities and staff of the State Bank of Pakistan (SBP).

II. ASSESSMENT BY DIMENSION OF DATA QUALITY

4. Assessment of the quality of monetary statistics was conducted using the July 2003 DQAF. In this section, the results are presented at the level of the DQAF elements and using a four-point rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions "0" and "1") of the DQAF are presented in Table 2. The assessments of methodological soundness, accuracy and reliability, serviceability and accessibility (Dimensions "2 to 5" of the DQAF) are shown in Table 3.

Table 1. Pakistan: Data Quality Assessment Framework July 2003—Summary Results for Monetary Statistics

Datasets	Assessment	Comments
Dimensions/Elements		
0. Prerequisites of quality		
Legal and institutional environment	0	
	0	
	0	
0.4 Other quality management	0	
. Assurances of integrity		
Professionalism	0	
	ГО	No advance notice of major changes in methodology.
Ethical standards	0	
2. Methodological soundness		
2.1 Concepts and definitions	0	
	0	
Classification/sectorization	0	
Basis for recording	ГО	SBP's Fund positions and gold assets are revalued only on an
		annual basis.
3. Accuracy and reliability		
	0	
Assessment of source data	0	
Statistical techniques	0	
d validation of intermediate data and statistical outputs	0	
Revision studies	ГО	Although revisions are used internally to inform the statistical
		processes, no revision studies are carried out.
4.1 Periodicity and timeliness	0	
	ГО	Data on interbank positions contain inconsistencies.
Revision policy and practice	0	•
5.1 Data accessibility	0	
Metadata accessibility	0	
Assistance to users	0	

Table 2. Pakistan: Assessment of Data Quality—Dimensions 0 and 1—State Bank of Pakistan

0. Prerequisites of quality

Legal and institutional environment

The SBP compiles and disseminates monetary statistics. *The State Bank of Pakistan Act 1956* endows the SBP with the legal authority for collecting data for monetary statistics from the scheduled banks. The other legislation—namely, *The Banking Companies Ordinance of 1962* similarly endows the SBP with the legal authority for collecting these data for monetary statistics. These laws make the reporting of data mandatory for the reporting institutions. Both these laws also oblige the SBP to safeguard the confidentiality of individual reporters' data, and impose penalties on those who might disclose these data. The SBP's arrangements for sharing data for compiling monetary statistics are adequate.

Resources

Staff resources are adequate to compile monetary statistics. The compilation of monetary statistics is computerized, and computing resources have been adequately distributed between the staff. The SBP staff receive on-the job training from the various programs provided within the SBP, as well as formal training in the statistical methodology through the various training courses organized by the IMF Statistics Department. Measures to ensure efficient use of resources are in place.

Relevance

The SBP monitors the relevance of monetary statistics through a User Feedback Form on its website, Users-Producers Workshops on Collaboration Among Data Compilers and Users, and meetings held with the user community.

Other quality management

The SBP has well-established processes to maintain or improve the quality of its statistical products. These include initiatives taken to enhance the awareness of quality in statistics—for example, a well-publicized Vision Statement; external auditing of the SBP's and scheduled banks' accounts; follow-up actions to verify reported data; and procedures for planning statistical programs within the larger framework of the SBP's five-year strategic plan.

1. Assurances of integrity

Professionalism

The State Bank of Pakistan Act 1956 gives autonomy to the SBP, and contains several provisions to protect it. Staff at the SBP maintain a high degree of professionalism, which is promoted within the organization—for example, by the primarily merit-based process of recruiting and promoting staff. The choice of source data and statistical techniques is made exclusively on statistical considerations. There is no evidence of interference from others, including government agencies, in the compilation and dissemination of monetary statistics.

Transparency

The public can access the terms and conditions under which the monetary statistics are collected, processed and disseminated from the SBP's website, on which are posted *The State Bank of Pakistan Act 1956* and *The Banking Companies Ordinance of 1962*. There is no internal governmental access to monetary statistics prior to their release. The SBP's statistical publications, as well as those of other agencies, clearly identify monetary statistics as the products of the SBP. The SBP does not have a formal procedure in place to inform the users in advance of major changes in the methodology of monetary statistics.

Ethical standards

The SBP has issued *The State Bank of Pakistan Staff Regulations (2005)*, and all its staff have copies.

Table 3. Pakistan: Assessment of Data Quality—Dimensions 2 to 5—Monetary Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions The concepts and definitions conform to the methodology of the Monetary and Financial Statistics Manual (MFSM). Scope The coverage comprises all major depository corporations— the SBP and scheduled banks (head offices and branches). Classification/sectorization Classification and sectorization are broadly in line with the MFSM. Basis for recording The basis for recording (1) uses market prices for valuation of most foreign currency positions and foreign and domestic securities, (2) relies on accrual accounting, and (3) performs grossing and netting operations correctly. Although it broadly follows the MFSM- methodology, there are some exceptions. The SBP's IMF positions and gold assets are revalued only on an annual basis.	Source data The source data cover the positions of the SBP and scheduled banks. These provide sufficient detail to classify sectors and instruments broadly in line with the MFSM-methodology. The source data are collected on a timely basis. Assessment of source data The SBP staff reviews the reported source data and, for any actual or potential errors, contact the reporting banks for verification. Statistical techniques No statistical techniques are used to deal with the source data and, in particular, no estimated data are used. Assessment and validation of intermediate data and statistical outputs The intermediate data are assessed and validated against data from certain other sources. The latter especially include the weekly data collected for supervisory purposes and half-yearly data collected	Periodicity and timeliness The periodicity and timeliness meet the GDDS requirements. Consistency Monetary statistics show inconsistencies in data on interbank positions between the SBP and scheduled banks. Monetary statistics are reconcilable over a reasonable period of time. Monetary statistics are inconsistent with the balance of payments statistics owing to exchange rate differences, and also with the government finance statistics owing to problems existing in the latter. Revision policy and practice Given the sporadic nature of revisions, the latter do not follow a regular schedule. Preliminary and revised data are clearly identified. As no revision studies are carried out, none are published.	Data accessibility Dissemination media are adequate. Monetary statistics are released on a preannounced schedule. Nonpublished nonconfidential data are available to users on request, although such requests are rare. Metadata accessibility Metadata are available from the SBP's Compilation Guide, which is posted on its website, and, in the form of GDDS metadata, from the IMF's DSBB, which is hyperlinked to the SBP's website. Assistance to users The SBP's publications and website provide contact information and a catalog of its publications.

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
	from scheduled		
	banks. Sources of		
	fluctuations or		
	discrepancies in		
	monetary statistics		
	are investigated.		
	Revision studies		
	No revision studies		
	are carried out.		
	Revisions are due to		
	the correction of		
	errors in data. These		
	revisions are used to		
	inform the statistical		
	processes.		

III. RECOMMENDATIONS

5. Based on the review of Pakistan's statistical practices, the mission made the following recommendations, which are aimed at strengthening Pakistan's adherence to the internationally accepted practices, as well as at enhancing the usefulness of its monetary statistics.

Short-term

Prerequisites of quality

• Issue an advance notice of major changes in methodology to the users by publishing a clear description of such changes on the SBP's website and in its monthly publication, *Statistical Bulletin* (Executing agency: SBP Statistics and Data Warehouse Department).

Methodological soundness

• For the central bank's survey, revalue the SBP's Fund positions and gold assets on a monthly basis at end-month market exchange rates and market gold prices (Executing agency: SBP Finance Department).

Accuracy and reliability

• Prepare studies of revisions to monetary data following finalization and publication of the SBP's data revision policy (Executing agency: SBP Statistics and Data Warehouse Department).

Serviceability

• Improve the consistency of data on positions between the SBP and scheduled banks (Executing agencies: SBP Statistics and Data Warehouse Department, and SBP Finance Department).

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

Response by the Authorities

February 2, 2007

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I. INTRODUCTION

We greatly appreciate the opportunity to provide comments on the Substantive Update of the Monetary Statistics Dataset of the ROSC Data Module Report prepared by the mission from the IMF Statistics Department that visited the State Bank of Pakistan (SBP) from November 1 to 15, 2006. We fully concur with the thrust of the mission's updated assessment of the monetary statistics dataset, which was prepared in consultation with the staff and management of the Statistics and Data Warehouse Department of the SBP. We have carefully reviewed the report and have suggested some minor corrections/amendments to be incorporated in the final version of the report (see Table 1).

The recommendations made by the mission to further improve the compilation of our monetary statistics have been taken into consideration for implementation. Based on the mission's recommendations, we have prepared an action plan (see Table 2). This plan will provide useful guidance to our future work on monetary statistics compilation, as well as indicate our priorities in statistics to the donor agencies.

At this stage, we do not expect to need IMF technical assistance in monetary statistics to facilitate implementation of these recommendations. However, we envisage technical assistance in 2008—when all financial institutions would complete transition to the new reporting system, which we have especially developed to meet the reporting requirements of the IMF's *Monetary and Financial Statistics Manual (MFSM)*. This technical assistance would help us verify our compilation of the *MFSM*-compliant monetary statistics from the new source data

Finally, we agree to the proposal to publish the ROSC report together with the response by the authorities.

Table 1. Changes Suggested in the Report "Detailed Assessment Using the Data Quality Assessment Framework (DQAF)," December 20, 2006

Text in report	Revision suggested
Section 0.2.2. page 7, para 1, line 11:	To be replaced by:
"The efficient allocation of resources is assessed in a mid-year review undertaken by the Audit Department."	"The efficient allocation of resources is assessed in an annual review undertaken by the Audit Department."
Section 1.2.4. page 10, para 1, line 11:	A footnote to be added:
"Issue an advance notice of major changes in methodology to the users by publishing a clear description of such changes on the SBP's website and in its monthly publication, <i>Statistical Bulletin</i> ."	Statistics Department has started publishing of Advance Notice on changes in the compilation methodology of monetary statistics due to implementation of <i>MFSM 2000</i> at SBP website (http://www.sbp.org.pk/departments/stats/ntb.htm) and published in December 06 issue of monthly Statistical Bulletin. Accordingly, a footnote describing this development may be added.
Section 4.2.3. page 22, para 3, line 2:	To be replaced by:
"While the Statistics & Data Warehouse Department does not meet with the MOF on data reconciliation, the Monetary Policy Department holds regular meetings, for this purpose, with the latter."	"While the Statistics & Data Warehouse Department does not meet with the MOF on data reconciliation, the Monetary Policy Department holds meetings with the latter when a need arises for reconciliation of data."

Table 2. Pakistan: Action Plan to Improve Monetary Statistics

DQAF Code	Mission's Recommendations	Action Plan	Timing
1.2.4	Issue an advance notice of major changes in methodology to the users by publishing a clear description of such changes on the SBP's website and in its monthly publication, Statistical Bulletin.	Statistics & Data Warehouse Department has already started publishing of Advance Notice on changes in compilation methodology of monetary statistics at SBP website (http://www.sbp.org.ph/departments/stats/ntb.htm) and publishing in monthly Statistical Bulletin from December 2006.	Implemented
2.4.1	For the central bank's survey, revalue the SBP's Fund positions and gold assets on a monthly basis at endmonth market exchange rates and market gold prices.	The issue has been taken up with Finance department of SBP for revaluation of SBP's Fund position and gold on monthly basis. The data based on monthly revaluation will be used in compilation of monetary statistics.	Short term
3.5.1	Prepare studies of revisions to monetary data following finalization and publication of the SBP's data revision policy.	Statistics & DWH Department would start study of revisions made in the monthly monetary statistics from the month of January 2007.	Short term
4.2.1	Improve the consistency of data on positions between the SBP and scheduled banks.	The issue of inconsistency in the two sets of data has been taken up for tracing the factors and will be resolved in coordination with the stakeholders.	Short term

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Detailed Assessment Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Mohsin S. Khan

February 2, 2007

This document contains a detailed assessment of the elements and indicators that underlie the data quality dimensions discussed in the Reassessment of the Monetary Statistics, dataset of Pakistan's Report on the Observance of Standards and Codes (ROSC)—Data Module.

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ACRONYMS

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BPM5 Balance of Payments Manual, fifth edition

BSC Banking Services Corporation
DFI Development Financial Institution
DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

FBS Federal Bureau of Statistics

GDDS General Data Dissemination System

MFSM Monetary and Financial Statistics Manual

MOF Ministry of Finance

NBFI Nonbank Financial Institution

NFA Net Foreign Assets
NLT Not Later Than

NIBF National Institute of Banking and Finance

Rs. Pakistani Rupees PC Personal Computer

ROSC Report on the Observance of Standards and Codes

SDR Special Drawing Right

SBOT State Bank Officers' Training

SBP State Bank of Pakistan STA Statistics Department, IMF

I. MONETARY STATISTICS

0. Prerequisites of quality

0.1 Legal and institutional environment

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

The State Bank of Pakistan (SBP) Act of 1956 endows the SBP with a legal authority and responsibility for the collection of banking statistics. Thus, its Section 39 requires the SBP "to compile and publish in such manner and at such times as the Federal Government may direct, a consolidated statement from such information as may be received under this Act." Moreover, its Section 40 calls for the SBP "to prepare and transmit to the Federal Government a weekly account of the Issue Department and of the Banking Department in such form as the Federal Government may, by notification in the official Gazette direct." The same section directs the Federal Government to publish these accounts on a weekly basis in the official Gazette.

Other provisions of *The SBP Act* give the SBP authority to collect information from the financial corporations. Thus, 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, 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.

Additional provisions exist in *The Banking Companies Ordinance of 1962* which support the above provisions. Thus, its Sections 32 (1) and (2) require all scheduled banks and other financial corporations to prepare and submit to the SBP half-yearly returns, and give the SBP the power to "call for information at such intervals as the SBP may deem necessary." Finally, its Section 33 requires the SBP "to publish any information obtained by it under this ordinance in such consolidated form as it thinks fit."

Working arrangements that exist within the various work units of the SBP, in particular between the Statistics and Data Warehouse Department (which is the former Statistics Department), the Banking Surveillance Department, the Monetary Policy Department, the Information Systems Department, and the Finance Department are consistent with the SBP's monetary statistics function. The recent establishment of the Data Warehouse Portal, which is currently functional, is a successful example of the SBP's interdepartmental collaborative work. As the monetary statistics are compiled exclusively by the SBP, no conflict exists between the SBP and other data-producing agencies.

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

Arrangements exist within the SBP to ensure a smooth flow of information between the departments that collect, process, and disseminate monetary data. To the Statistics and Data Warehouse Department, scheduled banks submit monthly balance sheet data, and the Finance Department submits the SBP's monthly balance sheet data. Based on these inputs, the Statistics and Data Warehouse Department compiles analytical accounts of the SBP and scheduled banks, and disseminates them on the SBP's website and in its monthly publication, *Statistical Bulletin*. In addition, the SBP's Monetary Policy Department publishes in the *Statistical Bulletin* the selected monetary aggregates compiled from the weekly statements submitted to the Banking Surveillance Department. The Statistics and Data Warehouse Department reconciles its monthly data with the Monetary Policy Department's aggregates on a quarterly basis. As there are discrepancies between government finance and monetary data sets on bank financing to the government sector, Monetary Policy Department collaborates with the Ministry of Finance (MOF) on data reconciliation.

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

The SBP safeguards the confidentiality of individual reporters' data. Section 53 of *The SBP Act* states (1) that any information related to individual units, persons, or authorities obtained by the SBP staff in the performance of their duties must be treated as confidential, and (2) that penalty can be imposed on anyone violating confidentiality—a penalty ranging from a fine of up to Rs. 500 to imprisonment of up to six months. *The Banking Companies Ordinance of 1962* and *State Bank of Pakistan Staff Regulations (2005)* also stipulate the confidentiality and nondisclosure of individual bank data, with penalties for noncompliance. These legal provisions are complemented by the SBP's procedures developed to prevent the disclosure of individual bank data: thus, access to individual bank data is restricted to the staff who require those data in the performance of their statistical duties; second, the computer system is protected by the IDs and passwords that deny access to these data to all other staff; and, finally, only aggregative data are published to prevent disclosure of individual bank data.

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

As observed in 0.1.1 above, Section 36 (3) of *The SBP Act* provides the SBP with the legal authority to collect information from scheduled banks required for the compilation of monetary statistics. Scheduled banks are currently required to report monthly balance sheet data to the Statistics and Data Warehouse Department. These data are exclusively used for compiling the analytical accounts of the scheduled banks.

The SBP Act 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 Rs. 100 for each day during which the failure continues. In addition, the Prudential Regulation 25 (Circular 21)

of June 9, 1999) states that the officials of scheduled banks are liable to pay Rs. 20,000 per case and/or Rs. 1,000 per day for the period of the irregularity, and/or disciplinary action may be taken against them. These penalties can be imposed by the SBP upon the advice of the Statistics and Data Warehouse Department.

The Statistics and Data Warehouse Department maintains a cordial relationship with the scheduled banks to facilitate data reporting. It holds periodic seminars, allowing participation of at least two staff from each bank, to provide training in statistical methodology. At the request of the Statistics and Data Warehouse Department, every bank has nominated one staff member as its representative or a contact person with whom issues arising out of reporting are discussed. Finally, the SBP has supplied data reporting software to the banks.

0.2 Resources

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

Among the various divisions of the Statistics and Data Warehouse Department, the Monetary and Financial Statistics Division, the Banking Statistics Division, and the Flow of Funds Division work in an especially close relationship with each other to produce Pakistan's monetary and financial Statistics. The number of staff working in these divisions—23 in all—is regarded as adequate. All statistical officers, assistant directors, junior joint directors, the joint director, and the director have at least a master's degree in statistics, three of whom hold a Ph.D. degree, and some have additional qualifications—such as a master's degree in economics and/or business administration.

The SBP has heavily invested in the training of its staff, especially its statistical work staff. This training is provided through a variety of channels and at a variety of levels. First, the SBP provides entry-level training to its new personnel, under the State Bank Officers' Training (SBOT) program, for a six-month period at the National Institute of Banking and Finance (NIBAF) in Islamabad, emphasizing commercial banking, monetary management and statistical compilation. Second, the SBP requires new recruits to receive hands-on-training in all its departments. Third, the SBP offers one to four weeks' courses in supervision, inspection, accounting, Pakistani economy, etc. to intermediate and advanced level officers at the NIBAF in Karachi. Fourth, the SBP invites external consultants to deliver management courses of three days to one-week to the staff who are aspiring for managerial positions. Fifth, the SBP hires experts from outside to provide job-specific training in the form of courses in econometric analysis and statistical programs to its staff. Finally, the SBP sponsors its staff for advanced education.

Computer resources made available for the collection and compilation of monetary statistics are broadly adequate. Every staff is equipped with a Personal Computer (PC), and a printer is shared by a team of staff members. Current staff salaries help the SBP attract qualified University graduates to the Statistics and Data Warehouse Department, and retain

experienced staff within the department. Staff turnover is low and manageable. 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, the Business Plan of the SBP, which was first implemented for the fiscal year 2002–2003, is considered to be a key instrument for the successful transformation of the SBP into a proactive, efficient and dynamic institution. The work program for the compilation of monetary statistics is subject to the Business Plan of the Statistics and Data Warehouse Department. It describes the objectives of this department, together with the operational and developmental projects required for their achievement. 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. These performance indicators are important benchmarks for the periodic reviews of staff performance. The efficient allocation of resources is assessed in an annual review undertaken by the Audit Department. The SBP Governor reviews on a quarterly basis the implementation of the projects by the Statistics and Data Warehouse Department, whose Director is made accountable to the efficient management of the resources allocated to the department.

0.3 Relevance

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

The SBP monitors the relevance of its monetary statistics by means of three key devices. First, it provides for a User Feedback Form on its website for users to provide a feedback on its monetary statistics. Second, it conducts the Users-Producers Workshops on Collaboration Among Data Compilers and Users by inviting representatives from the private corporations, academic community and financial institutions to meet with the data compilers. Thus, in 2006, it held two-days workshops in Islamabad and Karachi. Finally, it holds meetings especially with the distinguished members of the user community, such as eminent researchers or prominent banks, to discuss the relevance of its monetary statistics. User requests for additional statistical information, which are identified from such interaction, are considered at the time of review of the SBP's statistical work program.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The Statistics and Data Warehouse Department allows its processes and procedures to be guided by the SBP's Vision Statement, which envisages the transformation of the SBP into "a highly professional, efficient and modern institution which is fully equipped to play a meaningful role in the economic development of Pakistan," as well as by its own

departmental Vision Statement. While the SBP's Vision Statement is published in its monthly publication, *Statistical Bulletin*, the departmental Vision Statement is prominently displayed at the entrance to the Statistics and Data Warehouse Department. The SBP considers the qualitative improvement in data collection as an important factor in realizing both Vision Statements, and the establishment of the Data Warehouse Portal as an important step towards enhancing the quality of data.

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 *The Banking Companies Ordinance of 1962*. 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 of 1962* stipulates that the scheduled 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 purpose of auditing banks.

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

The Statistics and Data Warehouse Department reviews the reported source data for accuracy. It applies validation procedures for assessing the plausibility or reasonableness of reported data, automatically as well as visually, on a bank-by-bank basis. It consults with the Banking Surveillance Department on the issues arising from the reporting of data by the scheduled banks, and provides the Banking Inspection Department data on important variables for checking against bank records and basic documents during on-site inspections. The data compiled by the Statistics and Data Warehouse Department are checked, initially, by the immediate supervisor of the data producing unit, who uses a checklist of some 15 checks and, subsequently, by the Director, who certifies the accuracy of the data prior to publication. The SBP's internal users of monetary statistics comment on the accuracy, timeliness and comprehensiveness of the data, as well as on the possible discrepancies before their release.

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

The Statistics and Data Warehouse Department plans its statistical programs within the larger framework of the *Strategic Plan 2005-10* of the SBP. This plan prioritizes strategies, matches each strategy to a specific action, sets a deadline for its implementation, and identifies as its champions those who have the responsibility for its undertaking. Thus, the strategy "to improve use and effectiveness of data to support policy and research" has been matched by the action "to institutionalize periodic reviews of dataset to remove redundancies and identify new requirements: developing a mechanism for periodic reviews; identification of redundant data; exploring new data requirements; and system for acquisition of new data series." Within the department, the Planning and Development Division specifically 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 the international standards.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis.

The SBP is an autonomous institution. Its autonomy is legally protected by the various provisions of *The SBP Act*. Thus, Section 10 (3) requires that the Federal Government cannot vary the salary of the Governor nor his other terms and conditions of service to his disadvantage after his appointment; and Section 10 (9) requires that no person can be appointed a Governor or a Deputy Governor if he is a member of the Central or Provincial Legislature, ..., who is a director, officer or an employee of any other bank, ..." etc. There is no evidence of interference from others, including other government agencies, in the compilation and/or dissemination of monetary statistics.

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

Professionalism is actively promoted and supported within the SBP also through other channels. First, as observed in 0.2.1 above, the SBP conducts on-the-job training to help staff members acquire adequate knowledge. Second, it provides its staff with the opportunities to participate in the meetings of experts. Finally, it encourages research work, publishes selected research papers, and acknowledges the authorship of individual staff members.

1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination 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.

A spokesman from the External Relations Department maintains the records of press articles that comment on data disseminated by the SBP—the most recent example being an article in the daily *Business Recorder* on the drop in net foreign assets of scheduled banks in July 2006 based on the SBP's monetary statistics. These articles are sent to the relevant departments for

comments. If necessary, the SBP publicly clarifies erroneous interpretations or misuse of its monetary 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 can access *The SBP Act* and *The Banking Companies Ordinance of 1962*, which contain legal provisions concerning data collection, data dissemination and data confidentiality, through the SBP's website or select professional bookshops. The directives and regulations on data collection, which are issued by the SBP in the form of circulars to the scheduled banks, are also posted on the its website and are included in all its publications. As an additional point, Pakistan's GDDS web pages, which are posted on the IMF Dissemination Standards Bulletin Board (DSBB) and are accessible by a hyperlink provided in the SBP's website, provide information on the compilation and dissemination of monetary statistics.

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

There is no internal government access to monetary statistics prior to their release.

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

Monetary statistics disseminated by the SBP are clearly identified as produced by the SBP. Thus, for example, when the Federal Bureau of Statistics (FBS) reproduces the monetary data in its publications, *Monthly Statistical Bulletin* and *Yearbook of the Federal Bureau of Statistics*, or when the MOF does the same in its annual publication, *Economic Survey*, an attached footnote acknowledges the SBP as a source.

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

When the Statistics and Data Warehouse Department publishes monetary statistics that are compiled with major changes in methodology, it explains these changes in the footnotes attached to the statistical tables. Thus, when in October 2006 the SBP posted on its website new monetary data for April 2006 compiled on the guidelines described in the *Monetary and Financial Statistics Manual(MFSM)*, the following footnote was attached to the data: "Analytical accounts based on *MFSM 2000* will be published in *Statistical Bulletin* after having compiled appropriate series." As part of its preparatory work for introducing the *MFSM*-compliant monthly report form, the SBP informed the scheduled banks of the planned changes to the reporting format. If, at a time when major changes in methodology are being planned, there is an occasion to meet with users, for example, in a Users-Producers Workshop, the SBP staff takes the opportunity to inform them of the upcoming changes. No formal procedure, however, exists to give an advance notice of major changes in

methodology to the users—say, by publishing a clear and elaborate description of such changes on the SBP's website or in its monthly publication, *Statistical Bulletin*¹.

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 (2005) provides broad ethical guidelines for the employees of the SBP. New staff members are informed of these regulations. All staff members have copies of the regulations.

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 *MFSM* methodology requires compilation of monetary statistics within the framework of a Depository Corporations Survey. This survey is an analytical presentation of the consolidated accounts of the resident financial corporations and financial quasi-corporations that are mainly engaged in financial intermediation and that issue liabilities included in the national definition of broad money. It presents stock and flow data on those corporations' liabilities to—as well as on those corporations' claims on (credit to)—other sectors of the economy, as well as data on their liabilities to and claims on nonresidents.

The Statistics and Data Warehouse Department currently compiles two sets of data on monetary statistics with different formats. The first is the Monetary Survey, which is compiled from the data reported by the scheduled banks through the SBP's monthly report forms, and which is published on the SBP's website as well as in its monthly publication, *Statistical Bulletin*. The second is the Depository Corporations' Survey, which is compiled from the data reported on-line by the scheduled banks under the SBP's *Reporting Guide for Banks and Development Financial Institutions (DFIs)*—a new, detailed, *MFSM*-compliant monthly report form, and which is published on the SBP's website, although not as yet in the *Statistical Bulletin*. The Statistics and Data Warehouse Department is in the process of shifting the scheduled commercial bank data reporting from the traditional report form to the new reporting system and, in view of delays encountered by some banks in reporting data in the more detailed format, has decided to continue with both reporting formats during the

¹ Following the mission, the Statistics and Data Warehouse Department published, on the SBP website as well as in the *Statistical Bulletin*(December 2006), an advance notice on changes in the compilation methodology of monetary statistics due to the implementation of the *MFSM* methodology.

transitional phase. In addition to these monetary statistics datasets, the Monetary Policy Department compiles selected monetary aggregates, comprising reserve money, narrow money and money multiplier, from the weekly data reports submitted to the Banking Surveillance Department, which are also published on the SBP's website as well as in its monthly publication, *Statistical Bulletin*.

Both monetary statistics datasets compiled by the Statistics and Data Warehouse Department follow the *MFSM* guidelines on sectorization and classification of instruments. While the first monetary statistics dataset conforms to these guidelines broadly, the second one adheres to them closely. Consequently, the second monetary statistics dataset marks a decisive improvement over the first one, and the SBP's plans call for discontinuing the first monetary statistics dataset after a sufficiently long series has been developed with the second one. The Statistics and Data Warehouse Department, which is aware of the deviations from the *MFSM* concepts and definitions (see 2.4.1 below), keeps them under review. Work plans have been drawn up to remedy the deviations that have been identified.

2.2 Scope

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

According to the *MFSM* methodology, the scope of the Depository Corporations Survey should consist of all resident financial corporations and quasi-corporations that are primarily engaged in financial intermediation and that issue liabilities consisting of deposits or other liabilities that are included in the national definition of broad money. Thus, in the specific context of Pakistan, the following depository corporations qualify for inclusion in the Depository Corporations Survey: (1) SBP; (2) scheduled commercial banks; (3) depository Nonbank Financial Institutions (NBFIs); and (4) cooperative banks, which operate primarily in the rural areas

The depository corporations sector as defined in Pakistan's monetary statistics comprises (1) SBP, Head Office of the SBP-Banking Services Corporation (BSC), and its 16 domestic branches; (2) scheduled commercial banks—their domestic headquarters, their domestic branches, and, in case of foreign banks operating in Pakistan, only their domestic branches; and (3) depository NBFIs. According to Section 37 of *The SBP Act*, (2) comprises banks operating in Pakistan with "a paid-up capital and reserves of not less than Rs 5 lakhs of rupees." (Effective December 31, 2005, this figure was amended to Rs. 2 billion.) In all, Pakistan has 40 scheduled banks—of which 4 are public sector banks, 22 private domestic banks, 10 foreign banks, and 4 specialized banks—and all 40 are included in the scope of the Depository Corporations Survey. There are currently no banks in liquidation in Pakistan.

In addition to these other depository corporations, Post Office collects deposits. However, as its primary function, which is mail and parcel delivery, is nonfinancial in nature, its exclusion from the scope of the Depository Corporations Survey is consistent with the *MFSM*

methodology, which says, "transferable deposits, and perhaps other types of liabilities accepted by the central government or public nonfinancial corporations, such as post office checking and savings units, are usually included in national broad-money aggregates, but would fall outside the scope of the Depository Corporations Survey (*MFSM*, page 64, paragraph 322)." The Post Office reports only data on its deposits on a monthly basis to the SBP. As these data are included among memorandum items in the Monetary Survey Table published in the SBP's monthly, *Statistical Bulletin*, a user who needs to construct monetary aggregates inclusive of these deposits is in a position to do so on his own. The Post Office collects about 2 percent of total deposits.

Thus, cooperative banks are the only category of the other depository corporations, whose data are excluded from the Depository Corporations Survey. These banks operate primarily in the rural areas; report data to the SBP on a quarterly basis—which helps the SBP publish their consolidated data in its monthly, *Statistical Bulletin*; and account for only one-tenth of one percent of total deposits. As a result, the monetary statistics published on the SBP's website and in its monthly publication, *Statistical Bulletin*, provide a virtually complete coverage of the resident financial institutions issuing broad money liabilities in Pakistan.

2.3 Classification/sectorization

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

The *MFSM* methodology requires that claims and liabilities be divided by sectors into which all institutional units with similar characteristics be grouped; that sectorization first distinguish between residents and nonresidents, and then delineate the various domestic sectors and subsectors; and that the resident units of the economy be grouped into the following mutually exclusive sectors:

- Financial corporations (central bank, other depository corporations, other financial corporations);
- Nonfinancial corporations (public nonfinancial corporations, other nonfinancial corporations);
- General government (central government, state government, local government, social security funds);
- Households; and
- Nonprofit institutions serving households.

First, the SBP applies the residency criterion to distinguish between resident and nonresident sectors in the monetary statistics. This criterion, taken from the *Balance of Payments Manual*, fifth edition (*BPM5*), *System of National Accounts, 1993 (1993 SNA)* and *MFSM*, emphasizes the residency of the transactor's centre of economic interest. An institutional unit is defined as resident in Pakistan if it engages or intends to engage, at least for a one-year period, in significant economic activity on the Pakistani territory. The one-year period is suggested only as a guideline which needs to be used with a sound judgment. The delineation

between resident and nonresident institutional units in the SBP's monetary statistics is broadly consistent with this criterion.

Next, the SBP divides the resident sector thus defined by the following subsectors—namely, (1) central bank, (2) other depository corporations, (3) other financial corporations (4) central government, (5) provincial and local government, (6) public nonfinancial corporations, (7) other nonfinancial corporations, and (8) other resident sectors comprising households and nonprofit institutions serving households. This sectorization scheme conforms to the *MFSM* methodology. Source data are being sctorized for the surveys of central bank and other depository corporations broadly according to this scheme.

The MFSM requires that the financial instruments be classified by the following categories:

- Monetary gold and SDRs;
- Currency and deposits;
- Securities other than shares:
- Loans;
- Shares and other equity;
- Insurance technical reserves;
- Financial derivatives;
- Other accounts receivable/payable.

The financial instruments classification used for the SBP's monetary statistics closely follows the *MFSM* classification. The financial sector has begun to trade in financial derivatives and, although the scale is small, the SBP's formats for the central bank's and other depository corporations' surveys provides for spaces for correctly recording the related assets and liabilities. Second, consistent with the international standards, the treatment of repurchase agreements (repos) was changed, methodologically and numerically, on June 30, 2005 to allow these to be recorded as collateralized loans rather than as outright sales of securities

On the latter point, a letter from the Statistics and Data Warehouse Department to the scheduled banks (dated March 15, 2006) instructs the following: in the case of liquidity injecting repo transaction by the SBP, the securities should remain on the asset side of the scheduled bank, and a new financial asset—a loan—should be recorded as an asset of the cash provider (SBP), and a liability of the cash taker (the scheduled bank); and, in the case of liquidity withdrawing repo transaction by the SBP, the securities should remain on the asset side of the SBP, and a new financial asset—a loan—should be recorded as an asset of the cash provider (the scheduled bank), and a liability of the cash taker (SBP).

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

The MFSM methodology recommends 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 the banks' outstanding claims on creditors without adjustment for expected loan losses. This amount comprising the outstanding principal plus accrued interest is referred to as the book value of a loan

The SBP revalues most of its foreign currency positions at the market exchange rates of the Pakistani Rupee against major foreign currency. This exercise is carried out automatically on a daily basis for the Finance Department by the GLOBUS Banking System, which takes exchange rate data from the Exchange and Debt Management Department. There is an exception, however, to this practice: IMF positions are revalued annually on April 30 at the published SDR exchange rate. Scheduled banks revalue foreign currency positions at endmonth market exchange rates. This conforms with the *MFSM* guidelines.

The SBP holds foreign and Pakistani government securities, and scheduled banks hold, for investment and trading purposes, a range of domestic securities issued by the government and corporate sectors. Different investment funds which manage the SBP's foreign security portfolio provide its market valuation on a monthly basis. Pakistani government securities in the SBP's portfolio are revalued on a daily basis by taking into account the discount accrued at market prices. The scheduled banks are obliged to record their securities according to the SBP's Circular No. 20 (issued by the Banking Surveillance Department on August 4, 2000), which requires that all security holdings—government as well as quoted corporate debt and equity securities—be adjusted on a weekly basis with market values in the balance sheet data. The source for revaluing government securities is the Reuters quotations, and for quoted corporate securities it is the prices listed at the Karachi Stock Exchange.

The SBP holds monetary and nonmonetary gold assets. The Finance Department revalues the SBP's gold on an annual basis, on June 30, at the closing London bullion prices provided by the Exchange and Debt Management Department. These market gold prices are converted to Pakistani Rupee at the mid-point exchange rate against the Sterling Pound.

The SBP balance sheet data that are used for the central bank's survey show its loans and advances in gross terms on the asset side, and provisions in gross terms on the liability side. (The Finance Department, however, follows the practice of netting provisions against the SBP's equity participations and against loans and advances to the financial corporations.) Likewise, the reported data from the scheduled banks that are used for the other depository corporations' survey show loans and advances in gross terms on the asset side, and provisions in gross terms on the liability side. This conforms with the *MFSM* guidelines.

2.4.2 Recording is done on an accrual basis.

The *MFSM* methodology recommends that monetary statistics be compiled on an accrual basis. All transactions should be recognized in the period in which they arise, regardless of when the corresponding cash flows actually occur. Accordingly, the interest due but not paid on financial instruments should 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 these guidelines, the SBP's balance sheet data are being compiled on an accrual basis, and interest accruing on deposits, loans and securities other than shares are incorporated into the outstanding amount of the financial asset or liability. Moreover, following the instructions issued by the SBP, scheduled banks treat interest on financial assets and liabilities as accruing continuously during the accounting period, and report it as part of the outstanding balance.

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

Accounting data used for the SBP's Depository Corporations' Survey are collected on a gross basis, and claims on a particular transactor or group of transactions are not netted against the liabilities to that transactor or group of transactions. Certain statistical aggregates—namely, Net Foreign Assets, Net Claims on Central Government, and Other items (net)—are presented on a "net" basis owing to the analytical usefulness of the net concepts involved—a practice that conforms to the *MFSM* methodology. At the same time, the underlying data are also shown on a gross basis. The Depository Corporations' Survey is obtained by canceling out all outstanding claims and liabilities between the SBP and scheduled banks and between the scheduled banks themselves.

3. Accuracy and reliability

3.1 Source data

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

The SBP maintains a comprehensive and current register of financial sector institutions, including depository corporations and other financial intermediaries. This register is updated to reflect changes arising out of the entry of new units and liquidation and merger of existing ones. The institutional coverage is complete, and the procedures adopted to maintain the register are adequate, and the source data cover all the units listed in the register. The registers of financial institutions of different categories are published in the new reporting guides prepared by the SBP.

The Statistics and Data Warehouse Department uses the balance sheet data prepared by the Finance Department on a monthly basis as source data for the analytical accounts of the central bank. The Finance Department generates the balance sheet data, in the form of *The*

Statement of Affairs of the State Bank of Pakistan, from a chart of accounts of the SBP that provides information—disaggregated as well as consolidated—on the different balance sheet categories. Recently, Finance Department has begun to prepare a new, detailed, MFSM-compliant version of its balance sheet data, which is based on the format provided by the Statistics and Data Warehouse Department in the Reporting Guide for State Bank of Pakistan. This format contains sufficient detail to enable the classification of all financial instruments and economic sectors for statistical purposes as defined in the MFSM.

As observed in 2.1.1 above, the Statistics and Data Warehouse Department currently collects source data for compiling the analytical accounts of the other depository corporations' survey in two different formats. The first format is that of the SBP's monthly report form, which was introduced with Circular No. 2 of March 16, 1993, for scheduled banks. Monetary statistics compiled from these report form data are published on the SBP's website, as well as in its monthly publication, Statistical Bulletin. The second format is that of the SBP's Reporting Guide for Banks and Development Financial Institutions (DFIs)—a new, detailed, MFSMcompliant monthly report form, which was introduced for scheduled banks in a phased manner from September 2005 to April 2006. Monetary statistics for April 2006 compiled from these report form data have been published on the SBP's website but, in the absence of a sufficiently long series, not yet in its monthly publication, *Statistical Bulletin*. The Statistics and Data Warehouse Department is in the process of shifting the scheduled bank reporting from the traditional report form to the new reporting system and, in view of the delays encountered by some banks in reporting data in the more detailed format, has decided to continue with both reporting forms during the transitional phase. In addition, scheduled banks report half-yearly data, at end-June and end-December, to the Statistics and Data Warehouse Department, as well as weekly data to the Banking Surveillance Department.

These source data contain sufficient details to enable the classification of all financial instruments and economic sectors for statistical purposes as defined in the *MFSM* as the report forms follow the key *MFSM* guidelines. While the first monthly report form conforms to these guidelines broadly, the second one adheres to them closely. Consequently, the second report form marks a decisive improvement over the first one, and the SBP's plans call for discontinuing the first report form after a sufficiently long series has been developed with the second one. When the SBP determined that there was need for introducing a new report form, it consulted the Finance, Monetary Policy, and Banking Surveillance Departments before putting the change into effect. The data sources are kept under continuous review to ensure that the data collection system remains comprehensive.

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

The primary instruments of source data collection—namely, the *Reporting Guide for SBP* and the *Reporting Guide for Banks and Depository Financial Institutions (DFIs)*—have a common structure. The first chapter explains the purpose of the Guide, and instructs the data reporters as to how to use the Guide; the second chapter outlines the conceptual framework of compilation by defining the salient concepts of the *MFSM* methodology—such as sectoral

balance sheets, financial corporations' surveys, economic sectorization scheme, instrument classification scheme, the residency criterion, and the principle of accrual accounting; the third chapter clarifies the analysis of flows as derived from transaction changes, valuation changes, and other changes in volume; the fourth chapter describes various asset and liability categories (the material in the second, third, and fourth chapters is taken directly from the *MFSM*). These chapters are followed by three annexes—of which the first tabulates the central bank's or other depository corporations' survey; the second gives a registrar of financial institutions by categories; and the third presents a report form which the appropriate reporting unit, either the Finance Department or a scheduled bank, is expected to complete.

The new report form is a broad replica of the *Sectoral Balance Sheet of a Financial Corporations Subsector* in Table 7.1 of *MFSM*. Thus, assets are divided by monetary gold and SDRs, currency and deposits (transferable and other deposits), securities other than shares, loans, shares and other equity, insurance technical reserves, financial derivatives, and finally other accounts receivable. Liabilities are divided by currency and deposits (transferable and other deposits), loans, financial derivatives, and finally other accounts payable. This instrument classification is supplemented by economic sectorization, which identifies resident and nonresident sectors, and subdivides the former by central bank, deposit money institutions, other deposit-accepting institutions, other financial intermediaries, insurance companies and pension funds, financial auxiliaries, central government, provincial government, local government, public nonfinancial corporations, private nonfinancial corporations, households, and others. Both asset and liability positions are differentiated by national and foreign currencies.

Compiling instructions instruct scheduled banks to include accrued interest on loans and deposits in the outstanding amounts of loans and deposits; to value foreign currency positions at end-month market exchange rates of the Pakistani Rupee against major foreign currencies; and treat repurchase agreements as collateralized loans. Taking into account the source data format, as well as the compiling instructions, the source data have sufficient details to meet the *MFSM* requirements. Consequently, no other data are needed, nor are any used, to supplement these source data.

3.1.3 Source data are timely.

The Finance Department makes the balance sheet data of the SBP available to the Statistics and Data Warehouse Department within 15 days after the end of the reference month. The scheduled banks report balance sheet data through the monthly report form to the Statistics and Data Warehouse Department within 20 days after the end of the reference month. These lags in collecting source data facilitate timely compilation of monetary statistics. To promote timely data reporting by the scheduled banks, SBP employs follow-up procedures. For example, it maintains regular contacts with the scheduled banks and, whenever reporting delays extend beyond a reasonable target date, contacts the late reporter, and persuades it to minimize further delays. Although *The SBP Act* provides for penalties for late reporting banks, as observed in 0.1.4 above, these have not been used recently.

3.2 Assessment of source data

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

While all problems regarding the balance sheet data of the SBP are resolved between the Finance and Statistics and Data Warehouse Departments, the latter department reviews the monthly reported data for the scheduled banks, and discusses identified actual or potential problems directly with the reporting bank. Thus, recently when the Statistics and Data Warehouse Department found that one scheduled bank had reported data in which credit from the SBP was misclassified as government lending funds, it placed a call to that bank, confirmed the instance of misclassification, and corrected the error by reclassifying the liability, appropriately, to the central bank. A similar procedure was followed in another instance in which a scheduled bank had misclassified restricted deposits with the central bank as deposits with a private nonfinancial corporation. The Statistics and Data Warehouse Department uses computerized procedures to monitor the accuracy of the reported source data, and validation checks built into the electronic report forms enable the reporting banks to correct errors at the time of data entry.

3.3 Statistical techniques

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

Computerized data collection started at the SBP in March 1993 with the introduction of the monthly report forms for scheduled banks. The software for data entry and diskette formatting was developed by the former Statistics (now Statistics and Data Warehouse) Department. These bank data are reported on floppy diskettes, and entered into the electronic database of the Statistics and Data Warehouse Department. The potential for processing errors is minimized by the use of electronic reporting and processing procedures. No statistical techniques are used to deal with the source data and, in particular, no estimated data are used to supplement the source data.

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

The Statistics and Data Warehouse Department does not employ other statistical procedures. It has recently started a project for producing seasonally-adjusted monetary data. The latter data, however, are currently meant only for internal use, and are not being published.

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 Statistics and Data Warehouse Department validates the accuracy of the monthly source data submitted by the scheduled banks against other data sources, such as the Banking Surveillance Department's weekly data and/or its own half-yearly data on scheduled banks. The latter data set contains detailed information on deposits, advances and bills, and investment in securities. Most questions, however, are resolved by the Statistics and Data Warehouse 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 and Data Warehouse 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.

Whenever large fluctuations occur in monetary or credit aggregates, say, following major changes in methodology, the Statistics and Data Warehouse Department investigates the underlying contributory factors.

3.5 Revision studies

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

The Statistics and Data Warehouse Department has recently drafted a document, *Data Revision Policy*, to explain the rationale underlying its policy on revising monetary (and balance of payments data) and its guiding principles. According to this document, which the department plans to publish on the SBP's website, the revisions to data are needed "(1) to include improved source data; (2) to capture routine recalculation; (3) to adopt improved methodology; and (4) to correct errors." Most previous revisions to monetary data focus on correction of errors, for example, errors involved in sectorization of institutional units or classification of financial instruments. Revisions caused by correction of such errors are used internally to inform the statistical processes. However, since these errors occur randomly and these revisions tend to be sporadic, revision studies are not carried out.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

The analytical accounts of the central bank and scheduled banks are disseminated on a monthly basis—which meets the recommended periodicity of the GDDS.

4.1.2 Timeliness follows dissemination standards.

The central bank's survey, other depository corporations' survey, and depository corporations' survey are currently disseminated within four weeks after the end of the reference month, consistent with the GDDS recommendation for timeliness (which is one to two months). Previously, the end-of-fiscal-year central bank's survey for June was disseminated with a three-month lag as the SBP's balance sheet data were made available for monetary statistics compilation only after these had been approved by the Central Board of Directors, who meet every year before the 24th of August. This delay meant that the central bank aggregates could not be disseminated within the GDDS timeliness specification. To avoid the delay, starting June 2004, the SBP has allowed the Statistics and Data Warehouse Department to use the preliminary balance sheet data for compiling the central bank's survey for the period June–August. This has shortened the lags in dissemination to within the GDDS recommendation for timeliness.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

Data on interbank positions have inconsistencies of varying magnitude. Thus, in the analytical accounts of the central bank and other depository corporations published on the SBP's website, SBP's figures on the scheduled banks' deposits with itself are lower than the banks' by about 10 percent; and the scheduled banks' figures on their liabilities to the SBP arising out of loans and advances taken from it are about 13 percent lower than the SBP's claims on banks arising out of these loans and advances. The Statistics and Data Warehouse Department is aware of these inconsistencies, and can explain them in part.

4.2.2 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 SBP's monthly publication, *Statistical Bulletin*, in footnotes. As observed in 1.2.4 above, when major changes in methodology are introduced, monetary statistics are published with footnotes that explain these changes. Thus, when in October 2006 the SBP published new monetary data for April 2006 compiled on the *MFSM* guidelines on the SBP's website, the following footnote was attached to these data: "The

table shows monetary statistics of the central bank (or other depository corporations—scheduled banks) according to the *MFSM* guidelines," with a link provided to the *Reporting Guide for the State Bank of Pakistan* (or to the *Reporting Guide for Banks and Depository Financial Institutions*).

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

There are inconsistencies between monetary statistics and balance of payments statistics, as well as between monetary statistics and government finance statistics.

Inconsistencies between monetary and balance of payments statistics focus on data on net foreign assets (NFA). Here, the underlying causes for inconsistencies are the different exchange rates used by the compilers of these datasets for converting foreign currency stocks into national currency amounts. Thus, for compiling balance of payments statistics, the Statistics and Data Warehouse Department receives data from the scheduled banks on their foreign currency holdings and deposits in the respective currency of denomination, and these are converted into Pakistani rupees by using the midpoint exchange rate of the end-reference period. However, for compiling monetary statistics, it directly uses the Pakistani rupee amounts as reported by the scheduled banks, which convert foreign-currency holdings and deposits at the exchange rate prevailing at the time of the particular transaction. Within the Statistics and Data Warehouse Department, regular meetings are held between the compilation teams of the monetary and balance of payments statistics on data reconciliation.

Between monetary and government finance statistics, inconsistencies focus on bank credit to the government sector. While the Statistics and Data Warehouse Department does not meet with the MOF on data reconciliation, the Monetary Policy Department holds meetings with the latter whenever a need for data reconciliation arises. As the causes of the inconsistencies are broadly identified as existing in the government finance statistics, the bank credit figure from the monetary statistics is used for policy and programming work.

4.3 Revision policy and practice

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

As observed in 3.5.1 above, most revisions to monetary data focus on correction of errors and, since the errors occur randomly, revisions do not follow a regular schedule.

4.3.2 Preliminary and/or revised data are clearly identified.

Monetary data disseminated on the SBP's website and in its monthly publication, *Statistical Bulletin*, are clearly identified as preliminary or revised.

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

As observed in 3.5.1 above, revisions to monetary data tend to be of sporadic nature. Consequently, no revision studies have been published. At the same time, revisions are used internally to inform the statistical processes.

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 SBP makes its presentation of the monetary data broadly commensurate with the users' needs by adopting a variety of ways. First, it disseminates monetary statistics in the form of time-series data. Second, it disseminates monetary statistics and its key components with various levels of detail. For example, data are disseminated on the distribution of deposits by the type of account, category of deposit holder, size of account, as well as by category of deposit holder and type of account, and category of deposit holder and size of account; on classification of advances by borrowers, securities pledged, size of accounts, rates of margin, as well as by size of accounts and borrowers. Finally, it disseminates monetary statistics in its monthly publication, *Statistical Bulletin*, with charts, bar diagrams and tables to facilitate analysis. Although monetary data in this publication are not accompanied by comments in the form of a summary of recent economic and financial developments, such a summary is included in the SBP's other publications—especially, its quarterly publication, *The State of Pakistan's Economy*, and its half-yearly publication, *Monetary Policy Statement*. However, as observed in 3.3.2 above, the seasonally-adjusted monetary data, which began to be produced recently, are not being published.

5.1.2 Dissemination media and format are adequate.

The SBP publishes monetary statistics on a regular basis on its website, as well in its range of publications, *Statistical Bulletin, Annual Report of State Bank of Pakistan, The State of Pakistan's Economy, Monetary Policy Statement,* and *Quarterly Report of the State Bank of Pakistan*. Monetary statistics were also published in the SBP's 50-year publication, *Handbook of Statistics on Pakistan Economy (2005)*. In addition, the SBP's monetary statistics are reproduced on a regular basis in the FBS's publications, *Monthly Statistical Bulletin* and *Yearbook of the Federal Bureau of Statistics*, as well as in the MOF's annual publication, *Economic Survey*. On the SBP's website monetary statistics are disseminated in the form of PDF files, as well as in the more user-friendly form of Excel files.

5.1.3 Statistics are released on a preannounced schedule.

The SBP publishes an advance release calendar on its website for the release of monetary statistics. Thus, the currently published calendar indicates that the analytical accounts of the

central bank for the reference month of November 2006 would be released "No Later Than (NLT)" December 15, 2006; and those of the other depository corporations would be released "No Later Than (NLT)" December 31, 2006; and interest rate data would be released on a daily basis.

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

Monetary statistics are released to all users simultaneously.

5.1.5 Statistics not routinely disseminated are made available upon request.

Unpublished and nonconfidential data are made available upon request, but such requests are rare, and no such request has been received recently.

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 are primarily available from the *Compilation Guide* prepared by the Statistics and Data Warehouse Department, and recently published on the SBP's website. In addition, some metadata are also available from the methodological footnotes attached to the monetary statistics tables published in the SBP's monthly publication, *Statistical Bulletin*. Finally, metadata are available from Pakistan's GDDS web pages posted on the IMF's DSBB and, as observed in 1.2.1, accessible by a hyperlink provided in the SBP's website.

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

Metadata on monetary statistics provided by the SBP's website, publications, and the GDDS web pages are at different levels of detail suitable to different types of audiences. Of these sources, the *Compilation Guide*, which provides a comprehensive and detailed description of the sources and methods used for monetary statistics, is addressed to the statistical experts. Footnotes provide information on methodological changes in a brief form that is suitable to the specific categories users of monetary statistics. Finally, GDDS web pages provide metadata in a summary form to the larger community of those with a general interest in Pakistan's statistics.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

The SBP's monthly publication, *Statistical Bulletin*—the primary vehicle for dissemination of monetary statistics—identifies the following contact point for enquiries: Public Relations

Division, State Bank of Pakistan, Post Box No. 4456, Karachi (Pakistan), Tel. No. 2453998. Whenever queries from interested users of monetary statistics are received, the Public Relations Division sends these to the Statistics and Data Warehouse Department for answers and clarifications. Contact points are also available on the departmental pages of the SBP's website.

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

A list of statistical publications, differentiated by periodicity, with information on current charges is published on the back cover of every issue of the SBP's monthly publication, *Statistical Bulletin*, which is available on the SBP's website.

Table 1. Pakistan: Data Quality Assessment Framework—Summary of Results for Monetary Statistics

SBP plans to publish advance notice of major changes in methodology (short-term). SBP's Fund positions and gold assets are SBP plans to revalue Fund positions and gold Although revisions are used internally to inform the statistical processes, no following the finalization and publication of 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 Plans for Improvement and Target Dates assets on a monthly basis (short-term). the data revision policy (short-term). No advance notice of major changes in Comments on Assessment revalued only on an annual basis. revision studies are carried out. (Compiling Agency: State Bank of Pakistan) methodology. <u>N</u> LNO Assessment ГО × × \bowtie 0 $\times \times \times$ $\times \times \times$ $\times \times \times$ × \times NA 0.1 Legal and institutional environment 3.4 Assessment and validation of intermediate data and statistical outputs Methodological soundness 2.3 Classification/sectorization 0.4 Other quality management 3.2 Assessment of source data 4.1 Periodicity and timeliness 2.1 Concepts and definitions Accuracy and reliability Assurances of Integrity 0. Prerequisites of quality 3.3 Statistical techniques Element Basis for recording 1.3 Ethical standards Revision studies 1.1 Professionalism 1.2 Transparency Serviceability 3.1 Source data 0.3 Relevance 0.2 Resources Scope 2.2

Table 1. 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	Observe	d; LO = P	ractice Larg	gely Obse	rved; Ll	NO = Practice Largely Not Observed; NO = Practice	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
Dlomont	MA		Assessment	nent		tuccustical A no statement	Dlong for Immercement and Towart Dates
DIGIIGIII	Y.	0	ON ONT OT	CNO	ON	Comments on Assessment	rians for improvement and raiget Dates
4.2 Consistency			X			Data on interbank positions contain	SBP plans to improve consistency of data on
						inconsistencies.	positions between the SBP and scheduled
							banks (short-term).
4.3 Revision policy and practice		X					
5. Accessibility							
5.1 Data accessibility		X					
5.2 Metadata accessibility		×					
5.3 Assistance to users		X					