### Mexico: Report on Observance of Standards and Codes—Data Module

This Report on Observance of Standards and Codes on Data Module for Mexico 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 October 8, 2010. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mexico or the Executive Board of the IMF.

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

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### INTERNATIONAL MONETARY FUND

### **MEXICO**

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

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The Report on the Observance of Standards and Codes (ROSC)—Data Module provides an assessment of Mexico's macroeconomic statistics against the *Special Data Dissemination Standard (SDDS)* 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 datasets covered in this report are national accounts, government finance, monetary and balance of payments statistics. The agencies that compile the datasets assessed in this report are the National Institute of Statistics and Geography, the Bank of Mexico, and the Secretariat of Finance and Public Credit.

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

The National Institute of Statistics and Geography (<a href="www.inegi.org.m.m.">www.inegi.org.m.m.</a>)
Bank of Mexico (<a href="www.banxico.org.mx">www.banxico.org.mx</a>)
Secretariat of Finance and Public Credit (<a href="www.shcp.gob.mx">www.shcp.gob.mx</a>)

This report is based on information provided prior to and during a staff mission from February 3–17, 2010 and publicly available information. The mission team was headed by Mr. Robert Heath and included Messrs. Antonio Galicia-Escotto, Alberto F. Jiménez de Lucio, José Carlos Moreno, Ms. Lisbeth Rivas (all IMF Statistics Department), and Ms. Claudia Mammah (Administrative Assistant, IMF Statistics Department).

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### ACRONYMS

1993 SNA
 2008 SNA
 BI
 System of National Accounts 1993
 System of National Accounts 2008
 Benchmark to Indicator Ratio

BM Bank of Mexico
BOP Balance of Payments

BPM5 Balance of Payments Manual, fifth edition

BMP6 Balance of Payments and International Investment Position Manual,

sixth edition

CGT General Conditions of Employment of the Bank of Mexico

CNBV Banking and Securities National Commission COFOG Classification of Functions of Government

COICOP Classification of Individual Consumption by Purpose

DSBB Dissemination Standards Bulletin Board DQAF Data Quality Assessment Framework

GFS Government Finance Statistics

GFSM 1986 A Manual on Government Finance Statistics, 1986 GFSM 2001 Government Finance Statistics Manual, 2001

IIP International Investment Portfolio

INEGI National Institute of Statistics and Geography

ISIC International Standard Industrial Classification of All Economic

Activities

LSNIEG Law of the National System of Information on Statistics and

Geography

MFSM 2000 Monetary and Financial Statistics Manual 2000

NA National Accounts

NAICS North American Industry Classification System

ODC Other depository corporations

ROSC Report on the Observance of Standards and Codes

SDDS Special Data Dissemination Standard SHCP Secretariat of Finance and Public Credit

SNIEG National System of Statistics and Geographic Information

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### I. OVERALL ASSESSMENT

- 1. Mexico has been a subscriber of the SDDS since August 1996, posting its metadata on the Fund's *Dissemination Standards Bulletin Board* (*DSBB*) in March 1998. Mexico is in observance of the SDDS, meeting the specifications for data coverage, periodicity and timeliness, and the dissemination of advance release calendars. Mexico avails itself of a flexibility option on the timeliness of general government or public sector operations. Appendix I provides an overview of Mexico's dissemination practices compared with the SDDS.
- 2. This Report on the Observance of Standards and Codes (ROSC) data module is a reassessment of the exercise conducted in February/March 2002, but applies an updated framework (IMF's Data Quality Assessment Framework (DQAF July 2003)) and covers national accounts, government finance, monetary and balance of payments statistics. The National Institute of Statistics and Geography (INEGI) is responsible for the national accounts, the Secretariat of Finance and Public Credit (SHCP) for the government finance statistics, except for state and local government statistics, which are the responsibility of INEGI to compile and disseminate, and the Bank of Mexico (BM) for monetary and balance of payments statistics. The macroeconomic statistics are generally of a high quality, although there is some variation among datasets (see Table 1), and adequate to conduct effective surveillance. The mission found a high degree of quality awareness, professionalism, and integrity in all the compiling agencies.
- 3. Mexican macroeconomic statistics are in a period of transition as recent laws, including the Law of the National System of Information on Statistics and Geography (LSNIEG), have strengthened the legal backing and changed institutional arrangements. The implications of these changes are just beginning to be felt. The LSNIEG created a national system of statistics and geographic information (SNIEG) overseen by a National Statistical Council, with the support of specialist subsystems committees.<sup>2</sup> The system has just started to operate. INEGI is now an autonomous legal entity separate from the SHCP, has a clear legal mandate to compile and disseminate data on national accounts statistics, and is the coordinator of the SNIEG. From the discussions undertaken by the mission, this more robust institutional framework should allow a holistic view of the statistical system to be taken and, through the coordinating role of INEGI, the adoption of common statistical standards across all datasets of national interest.<sup>3</sup>

<sup>1</sup> At the time of the mission, the methodology for both the consumer price and producer price indices are in the process of being updated. When the new indices is is published, expected in early 2011, the intention is for a data ROSC reassessment for these two indices to be undertaken. Under the 2008 Law of the National System of Information on Statistics and Geography (LSNIEG), responsibility for prices is to be transferred from BM to INEGI by July 2011.

<sup>&</sup>lt;sup>2</sup> For the subsystem of economic information, the specialist committees comprise representatives of the INEGI, SHCP, BM, the Ministry of Economy, and the relevant ministries and public institutions by area (macroeconomic information, energy, tourism, agriculture, science and technology, and employment).

<sup>&</sup>lt;sup>3</sup> The mission understands that the datasets of national interest include national accounts, price statistics, government finance, monetary, and balance of payments statistics.

- 4. The ROSC mission assessed the quality of Mexican macroeconomic statistics as at the time of the visit. The mission observed variation across domains in terms of the improvements made since 2002. In national accounts, the North American Industry Classification System (NAICS) for classifying economic activity across public institutions has been introduced and the base year of the national accounts updated to 2003. In monetary statistics, the BM and the banking and security supervisor (CNBV) have cooperated closely to reduce the burden of reporting on financial institutions, while coverage of the financial sector has improved very significantly. In government finance (GFS) and balance of payments (BOP) statistics changes are underway. The full implementation by end 2012 of the General Law on Government Accounting should improve the compilation and dissemination of GFS, not least with regard to states and municipalities, and with regard to international statistical and accounting standards. Further, early in 2010, through the committee structure of the SNIEG, it was decided in principle that Mexico should adopt the *Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)*.
- 5. Despite the progress made and envisaged, there is scope for further improvement. The mission identified the need for greater consistency in recording across, and even within, agencies and for regular reconciliation exercises. The creation of SNIEG provides an excellent opportunity to improve this situation, and to proactively respond to emerging issues. Wider adoption of international statistical standards would also promote consistency. Also, across the domains, there is a need for more regular consultation with users. Periodic but regular meetings with users could help build greater understanding of the work of statistical agencies and enhance the statistical work of the agencies.
- 6. In applying the IMF's DQAF the remainder of this section presents the mission's main findings. The findings are presented at the level of the DQAF's quality dimensions, by agency for the first two dimensions, and across datasets for the remaining four.

### 7. Prerequisites of quality and assurances of integrity

- The LSNIEG establishes that **INEGI** has the exclusive responsibility for integrating the national accounts (Article 59); has legal backing to collect information for the national accounts (Article 45 (1)); and has to promote the strict confidentiality of information provided (Article 37). Further, Article 26 of the Constitution grants INEGI technical and operating autonomy. Resources are adequate at the INEGI. No regular consultation with users is established, but a portal on the INEGI website exists as a communication channel. INEGI firmly adheres to the principle of objectivity in the collection, processing, and dissemination of statistics. It demonstrates professionalism, is transparent in its policies and practices, and provides guidelines to their staff on ethical conduct. INEGI's autonomy guarantees that no government authority has access to its statistics before they are officially released.
- The responsibility for compiling macroeconomic statistics by the **Bank of Mexico** is broadly stated in Article 62 Section I of the Bank of Mexico Law (1994) that indicates that the BM, in coordination with the other competent authorities, may prepare, compile, and publish economic and financial statistics, as well as operate information systems based on these statistics, and collect the necessary data for these

purposes. While the BM has a long-standing and unchallenged tradition of compiling and disseminating statistics as a public service, the BM is not empowered by the law to require the reporting of information by the nonfinancial private sector (except for firms involved in the business of personal money transfers). Resources dedicated to the compilation and dissemination of statistics are adequate and high ethical standards are set. The BM does not conduct regular meetings with outside users, but has well-established procedures to monitor data quality.

- The Federal Budget and Fiscal Responsibility and other laws clearly establish that fiscal statistics on the central government and other levels of public sector aggregation are compiled and disseminated by the SHCP, while INEGI is responsible for compiling and disseminating fiscal statistics on the operations of state and municipalities (local) governments. Confidentiality of data is protected, and statisticians are free of political influence in the choice of the most appropriate data sources and methods for compiling fiscal statistics. The SHCP is fully aware that quality is the key for maintaining public confidence in fiscal statistics. The laws, regulations, methodologies, and manuals for classifying expenditure that govern compilation and dissemination of fiscal statistics are available to the public on the SHCP's website. Resources are adequate for current tasks. Fiscal statistics are released simultaneously to the general public through the SHCP's website.
- 8. The **methodological soundness** of the statistics varies across dataset. The national accounts generally follow the conceptual advice in the *System of National Accounts, 1993 (1993 SNA)*, although most government transactions on a quarterly frequency are on a cash instead of on an accrual basis. The methodological foundations of monetary statistics are generally sound and reflect significant improvement since 2002. However, the definition of broad monetary aggregates is not in line with key principles of the *Monetary and Financial Statistics Manual* and the recording of financial derivative and repurchase transactions are overstating the aggregated other depository corporations (ODC) balance sheet.
- 9. In BOP, data are compiled using a mix of methodological standards from the fourth and fifth editions of the *Balance of Payments Manual*. Some services are classified as income, both current and capital transfers are recorded as current; and official reserve assets are included within portfolio and other investment accounts in the International Investment Position (IIP), although separately identified. Branches of Mexican banks abroad are classified as residents and nonfinancial private debt is classified by place of issue of the liabilities not on the residence criterion. Cross-country comparability of data is hindered by the use of national classifications and presentations.
- 10. The compilation and dissemination of GFS follows national concepts and definitions, which are similar to the recommendations in *A Manual on Government Finance*Statistics, 1986 (GFSM 1986). The classification of revenue, expenditure, financing is in accordance with national criteria, broadly similar to those recommended in the GFSM 1986, but with major presentation differences, including presentation on a modified cash basis. Debt is valued at face value, and the classification of financing and debt as domestic or foreign is classified by place of issue of the liabilities not on the residence criterion. The same financing and debt data are used in the balance of payments and IIP. Fiscal statistics for

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general government are not compiled regularly, but can be provided on request. The authorities have no plan to migrate to the *Government Finance Statistics Manual*, 2001 (GFSM 2001) but the intent to implement new consistent accounting standards for all levels of government that follow international standards, including accrual accounting, and to introduce a modern information system, should provide the information necessary to compile GFS according to the *GFSM 2001*.

- Accuracy and reliability of data are generally adequate and have improved since 11. 2002. In the national accounts, source data and statistical techniques are sound and most statistical outputs sufficiently portray reality. A broad range of source data are available, with economic censuses every five years and a vast program of monthly and annual surveys. For most surveys, scientific sampling techniques are used. However, changes in inventories data are obtained as residuals—despite the availability of annual data in manufacturing and domestic trade surveys that is not incorporated in national accounts (indicating a need for strengthening internal coordination), so there is no independent verification between the production and expenditure measures of GDP. Also, there are some statistical techniques that are not fully in line with international best practice: the wide use of the single indicator method to estimate GDP, rather than the double deflation approach recommended by international standards; the use of fixed intermediate consumption coefficients at current prices in quarterly GDP, rather than the international best practice of using current price data from surveys or, the second best practice, of inflating constant price data by price indices: and the use of the average benchmark-to-indicator ratio (BI) of the previous year for aligning quarterly estimates to annual data, instead of the BI of the fourth quarter of the previous year, as international standards recommend. The latter two statistical techniques are causing a step problem in the estimates of the first quarter. Taxes and subsidies on products at constant prices are estimated by applying the GDP growth rate; a deviation from best practice.
- 12. The information necessary for compiling consolidated GFS data for the various levels of government is available in a timely way, except notably for state and local governments (and thereby general government). In this context, there is a lack of an advance release calendar for state and local government data. The accuracy and reliability of the monetary statistics are supported by comprehensive, high quality source data. The coverage of nonbank other depository corporations (ODC) has improved since 2002, but time delays in the submission of such data and the processing of the reports impedes timely dissemination of the ODC survey. The source data for BOP statistics come from comprehensive data collection programs. However, source data gaps are emerging due to the incomplete coverage of the nonfinancial private sector, in both the current and financial accounts, particularly services, <sup>4</sup> and financial transactions, including trade credits and financial derivatives.
- 13. While the **serviceability** of data has improved in some aspects since 2002, improvements are still needed in two areas. First, there is a pressing need to improve the consistency across datasets, not least because the reconciliation of data does not appear to be done on a regular basis. Second, there is a general need to provide more information to users

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<sup>&</sup>lt;sup>4</sup> There is inter-agency work on-going to improve the coverage of services.

on revisions, a clear conclusion supported by user consultations. Data are available with adequate periodicity and timeliness, and sometimes exceed, SDDS requirements, with the notable exception of the timeliness of general government operations. Beyond the SDDS specifications, the timeliness of the annual integrated economic accounts by institutional sector is very late and INEGI has recognized the need for improvement.

- 14. **Accessibility** of the data is better than in 2002. Most notably there has been a marked improvement in the assistance to users in a timely manner. But for national accounts, monetary statistics and BOP there is a need to improve the availability of metadata. Also, while the mission found that the websites of the agencies were generally informative, some users raised concerns about their user friendlessness. INEGI are encouraged to provide more detail on their annual national accounts estimates.
- 15. Section II provides a summary assessment by agency and dataset based on a four-part scale. This is followed by staff recommendations in Section III. Practices compared to the SDDS are summarized in Appendix I. The authorities' response to this report and a volume of detailed assessments are presented in separate documents.

### II. ASSESSMENT BY AGENCY AND DATASET

16. Assessment of the quality of four macroeconomic datasets—national accounts, government finance, monetary, and balance of payments statistics—were conducted using the DQAF, July 2003. 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 Tables 2a–c. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions "2" to "5" of the DQAF) are shown in Tables 3a–f.

Table 1. Mexico Data Quality Assessment Framework Version July 2003—Summary Results

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

Datasets	National Accounts	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Dimensions/Elements		Statistics		Statistics
0. Prerequisites of quality	1.0	0		1.0
0.1 Legal and institutional environment	LO	О	О	LO
0.2 Resources	O	О	О	О
0.3 Relevance	LO	О	LO	LO
0.4 Other quality management	O	О	О	O
1. Assurances of integrity				
1.1 Professionalism	O	О	O	O
1.2 Transparency	O	LO	O	O
1.3 Ethical standards	O	О	O	O
2. Methodological soundness				
2.1 Concepts and definitions	0	LO	LO	LO
2.2 Scope	O	LNO	O	LO
2.3 Classification/sectorization	O	LNO	O	LNO
2.4 Basis for recording	LO	О	LO	LO
3. Accuracy and reliability				
3.1 Source data	LO	О	LO	LO
3.2 Assessment of source data	O	О	O	O
3.3 Statistical techniques	LO	О	O	O
3.4 Assessment and validation of intermediate data and statistical outputs	LO	О	O	O
3.5 Revision studies	O	О	O	LO
4. Serviceability				
4.1 Periodicity and timeliness	О	LO	О	О
4.2 Consistency	LO	LO	O	LO
4.3 Revision policy and practice	LO	LO	.LO	LO
5. Accessibility				
5.1 Data accessibility	LO	LO	О	0
5.2 Metadata accessibility	LO	О	LO	LNO
5.3 Assistance to users	O	О	O	O

**Practice observed:** Current practices generally meet or achieve the objectives of DQAF internationally accepted statistical practices without any significant deficiencies. **Practice largely observed:** Some departures, but these are not seen as sufficient to raise doubts about the authorities' ability to observe the DQAF practices. **Practice largely not observed:** Significant departures and the authorities will need to take significant action to achieve observance. **Practice not observed:** Most DQAF practices are not met. **Not applicable:** Used only exceptionally when statistical practices do not apply to a country's circumstances.

### Table 2a. Mexico Assessment of Data Quality—Dimensions 0 and 1—National Institute of Statistics and Geography

### 0. Prerequisites of quality

Legal and institutional environment. The INEGI operates under the LSNIEG, published in April 2008. It has exclusive responsibility for conducting the national census, integrating the system of national accounts (Article 59). Under Article 26 of the Constitution it is a public institution with technical and managerial autonomy. In general, the flow of source data among agencies is timely. There are pre-established calendars for the provision of data from surveys and censuses, which are strictly observed. However, a need to strengthen internal coordination within INEGI exists regarding the collection and use of relevant data on intermediate consumption and inventories. INEGI is the coordinator of the newly established SNIEG, which includes a National Advisory Council and committees by type of statistic, and involves inter-institutional coordination. Confidentiality of individual data is guaranteed by the Second Title, Chapter V of the LSNIEG and by the Federal Law of Administrative Responsibilities of the Public Servants (March 2002). The legal power of INEGI for compiling statistics is clearly set out in Chapter V of the LSNIEG, which refers to the rights and obligations of users and respondents. Article 45 (1) states that "system respondents are obliged to provide accurate and timely data and reports as and when requested...." The Law also provides penalties for refusing data requests or falsifying information.

**Resources.** The human and financial resources allocated to national accounts (NA) are commensurate with INEGI's institutional programs. Staff attends training courses offered by international organizations. Compensation levels have been frozen for some years, affecting the retention of experienced staff. Computing resources, physical infrastructure, and funding are adequate. The INEGI seeks to take advantage of modern information technology for the compilation of NA.

**Relevance.** Although INEGI made a presentation of its statistical products to users in December 2009, it does not have a regular process of consultation with main users of NA on the needs for recurrent and new information. However, there is a portal in INEGI website that provides a permanently open communication channel to users for consultations on methodology and conceptual issues. INEGI is updated on the developments in NA methodology and compilation techniques through its participation in different international forums.

**Other quality management.** Article 3 of the LSNIEG states that the INEGI has the objective of providing to society and to the State quality information that is relevant, trustful and timely, in order to help national development. The SNIEG entails the design of strategic programs (long-term), national programs (5 years), and annual programs with objectives and goals in order to improve and broaden statistical products as well as implement international standards. INEGI seeks expert advice for improving statistics. The standards of quality are designed to enhance efficiency in the use of resources.

### 1. Assurances of integrity

**Professionalism.** Professional competence is the basic principle for recruitment and promotions of the INEGI staff. The choice of sources and methods is governed only by statistical considerations.

The INEGI prepares press notes stating its position against the errors of interpretation found, making these notes available to the broad public by means of the web page of the Institute.

Transparency. The press releases indicate that the published data are compiled under the responsibility of the INEGI and in accordance with the LSNIEG. The autonomy conferred to the INEGI guarantees that no government authority has access to the statistics before their release, although a note is sent to the Presidency of the Republic the same day of the release. The data are published in a press release with the logo of the INEGI. When there is a change in the base year of the NA, the most recent methodological standards are adopted. Any substantial modification of the source data and/or methodology used is publicized in advance.

**Ethical standards.** The conduct of INEGI's staff is subject to the norms and sanctions established by the Federal Law on Administrative Responsibilities of the Public Servants and to INEGI's ethical code issued under Article 7 of LSNIEG.

### 0. Prerequisites of quality

### Legal and institutional environment

BM compiles the monetary and external sector statistics. The BM Law, which entered into force on April 1, 1994, does not specifically assign monetary statistics or balance of payments statistics to the BM. However, Article 62.I of the Law indicates that the BM, in coordination with the other competent authorities, may prepare, compile, and publish economic and financial statistics, as well as operate information systems based on these statistics, and collect the necessary data for these purposes. Further Article 36 stipulates that financial corporations are obliged to provide the BM with the information it requires regarding their operations in order to fulfill its functions appropriately; but the BM is not empowered by the Law to require the reporting of information by the nonfinancial private sector (except for firms involved in the business of personal money transfers). Confidentiality and use for statistical purposes of the data reported are adequately guaranteed by current legislation and the General Conditions of Employment of the BM (CGT), which establishes that revealing operating secrets or confidential BM matters is grounds for dismissal, without the BM incurring any liability. Likewise the BM Ethical Code establishes similar confidentiality norms.

#### Resources

The financial, computing, and staff resources are generally adequate to compile the monetary and balance of payments statistics. Every effort is made to use the most advanced information technology instruments available for data processing and dissemination.

### Relevance

Under the Transparency and Access to Public Information Federal Law BM keeps records on the questions and expressions of data needs with the aim of improving the statistical products for all users. The BM does not have formal process of consultation regarding outside private sector users' needs, but consults internal users.

### Other quality management

The BM appears fully aware of quality as the keystone for the credibility of their statistics, including auditing statistical procedures through the internal audit office.

### 1. Assurances of integrity

#### Professionalism

The BM is staffed with competent personnel, and compilers participate in external courses and receive on-the-job training. Macroeconomic statistics are being compiled in accordance with strict technical considerations and are disseminated without political interference. BM has a long tradition of independence, professionalism and impartiality. If an incorrect interpretation is detected, efforts are made to contact the person or organization having interpreted the data to explain the correct interpretation.

### **Transparency**

The BM Law is published on the BM website and in affordable printed publications. No official or public agency outside the BM has access to monetary statistics prior to their release. For BOP statistics, outside of the BM, the agencies working jointly with the BM, such as the SHCP, INEGI and the Secretariat of Economy, have access to the statistics that these public agencies are involved with. All these statistics are released simultaneously to the general public. The terms and conditions under which statistics are compiled and disseminated are usually made available to reporting entities but not to the public.

#### Ethical standards

While there are no written ethical standards applicable to the staff relating directly to statistics, there are clear codes of conduct for staff to be found in the BM Law, the 2009 BM Code of Ethics, the Federal Law on the Administrative Responsibilities of Civil Servants, and in the CGT. Article 24 of the CGT specifies that BM personnel must use discretion in the exercise of their duties, keeping BM matters strictly confidential. Also, INEGI has issued a code of ethics that regulates the standards of behavior for all staff that undertakes statistical and geographic activities.

### Table 2c. Mexico Assessment of Data Quality—Dimensions 0 and 1—Secretariat of Finance and Public Credit

### 0. Prerequisites of quality

### Legal and institutional environment

The Federal Budget and Fiscal Responsibility and other laws assign to SHCP the obligation to provide Congress monthly and quarterly reports on the public finances and debt. Within the SHCP, the Adjunct General Directorate of Public Finance Statistics is responsible for fiscal statistics on revenue, expenditure, and financing; while the Debt Statistics Department is responsible for debt statistics. INEGI is responsible for compiling and disseminating fiscal statistics for state and local governments.

The confidentiality of data received from respondents is protected by law. For the federal public sector and parastatal entities there are legal and administrative provisions for collecting the information necessary for the compilation of fiscal statistics. There are currently no administrative procedures for ensuring the timely reporting of information by states and municipalities.

### Resources

The human resources assigned to compile fiscal statistics are adequate to perform current tasks. Opportunities are limited for staff rotation and salaries are lower than in other areas of the SHCP. Training on methodological matters is mainly internal, complemented by IMF courses. Physical facilities are adequate. Computer hardware and other modern technologies are available, and facilitate the timely compilation and dissemination of quality fiscal statistics. Funding is reasonably secure for the identified needs of the statistical program. Budgeting procedures allow cost control and allocation of resources.

### Relevance

Fiscal statistics follow the budget cycle and are used to prepare and monitor the budget. The timeliness and level of detail provided by the statistics allows users to assess fiscal performance. User needs are identified mainly through the budget process, and a new Advisory Committee, which has public and private sector representation, has been created to advise on accounting standards and financial reporting. A new government accounting law and the development of a new information system should have a significant positive impact on fiscal statistics in the near future and facilitate the compilation of statistics according to the guidelines of the *GFSM 2001*.

### Other quality management

The SHCP is fully aware of quality as the keystone for the credibility of fiscal statistics. Efforts are continuously made to expand the compilation and dissemination of statistics. Furthermore, Mexico participates in and observes the SDDS.

### 1. Assurances of integrity

### **Professionalism**

Article 26 of the Constitution grants INEGI technical and operating autonomy and the Federal Public Servants Responsibility law protects civil servants against illegal orders. Fiscal statistics are compiled on the basis of accounting records and administrative reports from the accounting centers, which follow charts of accounts and budgetary rules derived from the legal framework. Statisticians are free of political influence in the choice of data sources and methods to compile fiscal statistics. Dissemination is based solely on statistical considerations and generally follows international dissemination standards. The Press Office monitors the use of fiscal statistics and makes the necessary clarifications to avoid misinterpretations.

### Transparency

The laws, regulations, and methodologies that govern the compilation and dissemination of fiscal statistics are available to the public on the SHCP's website. Fiscal statistics are released simultaneously to the general public. However, Congress has prior access to the statistics. That there is prior access is not disclosed to the general public. The tables disseminated by the SHCP identify the department responsible for their compilation. Methodological changes are usually described in the draft Expenditure Budget of the Federation and in the General Economic Policy Criteria for the relevant year.

### Ethical standards

INEGI has issued a code of ethics that regulates the standards of behavior for all staff that undertakes statistical and geographic activities, and it is available to the public on a website.

The Federal Law on the Responsibility of Public Servants spells out behavior duties of civil servants. Failure to comply results in prosecution and sanctions, including dismissal.

### Table 3a. Mexico Assessment of Data Quality—Dimensions 2 to 5—National Accounts

### 2. Methodological soundness

# Concepts and definitions National Accounts are compile

National Accounts are compiled following the *1993 SNA*.

**Scope** Annual and quarterly GDP estimates are compiled by the production and expenditure approaches at current and at constant prices. The economic territory, production and assets boundary are in accordance with the *1993 SNA*. Illegal activities are not included.

### Classification/sectorization

Economic activities are classified according to the North America Industry Classification System, compatible with ISIC rev. 3.1. COICOP and COFOG are used to classify household consumption and government expenditures, respectively.

Basis for recording. All transactions are recorded in accordance with the valuation principles of the 1993 SNA. Transactions are recorded on accrual basis, except for the quarterly government accounts. It is likely that there are some cases where quarterly rental housing and private education services are recorded on a cash basis. Work-inprogress for agriculture is not included in annual estimates. Transactions between establishments from the same enterprise are recorded on a gross basis.

### 3. Accuracy and reliability

Source data. Mexico has a very comprehensive regular system of censuses and economic surveys. Censuses have a five year frequency; and surveys are conducted with monthly and annual periodicity. Sampling frameworks are based on the censuses, only partially updated on a current basis. Data on the BOP are received from BM. Adequate quarterly data on the federal government and the state governments are available but on a cash basis; quarterly information on local governments is based on a sample. Most samples do not include small enterprises.

**Assessment of source data.** Appropriate methods are applied to validate the source data.

Statistical techniques. Quarterly GDP by production is compiled at a quite disaggregated level ensuring an appropriate capture of changes in the production structure. GDP by expenditure is not independently estimated as there are no direct measures of changes in inventories. Wide use of single indicator method to estimate GDP. The Denton method is used for benchmarking the quarterly data, although fixed ratios of intermediate consumption at current prices and the average BI of the previous year are also used deviations from best practices. Seasonal adjusted data are estimated using the X12-ARIMA program. Taxes on goods at constant prices are not properly estimated.

Assessment and validation of intermediate data and statistical outputs. When detected, discrepancies are investigated and addressed. The supply and use framework are used to make the NA data consistent but inventory data are calculated by residual so an independent verification of GDP data by production is not undertaken.

**Revision studies.** Revision studies are conducted regularly, but only the most significant revisions are disclosed. Explanations of the revisions are only provided with a change in the base year.

### 4. Serviceability

Periodicity and timeliness
Periodicity and timeliness of the
national accounts exceeds the SDDS
requirements.

Consistency. Data are consistent for long periods. With each change of the base year, the series are recalculated backward up to the previous base year period; the 2003 base data were recalculated back to 1993 for quarterly data. Quarterly estimates are reconciled with the annual estimates, except for agriculture. National accounts are broadly consistent with the BOP data but there are differences in the classification of services and differences exist with the government finance statistics. The flow of funds table is not reconciled with that compiled by BM.

### Revision policy and practice.

There is a well established cycle of production and current revisions, which is known to the general public. In December a dissemination calendar for the following year is posted on the Internet and disseminated also through the press. Exact release dates are provided a quarter ahead. Quarterly data for the current year are revised with the release of each new quarter. Revisions of previous years' data are made at the time the first final annual estimates are published at the end of the year following the reference period. There is not a regular cycle for changing the base year. Preliminary figures are not identified in the tables.

### 5. Accessibility

Data accessibility. Ouarterly data are simultaneously released in a press release with an analysis of current-period developments and on INEGI website. Data on quarterly GDP by production with sufficient breakdown is made available on the website, along with tables of global supply and use of goods and services. Seasonal adjusted GDP series are also published. Although very detailed annual estimates are compiled, the published breakdown is not sufficient for detailed analysis of economic activities and main products. The 1993–2003 series is only available for the quarterly estimates. More detailed non-confidential data are made available upon request.

Metadata accessibility. Metadata is available on the Internet and in INEGI publications, but lacks sufficient detail on compilation methods. Summary methodologies are posted on the IMF's DSBB and on the OECD website.

Assistance to users. Some publications and the INEGI website provide the area, e-mail, telephone number, and address of the unit responsible for preparing the data, and the address and e-mail of the Consultation and Marketing Center. The customer service unit of INEGI monitors users' requests through INEGI website and provides a prompt response.

### Table 3b. Mexico Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

### 2. Methodological soundness

### Concepts and definitions

The national concepts and definitions used in compiling GFS are similar to the guidelines of the *GFSM 1986*. There is currently no migration plan to the *GFSM 2001*.

### Scope

Monthly and annual GFS are compiled and disseminated for the federal government and other public sector aggregates, but general government is only available on request annually with a long lag.

Presentation formats differ from the tables recommended by *GFSM 1986*, but their content is similar.

### Classification/sectorization

The classification of revenue, expenditure, financing, and debt follow national criteria, broadly similar to the *GFSM 1986* classifications, but with major presentation differences. The recommended residence criterion is not used to classify financing and debt as domestic or foreign; instead a place of issue criterion is used.

### **Basis for recording**

Revenue, expenditure, financing, and the overall balance are presented on a modified cash basis. Debt is valued at face value. All transactions are recorded on a gross basis, except for financing transactions.

### 3. Accuracy and reliability

### Source data

The main sources of information for the compilation of GFS for the federal government are the administrative systems that monitor budget execution, which cover all budgetary units. For state governments the main source is accounting records, complemented by a questionnaire for some municipalities. The main source of information for parastatal entities is the Integrated Information System. The chart of accounts is generally consistent with the classifications recommended by the *GFSM 1986*. Source data are timely, except for state and local governments.

**Assessment of source data** GFS are based on complete information. Data on the federal public sector are cross-checked with other accounting or administrative records.

### Statistical techniques

Compilation procedures are sound. Consolidation of data for institutional aggregates follows *GFSM 1986* guidelines.

# Assessment and validation of intermediate data and statistical outputs

Information on revenue, expenditure, financing, and debt is regularly reconciled with the budgetary records of various SHCP units and with bank records. Statistical discrepancies are investigated.

### **Revision studies**

Revisions to data incorporate all changes resulting from new information, and the reasons for the changes are known.

Revision studies are undertaken to improve the quality of GFS, but are not disseminated.

# 4. Serviceability Periodicity and timeliness

The periodicity and timeliness of GFS meet SDDS requirements, except for annual general government, for which a timeliness flexibility option is taken.

### Consistency

The various accounting identities are observed. Monthly statistics use the same concepts, definitions, and classifications used for annual statistics. Also, the sum of monthly statistics equals quarterly and annual statistics. Time series are consistent. In general, reconciliation of data across macroeconomic datasets is not done on a regular basis and inconsistencies exist.

### Revision policy and practice

The main revision of data occurs when the information for the Public Accounts becomes available. This information is audited and considered final. Revisions are also made in the month following the publication of preliminary data. Preliminary data and revised data are clearly indicated in statistical publications.

The public is not provided with information on data revisions.

# 5. Accessibility Data accessibility

The information is presented in a way useful for budget monitoring and development. Cross-country comparability of data is hindered by the use of national classifications and presentations. The introduction of a few tables highlighting the principal balances following the GFSM 1986 guidelines would be facilitate understanding of developments by users. Time series since 1990 are available. An advance release calendar is published, except for state and local government statistics.

### Metadata accessibility

Methodological notes explaining concepts, sources and methods are disseminated on the SHCP's and INEGI's websites. Methodological notes are also published on the IMF's DSBB.

### Assistance to users

The name, telephone number, and e-mail address of the person who can be consulted regarding GFS, and a catalog of services are posted on the SHCP's website.

Contact information is also posted on INEGI's website.

Table 3c. Mexico Assessment of Data Quality—Dimensions 2 to 5—Monetary Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions. Mexico's sectoral balance sheets and surveys of depository corporations are broadly in line with the methodology of the MFSM 2000. However, the definition of broad monetary aggregates is not in line with key principles in MFSM 2000.  Scope. The depository corporations survey (DCS) is compiled with full coverage of corporations included in the definition of broad money.  Classification/sectorization of financial instruments broadly follows the methodology of the MFSM 2000. For depository corporations, financial assets and liabilities are classified according to the institutional sector of the counterparts (assets classified by debtor sectors and liabilities by creditor sectors.)  Basis for recording. Monetary statistics are produced on an accrual basis, which is consistent with the MFSM 2000. Financial instruments are generally valued at market prices, and assets that cannot be valued at market prices are recorded at acquisition cost. Financial derivatives and repurchase agreements' recording are overstating the ODC aggregated balance sheet.	Source data. The DC survey is based on the consolidated balance sheets of the BM and ODCs. ODCs report monthly data directly to the CNBV. Time delays in the submission and processing of the reports of nonbank ODC impedes more timely dissemination (e.g., with a lag of less than 30 days) of the ODC survey.  Assessment of source data. Source data are based on accounting records and the use of a variety of comparison and revision tools minimize errors and ensure the quality of the information. Data are transmitted electronically, minimizing the risk of errors.  Statistical techniques. Procedures for compiling source data and for checking and validating data are fully automated.  Assessment and validation of intermediate data and statistical output. Compilers use secondary sources to verify the information reported by the ODC, with a view to reconcile the counterpart data involving the ODC with the BM and other financial institutions. They also use securities market data to cross-check the ODC asset holdings data.  Revision studies. Compilers of monetary statistics routinely analyze the data and compare the preliminary figures with the final. The findings are kept in a register of changes.	Periodicity and timeliness. Central bank (weekly) and summary ODC data (monthly) are disseminated with two and 30-day lags following the end of the reference period, respectively, which meets SDDS requirements.  Consistency. Monetary data are disseminated in consistent historical series. Data on the central bank and ODC survey are internally consistent.  Revision policy and practice. Data are preliminary when first released, and indicated as such in a footnote. Published data remain preliminary for three months, after which they are considered final. The routine consistency studies between the preliminary and the revised data carried out by BM are for BM's internal use and are therefore not published.	Data accessibility. Presentation of monetary statistics facilitates their interpretation and enables monitoring of monetary and financial developments. The BM publishes, and complies with, an advance release calendar for monetary data. Data are posted on the BM website, ensuring simultaneous access by all users.  Metadata accessibility. Mexico disseminates summaries of the methodology for monetary statistics through the IMF's DSBB. Detailed metadata on the BM's website only describe the compilation of the monetary aggregates and the construction of different financial sector surveys, but not of other analytical tables (balance sheets and surveys of central bank, other depository corporations, and other financial corporations).  Assistance to users. Information on the contact person for monetary statistics is available on the DSBB. The BM's website has a catalog of publications, listing all available titles on macroeconomic sectors and research papers.

## Table 3d. Mexico Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments Statistics

### 2. Methodological soundness

### **Concepts and definitions**

Data are compiled using a mix of methodological standards from the fourth and fifth editions of the *Balance of Payments Manual*.

### Scope

The BOP statistics include the transactions of institutional units resident in Mexico with the rest of the world. Branches of Mexican banks abroad are classified as residents and nonfinancial private debt is recorded on a place of issue not residence criterion.

### Classification/sectorization

In national presentations some services are classified as income, both current and capital transfers are recorded as current; and official reserve assets are included within portfolio and other investment accounts in the IIP, although separately identified. Cross-country comparability of data is hindered by the use of national classifications and presentations rather than the standard classification of *BPM5*.

### **Basis for recording**

Every effort is made to ensure valuation at market prices and recording on an accrual basis. However, public and private debt are recorded at face value and interest on public external debt is on a cash basis.

### 3. Accuracy and reliability

### Source data

Source data used in compiling the balance of payments are in general adequate and timely. However source gaps are emerging in both the current and financial accounts, particularly in areas such as services, and financial transactions of the nonfinancial private sector.

### Assessment of source data

There is a range of comprehensive checks for internal consistency, comparisons with other sources, and routine queries when large transactions are detected.

### Statistical techniques

A series of measures have been established to control quality and conduct appropriate and timely verification of the information provided in the surveys, both before and after their electronic processing.

# Assessment and validation of intermediate data and statistical outputs Statistical discrepancies in the intermediate

Statistical discrepancies in the intermediate data are assessed and investigated. Trends in the major balance of payments accounts are monitored using statistical methods.

### **Revision studies**

Although the direction and size of the revisions between the preliminary and final data are examined, no formal studies are conducted to inform statistical processes.

### 4. Serviceability

### **Periodicity and timeliness**

The periodicity and timeliness of all external sector statistics meet SDDS requirements.

### Consistency

The statistics are broadly consistent internally and over time. However consistency could be improved in areas such as the IIP, total external debt, and services. There are differences between the balance of payments statistics and national accounts and, monetary statistics. In principle these differences are reconcilable.

### Revision policy and practice

There is no formal revisions policy but revisions follow a regular and transparent schedule. No formal procedure has been established for disseminating studies and analysis of revisions.

# 5. Accessibility Data accessibility

Data access is provided through the BM website and in hard copy publications. Data are available in several formats and aggregation levels. Data are released on a preannounced schedule in accordance with the SDDS requirements. An advance release calendar is posted in November of each year.

### Metadata accessibility

No additional metadata other than the SDDS are published. Mexico's annual revisions to its BOP/IIP methodology are submitted for publication in the IMF's *BOPSY*.

### Assistance to users

Support and advisory assistance is provided to users on request by e-mail, but this support is not advertised. The BM website makes available to all users the e-mail address of a deputy governor who can be consulted and/or asked about the activities of the Bank or the statistics it produces. The BM responds to users questions through the channel available under the Transparency Law.

### III. STAFF'S RECOMMENDATIONS

17. Based on the review of Mexico's statistical practices, discussions with the data producing agencies, and responses from data users (see Appendix III of the Detailed Assessments volume), the mission has developed a set of recommendations. They are designed to increase further Mexico's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Mexico's statistics. Some additional technical suggestions are included in the Detailed Assessments volume.

### **Cross-cutting recommendations**

- Enhance cross-domain cooperation within and among statistical agencies to support both consistent methodological treatments and proactive responses to emerging issues.
- Conduct regular reconciliation exercises to verify consistency among the macroeconomic datasets.
- Strengthen the legal framework with regard to the compilation of balance of payments statistics.
- Begin an active, systematic process of consulting users on the quality of macroeconomic statistics.
- Establish procedures for informing users about data revision studies.
- Consider creating a centralized portal, a "one-stop shop" for macroeconomic statistics, and metadata, in Mexico to assist users.

### **National accounts**

- Update the business register (directory) continuously and use it also to select samples of small enterprises for expanding the population coverage in the economic surveys.
- Directly estimate changes in inventories and compile an expenditure measure of GDP independent of the production measure. Consider the use of chain indices for calculating volume measures
- Estimate preliminary (before benchmarking to annual results) quarterly intermediate consumption at current prices by inflating data at constant prices by a composite weighted price index of the corresponding producer price and consumer price items, and to the extent of possible, also consider price indices of imported raw materials.
- Conduct an integrated enterprise/establishment survey for a representative sample of
  enterprises by economic activity that collects data on production, inputs, fixed capital
  formation, inventories, income statement, and balance sheet in order to reduce the
  discrepancies between the estimates by economic activity and by institutional sector
  for the non-financial corporation sector.

- Improve the benchmarking technique of quarterly and annual data by applying the BI ratio of the fourth quarter of the previous year to estimate the quarters of the following year until the annual data for that year are available.
- Further investigate the recording of actual rents and private education services in the monthly survey.
- Study the compilation of a supply and use table of illegal goods including illegal trade (contraband).
- Explain in more detail the compilation methods and the causes of routine and major revisions to the NA data in INEGI's national accounts publications.
- Incorporate annual agricultural work-in-progress in the production and assets boundary, given the importance of agriculture activities in the Mexican economy.
- Increase the level of detail of disseminated annual data at four digits of the NAICS, or at least at three digits.

### **Government finance statistics**

- Adopt the *GFSM 2001* methodology for the compilation of fiscal statistics, and compile and disseminate data for general government on a regular basis.
- Develop the new government information system such that government finance statistics can be compiled automatically from budgetary accounts in accordance with international methodology.
- Improve the timeliness of source data for state and local government with a view to complying with SDDS requirements on the timeliness of statistics on general government operations.
- Use the residency criterion to classify financing and debt as domestic or foreign.
- Undertake regular reconciliation of data across macroeconomic datasets.
- Make public prior access to fiscal statistics by Congress.

### **Monetary statistics**

- Review the definition of monetary aggregates with the purpose of improving their international comparability. (Financial wealth aggregates are useful and should continue to be compiled separately.)
- Revise the treatment of financial derivatives and repurchase agreements to avoid overstating the aggregated balance sheet of the ODC.

- Collaborate with the CNBV to improve timeliness in the submission by and processing of nonbank ODC data, which will allow for a more timely dissemination of the ODC survey.
- Prepare and disseminate detailed documentation on the methodology used for compiling monetary statistics.

### **Balance of payments statistics**

- Apply *BPM5* criteria when classifying and disseminating the breakdown of income, financial services, financial derivatives, and official reserves assets.
- Apply the residency criteria to foreign branches of resident banks and nonfinancial private debt in the compilation of the balance of payments and International investment position.
- Improve the coverage of services and financial account transactions of the non-financial private sector.
- Develop a transition plan to *BPM6*.
- To the extent possible, record external public and private debt on an accrual basis in the balance of payments, use market values, and reconcile IIP data on debt liabilities with the total external debt statistics.
- Compile and disseminate a quarterly IIP.
- Prepare and disseminate detailed documentation on the methodology used for compiling BOP statistics.

Appendix I. Mexico: Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data

SDDS Data Category Coverage Periodicity Timeliness Commen							
SDDS Data Category	(meets SDDS)	SDDS	MEX	SDDS	MEX	(Flexibility Options, etc.)	
Real Sector (specifications)						1 , ,	
National accounts (Oferta y Demanda Global Trimestral)	Yes	Q	Q	1Q	45D		
Production index (Indicador mensual de la actividad industrial)	Yes	M	M	6W (1M encouraged)	NLT 6W		
Forward-looking indicators (Indicadores adelantados, encuesta cualitativa del sector manufacturero)	No	M or Q	M	1M or 1Q	3W		
Labor market: Employment (Mexican Labor Survey: National Survey on Occupation and Employment (Encuesta Nacional de Ocupación y Empleo. ENOE))	Yes	Q	M	1Q	NLT 22D		
Labor market: Unemployment (Mexican Labor Survey: National Survey on Occupation and Employment (Encuesta Nacional de Ocupación y Empleo. ENOE))	Yes	Q	M	1Q	NLT 22D		
Labor market: Wages/Earnings (Índice de Remuneraciones Medias reales por persona ocupada en la industria manufacturera)	Yes	Q	M	1Q	2M		
Price index: Consumer prices	Yes	M	F	1M	10D		
Price index: Producer prices	Yes	M	M	1M	10D		
Fiscal Sector ( <u>specifications</u> )							
General government or public sector operations (Gobierno general)	Yes	A	A	2Q	17M	Timeliness flexibility	
Central government operations (Gobierno Federal y Seguridad Social)	Yes	M	M	1M	30D		
Central government debt (Deuda pública )	Yes	Q	M	1Q	30D		
Financial Sector (specification	<u>s</u> )						
Analytical accounts of the	Yes	M	M	1M	1M		

SDDS Data Category	Coverage (meets SDDS)	Periodicity		Timeliness		Comments
		SDDS	MEX	SDDS	MEX	(Flexibility Options, etc.)
banking sector						
Analytical accounts of the central bank (Estado de Cuenta del Banco de México)	Yes	M (W recommended)	W	2W (1W encouraged)	2WD	
Interest rates (Principales Tasas de Interés)	Yes	D	D	1	D	
Stock market: Share price index (Mercado Accionario)	Yes	D	D	1	D	
External Sector (specification	<u>s</u> )					
Balance of payments	Yes	Q	Q	1Q	9W	
Official reserve assets	Yes	M (W recommended)	W	1W	2D	
Reserves template	Yes	M	M	1M (1W encouraged)	NLT 1M	
Merchandise trade (Merchandise trade balance)	Yes	M	M	8W (4-6W encouraged)	25D	
International investment position	Yes	A (Q recommended)	A	3Q (1Q encouraged)	6M	
External debt	Yes	Q	Q	1Q	1Q	
Exchange rates (Tipos de Cambio)	Yes	D	D	1	D	
Socio-demographic Data ( <u>spe</u>	cifications)					
Population Yes	A	A			5-8M	

Periodicity and timeliness: (D) daily; (W) weekly or with a lag of ## week(s) from the reference date; (WD) working days, or business days; (M) monthly or with a lag of ## month(s); (NLT) not later than; (Q) quarterly or with a lag of ## quarter(s); (A) annually; (SA) semiannual; and (...) not applicable.

<sup>&</sup>lt;sup>1</sup> Given that the data are broadly disseminated by private means, the timeliness with which official data are disseminated is not time critical.

## INTERNATIONAL MONETARY FUND

## **MEXICO**

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

# Response by the Authorities

October 7, 2010

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### I. INTRODUCTION

Mexican authorities agree with the general observations of the Report on the Observance of Standards and Codes (ROSC), and as noted in the report Mexico is in observance of the SDDS, meeting the specifications for data coverage, periodicity and timeliness, and the dissemination of advance release calendars.

As described in the report, Mexican authorities understand the importance of maintaining quality standards in the generation of statistics as a pillar of public credibility. The authorities also agree that the legal framework is adequate overall and, moreover, it has recently undergone several changes that, in the near future, will be reflected in an improvement in the quality of statistical information in the country, consistent with the report's recommendations.

Mexican authorities agree that there has been progress in the implementation of several recommendations of the 2002 Report. In addition, it is important to note that recently there were two substantive changes to the legal framework for the generation of economic statistics in the country.

First, the National Statistical and Geographic Information System was created. Within the system, the Specialized Technical Committee on Macroeconomic Statistics and National Accounts represents a formal space for the various institutions to interact with the purpose of achieving greater coordination and consistency in the generation of statistical information. Second, with the establishment of the National Council for Accounting Harmonization an appropriate institutional framework has been created in order to advance in the task of standardizing the information on public finances that is generated by all levels of government, which will allow Mexico to address the recommendations of the report.

### II. NATIONAL ACCOUNTS

The National Institute for Statistics and Geography is in the transition process from a decentralized government unit to an autonomous entity responsible for promoting the adoption of common statistical standards throughout the National System of Statistical and Geographical Information, so that different subsystems of macroeconomic statistics, including national accounts, may achieve higher levels of reliability, quality and consistency.

The National Accounts office analyzed the recommendations of the ROSC mission, noting that overall, the final report includes recommendations from this mission and from previous technical assistance missions, specially the one held on December 2009. This was done with the goal of implementing those recommendations that were not yet addressed as of the end of the February 2010 visit or that were in the process of being addressed.

Based on the above and on our effort to implement the *SNA 2008* new methodological guidelines, we are confident that we will be able to fulfill the assessment resulting from this mission for the benefit of the System of National Accounts of Mexico and, consequently, for the benefit of all its users.

Regarding some specific recommendations in the Report, INEGI has the following comments.

• Update the business register (directory) continuously and also use it to select samples of small enterprises to expand the population coverage in economic surveys.

We recognize that this proposal would contribute to a better measurement of several economic activities, especially in the stratum of small establishments, which by nature shows different behavior compared with large ones. Accordingly, we will evaluate the best use of the National Statistical Directory of Economic Units (DENUE, Spanish acronym), data from the Tax Administration System (SAT, Spanish acronym), as well as from other public and private organizations.

The DENUE was introduced in July 2010 and offers information on the identification and location of all the operating establishments within the national territory, according to the data gathered by the Economic Census of 2009; therefore, it is a fundamental tool for decision-making in the public and private scopes.

The feasibility of the recommendation will be studied with the responsible areas, to evaluate if it can be carried out in order to strengthen the estimates of the National Accounts System of Mexico.

• Directly estimate changes in inventories and compile an expenditure measure of GDP independent of the production measure.

Currently, in calculations of the National Accounts System of Mexico, changes in inventories are integrated by applying the flow of goods method, taking as reference the data on economic activities captured by the Economic Census, Administrative Records and Economic Surveys available in the framework of the Input-output tables.

For future work we will examine the feasibility of incorporating methods based on permanent inventory, paying special attention to the valuation and rotation criteria or inventory management. This would allow an improvement in the measurement of GDP from the expenditure side.

• Consider the use of chain indices for calculating volume measures.

The System of Economic Statistics of Mexico generates its main indicators with a fixed base to reflect accurately volume and price behavior over long periods of time. Changes in base-year have been made every 10 years. Nevertheless, given our interest to make the change every five years, as the *SNA 2008* suggests, we will assess this recommendation.

Estimate preliminary (before benchmarking to annual results) quarterly intermediate
consumption at current prices by inflating data at constant prices with a composite
weighted price index of the corresponding producer price and consumer price items,
and to the extent it is possible, also consider price indices of imported raw materials.

The annual calculation of intermediate consumption at current prices in most activities is estimated by the method of extrapolation of base year data with a nominal index of the same variable obtained from the surveys that capture the variable and from administrative records in specific activities.

It is important to note that, following the technical assistance of January 2008, which recommended obtaining the intermediate consumption for industrial activities at constant prices by deflating it rather than by extrapolating it, as is currently done, the national accounts office made an exercise for manufacturing industries. The exercise arrived at similar results with both methods, and concluded that the actual method is practical and does not produce bias in the structures or the trends.

In quarterly calculations, we will make an exercise for the main activities of the primary, industrial and services sectors, in order to evaluate the incorporation of the recommendation, without affecting the timeliness of the quarterly results.

Conduct an integrated enterprise/establishment survey for a representative sample of
enterprises by economic activity that collects data on production, inputs, fixed capital
formation, inventories, income statement, and balance sheet in order to reduce the
discrepancies between the estimates by economic activity and by institutional sector
for the non-financial corporation sector.

We consider addressing this recommendation is important to strengthen the national accounts estimates leading to important improvements in the institutional sectors accounts, in the variables of the accumulation accounts, and in the implementation of the recommendations for the SNA.

• Improve the benchmarking technique of quarterly and annual data by applying the BI ratio of the fourth quarter of the previous year to estimate the quarters of the following year until the annual data for that year are available.

According to the alternatives proposed in the Quarterly National Accounts Manual of the IMF, the previous year BI ratio method was selected to standardize it and to preserve the comparability between monthly national, monthly regional, quarterly regional indicators and quarterly national accounts. However, we will make an exercise with quarterly GDP to evaluate the possible differences between the method used and the method suggested by the report.

• Further investigate the recording of actual rents and private education services in the monthly survey.

Due to the fact that measurement of these activities is a complex task, especially in the short term, we will implement the investigations that are necessary to complement the measurements that are currently calculated, making more extensive use of the Monthly Services Survey and the available administrative records.

• Study the compilation of a supply and use table of illegal goods including illegal trade (contraband).

This recommendation will be revised in order to explore the data sources that may provide information about the importance of these activities.

• Explain in more detail the compilation methods and the causes of routine and major revisions to the NA data in INEGI's national accounts publications.

A mechanism for providing users access to information on major revisions and detailed compilation methods is being assessed.

• Incorporate annual agricultural work-in-progress in the production and assets boundary, given the importance of agriculture activities in the Mexican economy.

We will evaluate the recommendation, the availability of data and the best practices followed by other countries.

• Increase the level of detail of disseminated annual data at four digits of the NAICS, or at least at three digits.

It is expected that future releases will include a broader level of detail of the variables of supply and use with an annual periodicity.

### III. BALANCE OF PAYMENTS STATISTICS

As to the balance of payments statistics, Banco de México, in general, agrees with the mission's main findings. As mentioned in the Report, submissions based on *BPM5* have regularly been presented to the IMF on a quarterly basis; however, balance of payments statistics were published domestically according to a mix of *BPM4* and *BPM5* criteria. It is worth mentioning that, with the recent data release of the second quarter of 2010, Banco de México started publishing the balance of payments figures with the *BPM5* structure and classification, in addition to the format used previously. Furthermore, historical data from 1995 onwards were also published with the *BPM5* format. Additionally, the metadata for the BOP has already been posted on the website. Thus, some of the main concerns raised in the ROSC Report have been addressed.

Regarding other specific recommendations of the IMF mission, Banco de México is currently working on addressing them. In particular, it is important to highlight the following:

- With the release of balance of payments figures for the second quarter of 2010, the residency criterion for foreign branches of Mexican banks has been applied. Specifically, foreign branches of Mexican banks are now treated as non residents in the new balance of payments format, as recommended in the Report.
- Banco de México is working on developing a transition plan to *BPM6* for its adoption by 2012, as suggested by the IMF.
- With respect to the mission's comment on improving the coverage of services, discussions are already underway with INEGI with the goal of producing more comprehensive and detailed statistics on services, in line not only with *BPM5*, but also taking into account the future adoption of *BPM6*.
- As for the consistency between external debt position data and the IIP, conciliation between the two areas in Banco de México involved in these statistics is underway.
- As to the recommendation of recording, to the extent possible, external public and private debt on an accrual basis in the BOP using market values, Banco de México will work with the institutions that provide such information to determine the necessary steps to apply the recommended valuation criteria to those operations.
- Regarding the recommendation on the compilation and dissemination of quarterly IIP, these statistics are currently released on an annual basis in accordance with the SDDS requirements. However, Banco de México has started the process to develop such statistics on a quarterly basis, and is expected to begin publishing them soon.

### IV. MONETARY STATISTICS

In the area of monetary statistics, the IMF mission concluded that Banco de México has achieved a high degree of compliance with agreed international standards. The IMF mission recommended reviewing the definition of monetary aggregates with the purpose of improving their international comparability. Therefore, Banco de México has been reviewing the methodology and definitions of broad monetary aggregates to fully comply with the *Monetary and Financial Statistics Manual*. In addition, as recommended by the IMF mission, Banco de México will continue publishing monetary aggregates under the current definition since they serve as measures of financial savings of the private and public sectors.

Regarding the revision of the treatment of financial derivatives and repurchase agreements, Banco de México has been evaluating different sources of information to avoid overstating the aggregated balance sheet of other depository corporations (ODC) as recommended in the Report.

On the mission's comment to collaborate with the CNBV to improve timeliness in the submission and processing of nonbank ODC data, Banco de México and the CNBV have established contact with these intermediaries to address the issue.

With respect to the dissemination of the methodology used for compiling monetary statistics, Banco de México has been preparing several documents explaining the methodology of relevant monetary statistics and plans to publish them on Banco de México's website.

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### V. Public Finance Statistics

In general terms, the Mexican authorities agree with the remarks in the Report about the situation of government finance statistics in Mexico with regard to recommended practices. The government finance statistics follow the prerequisites of quality and the standards on the assurances of integrity, accuracy, reliability and accessibility of information.

Nevertheless, the Report points out that recommended practices in terms of methodological soundness and usefulness of the information are not fully followed, due to the following:

- To assess the methodological rigor of Public Finance Statistics, the conceptual framework of the *Government Finance Statistics Manual 1986* of the International Monetary Fund and the actions for migrating to the new 2001 Manual were considered, instead of the conceptual framework of government finance statistics in Mexico, which is designed for budget monitoring and structured according to national legal regulations<sup>1</sup>.
- For the statistics of the general government, states and municipalities, the practices in terms of timeliness (lag between the end of the month and the release of the information), periodicity (frequency with which monthly, quarterly or yearly information is released) and the dissemination of the release calendar are not fully followed.
- A conciliation of government finance statistics with other macroeconomic statistical systems is not carried out regularly and studies on data revisions are not published.

In this regard it is important to point out that the Government Accounting General Law, enacted in December 2008, meets practically all the observations and recommendations of the Report:

• It harmonizes the federal, states and municipalities accounting systems; it points out the periodicity and timeliness for the dissemination of information; and it authorizes the National Council for Accounting Harmonization to establish the mechanisms for consolidating information.

<sup>&</sup>lt;sup>1</sup> The *GFSM 2001* is focused on the analysis of the Central Government and the General Government, while the budget in Mexico is focused on the non-financial Federal Public Sector. This is because fiscal policy actions in Mexico are not concentrated in the units that form the government, but they transcend to the field of public enterprises. For example, state-owned enterprises issue a significant portion of public debt, and their investment projects respond to the authorization of Congress rather than to profitability criteria. It is worth mentioning that the definition of the public balance, revenues less expenditures, is equal in both conceptual frameworks except for the registration of investment and the indebtedness of the PIDIREGAS projects, while the classification and grouping of revenues and expenditures differ due to national practices based on the legal framework.

• It establishes the obligation for the Federation and the States to keep their accounting on an accrued basis and to submit financial statements and budget reports no later than December 31, 2012. It also establishes that Municipalities should submit their financial statements and budget reports at least at the economic-administrative level.

Moreover, with the implementation of the Integrated Federal Financial Administration System it is foreseen that information will be generated to integrate national accounts for the Central Government and Federal Public Sector, and government finance statistics according to the *GFSM 2001*.

During the transition period, the Ministry of Finance will send the following information to the IMF:

- Monthly data on consolidated central government operations and debt, 30 days after the reference month, according to the *GFSM 2001* tables.
- Monthly data on non-financial Public Sector operations and debt, 30 days after the reference month, according to the *GFSM 2001* tables.
- Data about the operations and debt of the consolidated central government for the IMF Statistics Yearbook, with definitive information six months after the reference year, and for the general government 16 months after the reference year, according to the *GFSM 2001* tables.

### VI. CROSS-CUTTING RECOMMENDATIONS FOR INEGI

• Enhance cross-domain cooperation within and among statistical agencies to support both consistent methodological treatments and proactive responses to emerging issues.

Since the INEGI became autonomous and the SNIEG was created, Executive Committees have been established. These in turn are composed of Specialized Technical Committees with the participation of all the entities of the State that generate information of national interest. In the Specialized Technical Committees different economic and social issues are addressed, and the information needs of specialized users are analyzed, as well as those of INEGI itself.

Furthermore, INEGI has always promoted, at various organizational levels, direct communication amongst the areas responsible for generating basic data in the public and private sectors.

• Conduct regular reconciliation exercises to verify consistency among the macroeconomic datasets.

The autonomy granted to INEGI (July 2008), requires the Institute to promote in a continuous and coordinated fashion the conceptual and methodological consistency amongst

various macroeconomic databases, in order to achieve acceptable levels of consistency and relevance

• Begin an active, systematic process of consulting users on the quality of macroeconomic statistics.

The meetings where specialized users express their views on existing national accounts products allow INEGI to obtain an assessment about the quality and relevance of such products. Based on the positive results achieved during the first event of this kind, in the month of December 2009, where a presentation of SNA products was made to the most important specialized users, this kind of consultation has been performed on a regular basis, leading up to two additional meetings with specialized users as of the current month.

• Establish procedures for informing users about data revision studies.

Currently, the national accounts area keeps track of the changes made to statistics calculations and is studying a mechanism to provide users access to the information on these routine revisions.

• Consider creating a centralized portal, a "one-stop shop" for macroeconomic statistics, and metadata, in Mexico to assist users.

INEGI will take into account the recommendation and make an assessment within the Executive Committees that make up the SNIEG, by taking into account available statistical systems and looking for synergies with the involved areas and data users.

### VII. OTHER RECOMMENDATIONS FOR INEGI

• Take account of the number of working/trading days in calculating economic activity on a seasonally adjusted basis, as the QNAM recommends.

This recommendation will be considered to perform an exercise where any possible differences between the two options will be assessed.

• Improve the sources and methods of FISIM and central bank's services at current and constant prices.

The method used for the calculations of FISIM has been corrected following the technical assistance mission in January 2008, taking into account the comments made during this visit. The methodology was disseminated in Volume I of the publication of the Institutional Sectors Accounts 2003–2007.

Regarding the improvement of data sources and methods used for measuring the services provided by the banking services, INEGI will attempt to obtain more information through the Specialized Technical Committees in order to improve the calculations.

• Improve the estimates of taxes and subsidies on products at constant prices by applying the base-year-tax rates to the volume of transactions (uses) subject to the specific tax/subsidy or by extrapolating the base-year tax/subsidy using a volume index of transactions subject to that specific tax/subsidy.

We will review the methodology for the calculation of net taxes on products, implementing the recommendation to evaluate the results and examine its possible inclusion in a new series.

• The linked annual series for 1993–2003 should be disseminated in official publications.

The national accounts office has disseminated the quarterly and annually accumulated GDP series by industry for 1993–2003, which covers the information needs related to this variable. The area responsible for annual estimations has begun to evaluate the level of disaggregation for other variables on the basis of the SCIAN.

• Develop a more user-friendly webpage for posting all national accounts data and metadata together.

INEGI will consider this recommendation and will take the steps needed to assess the feasibility of building an exclusive website for national accounts and macroeconomic indicators, and to make it more user-friendly.

• Finally, there is a comment indicating that INEGI does not have a publication calendar for the annual series.

In this regard it is important to note that the calendar of the annual products is available on the website of the Institute since January 2010 and is disseminated along with the calendar of short-term products.

### INTERNATIONAL MONETARY FUND

### **MEXICO**

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

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

Prepared by the Statistics Department

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October 7, 2010

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Mexico's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as appendices the summary of the Special Data Dissemination Standard (SDDS), the DQAF generic framework, and the results of the users' survey.

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### **ACRONYMS**

1993 SNA System of National Accounts 1993 AGA Customs General Administration

BM Bank of Mexico

BIE The Economic Information Bank

BOP Balance of Payments

BOPSY Balance of Payments Statistics Yearbook
BPM4 Balance of Payments Manual, fourth edition
BPM5 Balance of Payments Manual, fifth edition

BMP6 Balance of Payments and International Investment Position Manual,

sixth edition

CBS Central Bank Survey

CCCINEGI INEGI's Consultation and Marketing Centers CEMLA Center for Latin American Monetary Studies

CFE Federal Electricity Commission

CGT General Conditions of Employment of the Bank of Mexico

CMS Catálogo Mínimo Sectorizado

CNBV Banking and Securities National Commission COFOG Classification of Functions of Government

COICOP Classification of Individual Consumption by Purpose

CPI Consumer Price Index

DCN National Accounts Directorate
DCS Depository Corporations Survey
DED Debt Statistics Department

DEH Government Finance Statistics Department

DGACN Economic and Agricultural Censuses, Economic Surveys and

Administrative Records, National Accounts

DGAEHP Adjunct General Directorate of Public Finance Statistics

DGEE The General Directorate of Economic Statistics

DOF Official Gazette of the Federation

DSBB Dissemination Standards Bulletin Board

DSIES Directorate of Systematization of Economic Information and Services

DQAF Data Quality Assessment Framework

ECLAC The Economic Commission for Latin America and the Caribbean

ENAMIN The National Microbusiness Survey

ENDID The National Survey of Demographic Dynamics

ENE The National Employment Survey

ENEU The National Urban Employment Survey

ENIGH National Survey of Household Income and Expenditure ENOE The National Survey of Occupation and Employment

ESPC Professional Career Service FCF Fiscal Code of the Federation FDI Foreign Direct Investment

FISIM Financial Intermediation Services Indirectly Measured

FOB Free on Board FOF Flow of Funds

G-20 Group of 20 Economies

GAM Office of the Manager of Macrofinancial Analysis

GFS Government Finance Statistics

GFSM 1986 A Manual on Government Finance Statistics, 1986 GFSM 2001 Government Finance Statistics Manual, 2001 GPS Office of the Manager of Budget and Accounting

IFSInternational Financial StatisticsIIPInternational Investment PositionIMFInternational Monetary FundIMSSMexican Social Security Institute

INDEVAL Securities Institute

INEGI National Institute of Statistics and Geography

ISIC International Standard Industrial Classification of All Economic

Activities

ISSSTE State Workers Security and Social Services Institute

LFRASP Federal Law on the Administrative Responsibilities of Civil Servants

LSNIEG Law of the National System of Information on Statistics and

Geography

MA Monetary Aggregates

MFSM Monetary and Financial Statistics Manual, 2000

MS Monetary Statistics

NAFTA North America Free Trade Agreement

NAICS North American Industry Classification System

NFPS Nonfinancial Public Sector
ODC Other Depository Corporations

ODCs Other Depository Corporations Survey

OECD Organization of Economic Cooperation and Development

OFC Other Financial Corporations PDA Personal Digital Assistant

Pemex Mexican Petroleum

PIDIREGAS Long Term Productive Infrastructure Projects financed by the private

sector

PPI Producer Price Index

ONAM Quarterly National Accounts Manual 2001

ROSC Report on the Observance of Standards and Codes

SAGARPA The Secretariat of Agriculture, Livestock, Rural Development,

Fisheries and Food

SASE External Sector Analysis SE Secretariat of Economy

SEG Large Establishment Monitoring
SBIB Basic Banking Information System
SCNM Mexican System of National Accounts
SDDS Special Data Dissemination Standard

SGAM Office of the Manager of Monetary Analysis
SGIF Office of the Manager of Financial Information

SHCP Secretariat of Finance and Public Credit

SIDAFF Integrated Federal Financial Administration System

SIE Economic Information System

SII Integrated Government Revenue and Expenditure Information System

SNIEG National System of Statistics and Geography

STA IMF Statistics Department

UGARPM Unit of Government Accounting and Reports on Public Management

VAT Value Added Tax

The following detailed information on indicators of statistical practices in the areas of the national accounts, government finance, monetary, and balance of payments statistics was gathered from publicly available documents and information provided by the Mexican officials. This information, which is organized along the lines of the generic DQAF (see Appendix II), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Mexico's Report on the Observance of Standards and Codes (ROSC)—Data Module.

#### I. NATIONAL ACCOUNTS

## 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

Mexico's national accounts are compiled and disseminated by the National Institute of Statistics and Geography (INEGI). INEGI's activity is governed by the Law on the National System of Statistics and Geographic Information (LSNIEG), published in the Official Gazette of the Federation (DOF) on April 16, 2008. Article 52 of the Law indicates that INEGI is an agency with technical and management autonomy, its own legal status and its own assets and liabilities, and it is responsible for regulating and coordinating the National System of Statistical and Geographic Information (SNIEG).

The priority objective of the INEGI is to take steps to ensure that information in the national interest is subject to the guiding principles of the SNIEG which are: accessibility, transparency, objectivity, and independence. Likewise, the purpose of the SNIEG is to provide society and the State with information that is of good quality, relevant, truthful, and timely, in order to facilitate efforts to pursue national development (Article 3, LSNIEG).

Article 4 states that the SNIEG has the following objectives: produce information, ensure timely dissemination of information for consultation purposes, promote knowledge and use of information, and safeguard information. The composition of the SNIEG is defined in Article 5 and is as follows: the National Consultative Council, the National Information Subsystems, and the INEGI, which is the unit coordinating the system.

Article 59 states that the INEGI shall have as exclusive powers: carry out national censuses, establish the national accounts system. Finally, the Article states that the terms national census or national accounts may not be used in the names or advertising for records, surveys, or listings other than those carried out by the INEGI.

Article 78 of the LSNIEG gives the system of national accounts the status of information in the national interest.

The Law is available on the INEGI's website at <a href="https://www.inegi.org.mx/normateca/despliegainfo.asp?tema=11">www.inegi.org.mx/normateca/despliegainfo.asp?tema=11</a>. There are Bylaws (DOF of

March 31, 2009) to govern the INEGI's operations and regulate the form and basis on which the INEGI exercises the functions and powers conferred upon it by the Political Constitution of Mexico (Article 26), the LSNIEG, and other laws, regulations, decrees, and resolutions of the Governing Board.

Support for the President of the INEGI includes the following structure for Economic Statistics: the General Directorate of Economic Statistics (DGEE) and in turn, four Assistant General Directorates—specifically, Economic and Agricultural Censuses, Economic Surveys and Administrative Records, National Accounts (DGACN), and Price Indices.

Article 22 of the Bylaws defines the specific functions of the Assistant General Directorate of National Accounts (DGACN), including: direct the development and updating of the component calculations of Mexico's system of national accounts, with annual, regional, short-term indicators, and sectoral and thematic satellite accounts, in accordance with economic classifications and the prevailing international conceptual framework; work to bring about conceptual alignment between core statistics and macroeconomic statistics; and evaluate, validate, and submit for dissemination the constituent outputs of the national accounts system, as well as their pertinent methodologies.

Operationally speaking, the DGACN is comprised of four Area Directorates, namely: National Accounts, Satellite Accounts, Short-Term and Regional Accounts, and Input-Output.

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

In general, the flow of information needed to compile the national accounts is efficient and timely. To a large extent, the source data for compiling the national accounts, such as censuses and surveys, are covered by established timetables for information reporting, which are complied with rigorously. With regard to data sources outside INEGI, the procedure is to request data from the public sector and from the private sector by means of an official letter; this creates no problems in terms of timely data delivery.

There is in fact an established practice of exchanging information between INEGI and various public sector institutions, which provide timely and detailed information for compiling the national accounts. These arrangements include agreements with the Bank of Mexico (BM) for balance of payments data.

Coordination between INEGI and the various information-producing agencies (BM, the Secretariat of Finance and Public Credit (SHCP), the Secretariat of Economy (SE), and the relevant secretariats and public institutions) is facilitated through ad-hoc working meetings designed to ensure greater efficiency in the compilation and provision of source data for the national accounts: the meetings discuss information needs in terms of conceptual characteristics, coverage and periodicity of the data requested and the availability of respondents, taking into account the effort and economic cost involved. However, no recent meetings have been held.

Based on the independence of the INEGI and pursuant to the LSNIEG, the Executive Committees and the Specialized Technical Committees of the National Subsystems of Information (Demographic and Social, Economic, Geographic and Environmental, and Government Information, Public Security and Justice) have very recently been established. The former are collegiate bodies which contribute to inter-institutional coordination and implementation of policies on the carrying out of statistical and geography-related activities. The Specialized Technical Committees, created within the framework of the Executive Committees, such as the Committee of Macroeconomic Indicators and National Accounts, are collegiate entities for participation and consultation created by resolution of the INEGI Governing Board, comprised of units of the INEGI and representatives of government entities (the SHCP, the BM, the SE), and the relevant secretariats and public institutions by area (macroeconomic information, energy, tourism, agriculture, science and technology, and employment). The most recent meeting of the Economic Executive Committee for which minutes have been published was held in October 2009. No minutes of the meetings of the Specialized Technical Committees have been released, but the agreement for their creation is available.

However, the need for some strengthening of internal coordination within the INEGI has been observed, given that available information from the surveys, such as on inventories and monthly intermediate consumption, has not been used to enhance the coverage and accuracy of national accounts statistics. In addition, some communication issues were noticed regarding the selection of sources and methods for estimating the Financial Intermediation Services Indirectly Measured (FISIM), the central bank's output, and the output of private banks and development banks at current and constant prices.

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

Title Two in Chapter V of the LSNIEG guarantees the confidentiality of statistical data supplied to INEGI, stipulating that such data may be used only for statistical purposes. Article 37 of the Law states that "data provided for statistical purposes by system respondents to units under the law, shall be strictly confidential, and under no circumstances may they be used for any purpose other than a statistical purpose."

Article 38 of the Law declares that "data and reports provided by private parties for statistical purposes or derived from administrative or civil records shall be handled, for purposes of this law, with due regard to the principles of confidentiality and may not under any circumstances be disclosed in a personalized (*nominativa*) or individualized manner, nor may they be used as evidence before an administrative or fiscal authority, in judicial or other proceedings."

As an autonomous agency, INEGI is also governed by the Federal Law on the Administrative Responsibilities of Civil Servants (LFRASP) (DOF of March 13, 2002), Article 8 (V) of which obliges civil servants to "safeguard documentation and information that, by reason of their employment, post, or commission, they may have entrusted to their responsibility, and to prevent the unauthorized use, removal, destruction, concealment or impairment of the usability of such information." As well, paragraph XII prohibits civil servants from requesting, accepting, or receiving, whether by themselves or through intermediaries, money,

movable assets, or immovable assets through sale at a price well below the domestic market price, gifts, services, employment, posts or commissions for themselves, when these originate from any individual or legal entity, whose activities are directly linked to, regulated or supervised by the civil servant in question in the performance of the latter's employment, posts or commissions, and where a conflict of interest might arise.

All questionnaires used for censuses, surveys and special investigations by INEGI make clear reference to the confidentiality requirements regarding the information, in a section placed on the first page which reads: "Pursuant to the provisions of Article 37 of the LSNIEG currently in force: data provided for statistical purposes by system respondents to units under the law, shall be strictly confidential, and under no circumstances may they be used for any purpose other than a statistical purpose." Article 38 states that "data and reports provided by system respondents for statistical purposes or derived from administrative records shall be handled with due regard to the principles of confidentiality and privacy and may not under any circumstances be disclosed individually or by name, nor may they be used as evidence before an administrative or fiscal authority, in judicial or other proceedings." Article 46 of Chapter VI states: "The units shall show due regard for the confidentiality and privacy of the data supplied by system respondents for statistical purposes."

Article 104 of the LSNIEG defines the violations imputable to civil servants at the INEGI or civil servants at the system units as follows: "the disclosure of confidential statistical data; violations of industrial or commercial secrets, or the provision by system respondents of data that is individualized or identified by name" (paragraphs I and II). Consequently, Article 108 of the Law provides administrative penalties for anyone who discloses confidential data: "a fine of 2,000 to up to 30,000 times the minimum monthly wage valid for the federal district at the time the violation was committed."

Article 13 of the LFRASP establishes mechanisms for imposing penalties on civil servants on grounds of administrative conduct deriving from their failure to fulfill their obligations pertaining to the custodianship of documentation and information, which mechanisms shall consist in a private or public warning; suspension; removal from office; economic penalty; and temporary disqualification from engaging in the employment, post, or commission for a period of not less than 3 days and not more than one year in the public service.

By the same token, in the resolution establishing the Regulations (*Estatute*) of the Professional Career Service (ESPC) for the INEGI (DOF of May 8, 2009), specific provision is made for disciplinary measures for personnel on grounds of noncompliance with current law, in particular Article 38 (V) which establishes that one of the grounds for separation from the INEGI shall be failure to fulfill the obligations inherent in the employee's post or those established in the Statutes or in the regulations deriving from it.

The ESPC points out that government employees must abide by the principles of confidentiality and privacy with respect to respondent data provided for statistical purposes, as well as with respect to confidential information obtained from administrative records and the application (in the performance of their duties) of the SNIEG code of ethics.

Article 38 (2) of the LSNIEG says that "When it is necessary to disclose information, said information must be aggregated in such a way that it is not possible to identify system respondents or those individuals or legal entities that are the focus of the information in question."

Staff assigned to the national accounts regularly check and ensure the non-disclosure of confidential data. Success in this regard is due largely to the fact that the maximum disaggregation for disclosure is at the three- and four-digit level of the North American Industry Classification System (NAICS).

The data provided by respondents are kept in the safekeeping of the officials responsible for their handling and are not shown to the public or other INEGI staff. The only persons who have access to the information are those authorized to perform calculations with the data, and those people are reminded in writing of the confidential nature of the data. In general, INEGI staff is fully aware of the penalties for disclosing confidential data.

Security measures for protecting installations are under the responsibility of security personnel who inspect all persons and things entering and leaving the premises. In terms of information technology (IT) systems, the DGACN operates with an IT infrastructure based on the network platform Microsoft Windows 2003 server both at the local and national level, all services are with Windows, for e-mail Microsoft Exchange, for Intranet, Microsoft SharePoint, for Internet Microsoft IIS. For databases, personnel work with Visual FoxPro, and there are plans to migrate in future to Oracle or SQL server; with around 194 microcomputers. Local and networked computers have an access code barring use by outsiders. This working mechanism ensures information security for each user of the system.

Users of both the local and network microcomputers maintain the security of information by storing it on hard disks or in the corresponding space on the server.

Weekly backups of this information are made on rewritable disks, while quarterly fixed backups are made on non-rewritable disks.

The network servers and their backups are kept in areas of restricted access; in the offices of the network administrator, at Area Directorates. A backup is also kept away from premises, in the event that an accident befalls the building, under the responsibility of the Area Director.

Confidential information is destroyed in accordance with the following process: once the information has been used, it is kept for five years in a storage facility belonging to INEGI, located away from headquarters, and is then sent to the national archives where it is kept for further five years. At the end of 10 years, the document is destroyed.

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

The legal powers of INEGI to compile information are clearly set out in Chapter V of the LSNIEG, referring to the rights and obligations of users and respondents of "National

Statistics and Geographic Information Systems." Article 45 defines the obligations of respondents, while Article 40 requires respondents to provide the information requested in a truthful and timely manner. Article 45 (1) states that "system respondents are obliged to provide accurate and timely data and reports as and when requested by the competent authorities for statistical, census or geographic purposes, and to provide the required assistance."

There is no record of conflicts between legal provisions for the supply of information and those that protect respondents. Despite some discrepancies in the legislation, they do not affect the quality of national accounts estimates. For example, the banking secrecy law protects individuals and corporations at an individual level, but aggregated information is provided to the INEGI. A similar situation has occurred with the change in mining legislation, which formerly required mining companies to provide monthly and yearly information to the SE: the new mining law exempts them from that obligation. The INEGI resolved the situation, under the powers granted to it by the LSNIEG, by conducting a monthly survey of mining companies to gather the required information. A similar example relates to the privatization of public enterprises: when they belonged to the government their data were obtained from administrative records, whereas cooperation agreements have now had to be negotiated with their new private owners to supply information on their activity.

Chapters I and II of Title IV of the LSNIEG spell out the administrative misconduct perpetrated by system respondents and the sanctions to which they are subject. Article 48 states that "In the exercise of its powers under this Law, the INEGI may conduct inspections to verify the authenticity of information, when the data provided are incompatible, incomplete, or inconsistent."

Article 49 indicates that verification inspections must be done under a written order from the competent authority: Paragraph I (d) states that "the order must specify the statistical or geographic information to be verified, as well as the documentation that must be exhibited for inspection by the system respondent."

The Law also provides penalties for refusing or falsifying information. Article 106 imposes a fine of "from 5 to 500 times the minimum daily wage valid for the federal district at the time the violation was committed."

Despite the existence of legal provisions for obtaining information, and penalties for noncompliance, they have rarely been enforced: the intent is to encourage voluntary reporting, by explaining to respondents in detail the use that will be made of their information, its confidential nature, and its importance for the country in terms of quantifying the characteristics and economic behavior of its activity.

The information burden imposed on respondents is a constant concern of the DGACN, which has taken several steps to minimize that burden: in preparing the questionnaires, for example, care is taken to request only the most significant information. INEGI staff is available at all times to help in reporting the data. Instructions are provided for recording the requested data, with a glossary of terms, and survey responses may be submitted electronically. In the case of public and private bodies providing administrative records to several national accounts

areas, cooperation agreements have been established to avoid duplication of efforts and to include all information requirements in a single request.

INEGI encourages cooperation by respondents in its everyday work, stressing the importance of reliable and timely information and highlighting the link between the quality of basic statistics and that of derived statistics.

INEGI also provides information on the basic and derived statistics that it produces, and on procedures for consulting data. It responds to respondents' requests for information where appropriate, without prejudice to the principle of confidentiality.

## 0.2 Resources

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

The human and financial resources devoted to the national accounts are, in general, commensurate with the SNIEG's mission, which is to provide society with a timely supply of information in the national interest by coordination among SNIEG members and the across-the board adoption of national and international standards.

INEGI's mission is pursued through a Governing Board comprised of one Chair and four Vice-Chairs; in turn, the President of the INEGI is supported by seven General Directorates and one Internal Comptroller's office. The General Directorates include the following: Social and Demographic Statistics, Economic Statistics, Geography and the Environment, Public Information Service, Coordination of the National System of Statistical and Geographical Information, Strategic Linkages, and Administration.

The INEGI has units at both the central and decentralized (regional) levels for generating, compiling and processing census and survey data, and a central unit for calculating derived macroeconomic statistics. In terms of the number of statisticians with national accounts experience available to meet the needs of the general public, the ratio is only one statistician per million inhabitants.

The staffing level in the DCN is considered sufficient in light of the annual work program. This directorate of the DGEE has the support of all economic statistics generating areas of the INEGI, in the tasks of planning and developing the outputs of the System of National Accounts of Mexico (SCNM).

The Directorate has 181 positions, of which there are currently no vacancies or trust positions. The positions are occupied as follows: 1 Assistant General Director, 4 Area Directors, 26 Deputy Directors, 58 Department Heads, 20 Deputy Department Heads, and 72 operating technicians, including secretarial and support personnel. Although in general the number of staff seems sufficient, the proportion of technicians (39.8 percent) seems insufficient in terms of the total number of supervisory positions (109, 60.2 percent). Salaries have been frozen since 1996, which originated a human resource structure skewed to

supervisory positions as a way to raise the salaries of experienced personnel to ensure retention.

The academic training for personnel is considered adequate; the DGACN has 105 economists representing 58 percent of the total; 12 mathematicians and actuaries (6.6 percent); 16 administrators and accountants (8.8 percent); 31 with different professional backgrounds (agronomists, sociologists, biologists, engineers, etc.), (17.1 percent); and 17 individuals with technical diplomas or without professional qualifications (9.5 percent).

All INEGI staff is enrolled in a continuous training program that keeps them up to date on various issues, from statistics and computers to national accounts questions. The training program is regulated in the ESPC, which states that the INEGI conducts activities designed to promote the professional development and continuous skills upgrading of its personnel, in accordance with the needs of each of its areas of specialization.

The training program is divided into short-term courses, training cycles and diploma courses, and includes professional examinations for bachelor's and postgraduate degrees, as well as facilities (leave, special working hours, fellowships, tuition payments, etc.) for the pursuit of specialized and postgraduate studies.

In addition, national accounts officers frequently attend courses, seminars, and international conferences for training purposes. Visits are arranged every year to various international organizations for these purposes, including the Organization of Economic Cooperation and Development (OECD), the Economic Commission for Latin America and the Caribbean (ECLAC), the IMF, and the Center of Latin Monetary Studies (CEMLA).

There is also a noteworthy effort at on-the-job training in national accounts methodology: this is accomplished by making all areas and all working groups including the deputy directorates and directorates of the DGACN aware of the overall national accounts process and holding group sessions to discuss methodology and propose improvements, while looking for ways to streamline and simplify procedures. The *System of National Accounts* 1993 (1993 SNA) is available to all staff via the DGACN network.

The accumulated experience of DGACN staff extends over many years, during which officers have specialized in specific areas, applying the concepts and practices suggested in the 1993 SNA and adapting them to local needs and information availability.

The stability of national accounts personnel in the Institution can be appreciated from the following table:

Time in service	Percentage of staff
1 to 7 years	45.3
7 to 14 years	16.6
14 to 21 years	25.4
21 years and over	12.7

This stability in DGACN staffing can be explained, among other factors, by the ESPC, which guarantees employment security and serves to retain trained personnel within the INEGI. The ESPC also includes a system of staff incentives, which run from operational personnel in confidential positions up to area directors; salary bonuses are awarded in accordance with productivity over the last six months, while operational technical staff compete for the award of "employee of the month," and are eligible for an annual cash bonus and/or an additional 10 days of vacation if they meet previously established goals.

The DGACN's computer resources are considered adequate, in light of the staff numbers assigned to each area directorate, as it has 194 microcomputers and 5 multifunction devices. The DGACN has one computer for every employee. In addition, the equipment is upgraded every 5 years, and new equipment is added as new staff is hired. This has meant that the DGACN produces efficient, recurrent and timely output, taking advantage of information technology resources for generating and disseminating the SCNM, using internally developed applications (database managers, compilers, programming languages) as well as commercially available products (office suites, operating environments and systems).

The INEGI seeks to take advantage of all the possibilities offered by modern information technology, through links to the Internet, e-mail, and intensive use of computer programs such as Excel, Word, PowerPoint, and Acrobat that are part of the basic platform of institutional software. As well, national accounts personnel have developed and introduced computer programs for automating, simplifying and streamlining work procedures. Installation of a second network server within the DGACN recognizes the importance of the work of the Directorate of Short-term and Regional Accounts in compiling current short-term macroeconomic statistics, and the confidentiality that they require.

The IT equipment available in national accounts is distributed on the basis of the personnel assigned to the various area directorates of the DGACN and the work programs to be carried out.

The financial resources available to national accounts are deemed adequate and sufficient, in light of the authorized work programs, and they are compatible with the resources available within the INEGI. Funding is reasonably secure for the identified needs of the statistical program and the funding horizon is amendable to planning for statistical developments. Budgeting practices provide clear information to financing authorities.

Conversely, the DGACN has adopted its own program of budgetary austerity, designed primarily to reduce current expenses (telephones, travel, per diems, paperwork) without jeopardizing the primary objective of completing its mandated work programs.

Currently, the DGACN has been restructured in such a way that it is now comprised of four area directorates, one of which is the Input-Output Directorate, a new directorate whose budget is already in place and authorized.

# 0.2.2 Measures to ensure efficient use of resources are implemented

Article 5 (X) of INEGI's Bylaws states that the Governing Board shall approve the annual work program of the INEGI which shall be prepared on the basis of the annual program of statistics and geography and the preliminary draft annual budget. The work programs and their strategies are disseminated among the various layers in the chain of command, because it is necessary to set completion dates for achieving results on a basis of consensus. Furthermore, this implementation strategy involves the entire staff and includes three presentations by the Director. Monthly progress reports are prepared for the Internal Comptroller's Office.

INEGI is attempting to make more efficient use of resources by applying consistent and standardized concepts both in the statistics-generating areas as well as in the DCN. Within the DCN, working meetings are held to discuss concepts and international recommendations relating to the national accounts. The national accounts areas make suggestions to the survey and census areas for improving basic statistics, consistent with the requirements of the 1993 SNA.

The INEGI also makes a practice of applying a semi-annual "Performance Appraisal Form" to its staff: this covers objectives achieved with respect to the quality, quantity, timeliness and reliability of their work.

Working procedures are designed to minimize coding, editing and tabulation errors. The process of producing and coding data has been systematized and simplified, and the results are reviewed more quickly and efficiently by identifying activities that can be pursued at the same time as, or immediately after, recurrent calculations, such as statistical cross-checks, calculation of consistency ratios and variables, preparation of graphs and summary tables, correlation analysis, etc. The areas producing the calculations are also responsible for printing.

The Office of the Internal Comptroller of the INEGI is responsible, inter alia, for carrying out audits and inspection visits to the INEGI's administrative units to verify that the INEGI's goals and objectives are being achieved in an efficient, effective, and economical fashion; it is also responsible for monitoring compliance with the provisions of applicable laws and regulations.

Article 91 of the LSNIEG and Article 47 of the INEGI Bylaws state that supervision of the INEGI's resources shall be entrusted to an Internal Comptroller's office and an external audit appointed by the Governing Board from a shortlist made by the Superior Auditor of the Federation; to consult information on the functions of the Audit Office, readers are invited to click on the following link: <a href="www.inegi.org.mx/inegi/contenidos/espanol/transp">www.inegi.org.mx/inegi/contenidos/espanol/transp</a>.

For several years, programs and working procedures have been reviewed in the planning area, which promotes the review of work processes in the context of an activity entitled "Management of Working Procedures," the main purpose of which is to detect suitable areas for proposing processes and activities designed to achieve improvement. In addition, manuals

of organization and procedures have been updated to reflect the INEGI's autonomy, consistent with the general rule of the Federal Public Administration (AFP).

The national accounts area is aware of the importance of efficient administration of financial resources with a management review process that allocates resources to high priority activities such as maintaining the work program and preparing new products (e.g., satellite accounts like environment and health) within the limits of current personnel and budgetary constraints.

Innovations have been introduced to reduce time and costs throughout the chain of statistics production, editing and dissemination, by making full use of the available information technology.

For data production, steps have been taken to systematize processing and calculation, using databases instead of the previous worksheets, an approach that reduces errors and saves time and resources, such as paper, printer cartridges, and machine time, not to mention the use of multifunction devices which make it possible to obtain printouts, photocopies, and document scanning.

The release of documents for mass dissemination is carried out by each of the DGACN Directorates, in accordance with the criteria specified by the Rules on Dissemination and Development of the Use of Statistical and Geographical Information of INEGI and other provisions pertaining to editorial production and copyright for the release of publications. In addition, existing publications are converted to PDF format using Acrobat. Thanks to this process, some publication activities carried out at the DGACN have cut down on the time elapsing between the completion of calculations and the subsequent dissemination of information—publication of short-term statistics occurs hours after the calculations have been completed, with the information posted on web pages and at INEGI customer service centers.

IMF experts conducted visits to Mexico in 2002, 2005, 2006, 2008, and 2009 to assess the methodology and systems for the compilation of the input-output table 2003 and the new national accounts annual series as well as the new quarterly series and provide recommendations for improvement. In addition, the DGACN participates in the technical meetings of international agencies such as the United Nations, the OECD, the World Bank, and ECLAC, and it responds to specific questionnaires on national accounting practices.

#### 0.3 Relevance

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

There is a portal on the INEGI's website which provides users with a permanent and open communication channel on requests for information, methodologies, and conceptual issues. In addition, specialized committees have been established as discussed in 0.1.2.

In this context, meetings were held with users from government agencies, consulting firms, universities and research institutes, among others, before the release of the new national accounts series with 2003 as the base year. In practice, the National Accounts Program since its inception has endeavored to meet users' needs, as evidenced by the implementation of changes in the base year, the adoption of international recommendations, and the extension of the scope and detail of the accounts, such as the goods and services accounts, accounts by institutional sector, quarterly accounts, monthly estimates of economic activity, regional accounts, miscellaneous satellite accounts, and recently, the input-output matrix. In addition, the INEGI captures users' needs by compiling information requests received via the Sale Centers and by e-mail.

Although the INEGI made a presentation of 2009 Products of the System of National Accounts of Mexico, New Projects and Updates to users in December 2009, in practice, there has not been a regular process of consultation with main users of national accounts on the needs for recurrent and new information.

The INEGI keeps abreast of progress and developments in national accounts through its participation in various international fora including those organized by the UN, the OECD, and ECLAC; participants at these meetings also identify the information needs of those selfsame international institutions.

Article 32 (XII) of the Bylaws makes provision for the design and operation of a system to assess customer satisfaction and to identify the INEGI's needs for information, products, and services. However, regular user's surveys have not yet been conducted.

#### 0.4 Other quality management

#### 0.4.1 Processes are in place to focus on quality

Quality of statistical products is ensured through the work of the recently established National Consultative Council, which comprises the president of the INEGI, representatives of the State secretariats, of the judicial power, of the different Chambers of Congress, of the federal states, and of the BM. Other public institutions and social and private institutions may be invited to the council's meetings when relevant. The council provides opinions on the statistical projects and programs and proposes topics for discussion.

The SNIEG also entails the design of a long-term strategic program of twenty four years, a six-year national program, and an annual program for statistical improvement with objectives and goals to broaden statistical products as well as implement international standards, which are approved by the INEGI's Board.

Article 3 of the LSNIEG states that the purpose of the SNIEG is to provide society and the State with information that is of good quality, relevant, truthful, and timely, in order to facilitate efforts to pursue national development.

INEGI has implemented externally recognized processes or activities that focus on quality, with the ISO 9001–2000 certification granted to INEGI for the treatment phase of the monthly survey on private non-financial services.

Staff training programs emphasize the importance of quality and give staff an understanding as to how quality may be achieved. The INEGI provides an infrastructure for quality by recognizing trade-offs, economies of scale, and interrelations between datasets.

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

Processes for monitoring quality are based on indicators that assess progress achieved in the work programs at monthly and annual intervals based on the attainment of established goals. Response rates to surveys are calculated, and revision history and timeliness evaluations are carried out.

Relevant steps have been taken to ensure that the statistics which the INEGI produces are subject to review by national and international organizations on a permanent basis in order to improve their quality. For example, the INEGI has requested that IMF ROSC and technical assistance (TA) missions assess the SCNM and provide recommendations for improvement.

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

The DGEE's responsibilities include assessing quality and coverage of economic information and promoting continual improvements in economic statistics, in particular those statistics generated by the INEGI, through the development of classifications, conceptual frameworks, and studies of various economic sectors, short-term issues, long-term issues, and related emerging trends pursuant to Article 20 (VIII) and Article 21 (X) of the INEGI Bylaws.

With respect to the quality of the information made available to users, efforts are made to maintain high rates of reliability in figures, which are examined by international organizations.

# 1. Assurances of integrity

# 1.1 Professionalism

#### 1.1.1 Statistics are produced on an impartial basis

Mexico recognizes the importance of ensuring professional independence for personnel compiling statistics. For this reason, Mexico promulgated the resolutions establishing the rules of the ESPC of the INEGI (DOF of May 08, 2009); these set forth the rules enabling the INEGI to have a career professional staff that is agile, efficient, and transparent, that promotes and fosters staff development and hires the best people. The guiding principles are: lawfulness, efficiency, objectivity, quality, impartiality, equity, independence, and competence based on merit (Article 3). Issues regulated by the Statutes are: income, training,

performance assessment, incentives, separation, rights and obligations of government employees, and appeals (Article 4).

Under Articles 67, 68, and 69 of the LSNIEG, the ultimate authority of the INEGI is the Governing Board, which is comprised of five members appointed by the President of the Republic with the approval of the Chamber of Senators, one of whom is the appointed President of the INEGI who is entrusted with responsibility for presiding over the INEGI's Governing Board.

Article 68 states that the tenure of the president of the INEGI will be six years and that of the vice-presidents of the Governing Board will be eight years. The tenure of the president of the INEGI will commence the first of January of the fourth calendar year of the tenure of the President of the Republic. The tenure of the vice-presidents of the Governing Board will be spread out at intervals of two consecutive years commencing the first of January of the first, third and fifth year of the tenure of the President of the Republic. The members of the Governing Board may be selected for the post up to two times and will hold their posts only during the designated time.

Title 3, Sections I and II of the LSNIEG make provision for the organization of the INEGI, as well as the requirements to be complied with by members of the Governing Board, who must be distinguished professionals in issues pertaining to statistics, geography, or economics, and who must have served for at least five years in some high-level post in the public or private sectors, or be a recognized academic in these fields.

Professional competence is the basic criterion for recruitment and promotion within the INEGI. Determination of professional competence is governed by the ESPC, which requires examinations and competitions for recruitment and promotion.

The ESPC points out that training is the process whereby government employees continue to develop the skills they need to do their jobs at the INEGI, with the aim of enhancing their performance on the job and their capacity to participate in competitions for vacancies or newly created posts.

Meetings, conferences and presentations are arranged with academics from the major public and private universities in the country, consultants, specialized journalists, central government officials and representatives of other levels of government (primarily at the State and municipal levels) in order to publicize calculation methodologies and the principal results of the national accounts new products.

Publications containing national accounts results are carefully reviewed and validated by the management of the DGACN which is responsible for the dissemination of outputs, in terms of their technical aspects and the INEGI's publication standards, in order to protect the professional reputation of the INEGI.

1.1.2 Choices of sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations

The choice of sources and methods is governed solely by statistical considerations and by the guidelines and recommendations made by international organizations in the form of documents and manuals.

It should be pointed out that census information as well as information generated by surveys are the responsibility of the Assistant General Directorate of Economic and Agricultural Censuses and the Assistant General Directorate of Economic Surveys and Administrative Records, which are responsible for ensuring quality, timeliness, and for taking account of the implicit costs for respondents; it follows that only information deemed relevant is requested.

Regarding information from other data sources such as State Secretariats, and public and private enterprises, not canvassed by the INEGI, cooperative agreements on the provision of information are prepared, bearing in mind that such statistics should possess the characteristics of quality, homogeneity, comparability, and timeliness, which are indispensable for meeting preset release dates.

INEGI has a practice of providing a technical justification for its use of calculation methodologies in publications, thereby underlining the professional independence of its staff, while observing international guidelines at all times.

The presentation of work plans and programs is governed by the INEGI Bylaws which state that specific functions of the DGACN include planning, organizing, and identifying strategies for obtaining SCNM projects and planning and programming the development, maintenance, and validation of annual calculations for the national accounts, as well as short-term accounts.

The Bylaws mention the criteria issued by the DGEE for the purpose of conferring homogeneity upon the processes for the production of economic statistical information, as well as for the dissemination of the related data and indicators.

Decisions governing the disclosure of information are informed solely by statistical considerations as defined in the National Economic Information Subsystem—specifically, in Article 24 of the LSNIEG.

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

In the performance of its functions under the Law, and pursuant to rules for defining information that is in the national interest, the INEGI is entitled to comment on errors of interpretation or misuse of statistics generated by INEGI. In addition, it also issues press releases explaining the INEGI's position on errors of interpretation, and these are posted on the INEGI's webpage for public information.

As well, the Office of the President of INEGI closely monitors the specialized press and other media, preparing executive summaries that are stored electronically for internal consultation by sector of activity and by date of publication in order to comment publicly and in a timely manner on erroneous interpretations or misuse of the statistics in the media and in other fora.

# 1.2 Transparency

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

INEGI website includes the text of the LSNIEG, which informs about the INEGI's standards of confidentiality and professionalism of its president and Governing Board. The law can also be obtained in print in Spanish. The INEGI Bylaws are available to staff.

The LSNIEG includes the code of conduct under which official statistics are compiled and disseminated, the approval process for data dissemination, and the procedures to hire and remove the head of the data producing agency.

The INEGI website (http://www.inegi.gob.mx) contains an email addresses to direct additional requests, suggestions, and contact INEGI personnel. INEGI publications contain information on the INEGI website, its address, e-mail address, and phone number. In addition, the INEGI has a unit, Consultation Marketing Service, in charge of providing information to the public.

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

The autonomy that the INEGI enjoys guarantees that no government authority has access to its statistics before they are publicly released: thus, no government unit or civil servant has access to the data before they are published. In particular, in the case of market conditions reports, on the day they are published a note is sent to the President of the Republic and in accordance with the INEGI market data release timetable, the reports are released to the press and general public on the date specified therein, and posted on the INEGI website.

The press releases indicate that the data have been prepared under the responsibility of INEGI, although it is not explicitly stated that approval of the results lies exclusively with the INEGI (Article 23, 24, and 59).

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

Because INEGI is an autonomous agency with respect to technical and management issues, the content of the system of national accounts and the national censuses are INEGI's exclusive responsibilities, and furthermore, the term "national census" or "national accounts" may only be used by the INEGI.

Data are published in a press bulletin bearing the SHCP logo and indicating clearly that the information was prepared by INEGI. At the same time, the press bulletin is posted on INEGI website, with the insignia of the unit producing the press bulletin.

The INEGI has a policy of releasing its annual publications in a standard format, in which presentation, titles, colors, typography, logos, etc. are consistent.

In the case of joint publications with other institutions, the contribution of each is clearly identified, indicating that data associated with the national accounts are the exclusive responsibility of INEGI. Such publications bear the logos of the participating institutions, consistent with the INEGI's editorial standards. In addition, the Federal Copyright Law mandates citation of information sources when these are disclosed.

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

Any substantive change in source data and/or methodology is announced in advance in meetings, seminars, and in publications, which contain notes specifying the methodology implemented and specify whether the data are preliminary or revised, stressing that the results may undergo changes resulting from the updating of the basic statistics. Press notes specify the changes made in publications.

In particular, when there is a change in base year, the most recent methodological standards are adopted, resulting in revisions of documents and manuals. A public campaign is undertaken on the features of the census data and the national accounts, as well as for describing differences between series. This campaign is carried out through newspapers, radio, and by means of presentations at universities, state secretariats, and public and private institutions.

#### 1.3 Ethical standards

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

In light of the technical autonomy conferred upon the INEGI, it was deemed necessary to create a code of ethics to govern the standards of conduct to be complied with by all those who engage in statistical and geography-related activities within the SNIEG, including the INEGI itself. Under Article 7 of the LSNIEG, INEGI has issued a code of ethics for use within the SNIEG.

In addition, INEGI personnel are subject to standards of conduct and penalties for their noncompliance, established in the Federal Law on the Administrative Responsibilities of Civil Servants as well as those set forth in the LSNIEG. Detailed specifications on the rights and obligations of INEGI personnel are established in the General Conditions of Employment on file with the "Federal Court of Conciliation and Arbitration" on February 1, 1994.

The established standards of conduct are statistical and geographical culture, quality, excellence, cooperation, lawfulness, transparency, confidentiality, equality, integrity, respect, responsibility, solidarity, commitment, learning, leadership, and accountability.

All levels of management are aware of the pressing need to ensure irreproachable conduct within and beyond the institution, and for officials and workers of INEGI to fulfill their obligations to maintain the public credibility of the information they process.

During the induction of new workers, INEGI informs them of their rights and obligations as employees and ensures that they are familiar with the Quality Program.

Daily practice and the quality process within INEGI, provide constant reminders of the obligation to meet existing standards.

# 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

Mexico's national accounts are based on the conceptual framework of the 1993 SNA.

# 2.2 Scope

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

The system of national accounts implemented in Mexico includes annual, quarterly and monthly estimates. The published series of national accounts uses 2003 as the base year.

Supply and use tables are published annually at current and constant 2003 prices, from which are derived estimates at current and constant prices for Gross Domestic Product (GDP), for both the production approach and the expenditure approach. The lines in the supply and use tables show the origin of products by economic activity. Series of integrated economic accounts for the entire economy and for each institutional sector, from the production account to the financial account, are also compiled each year.

The quarterly accounts include GDP estimates at current and constant 2003 prices derived from the balancing of the supply and use tables, and the preparation of the symmetrical input-output matrix, in a manner similar to the annual calculations. A volume index, the "Global Indicator of Economic Activity," is calculated each month: this is an index of the mean weighted percentage change (base year 2003) of growth indicators for economic activity.

The national accounts are consistent with the 1993 SNA in terms of the definition of units that make up the economy: these include Mexican government offices abroad, free zones, and

Mexican residents residing abroad for less than one year. The production boundaries are also consistent with 1993 SNA definitions, with a few exceptions reflecting data limitations.

With respect to the measurement of production for own-account consumption in the base year 2003, it is measured by means of indirect methods through the National Survey of Household Income and Expenditure (ENIGH) and the National Survey of Occupation and Employment (ENOE), from which the pertinent inferences were made.

Regarding the measurement of the production of original literary or artistic works, it was possible to retrieve some information for the base year 2003 on the demand side in sectors for which source data are obtained via administrative records—for instance, some decentralized federal government agencies. This made it possible to take initial steps towards measuring the production of assets of this nature.

Original entertainment products such as the production of movies are included. The production of computer programs is captured only when they are for sale to third parties: the production of programs for internal use within the business is not separately identified. Inhouse research and development work is not identified separately, and expenditures on this activity are reflected in intermediate consumption for the principal activities. Mineral exploration is explicitly included in production in the case of oil and gas exploration.

In general, production generated by illegal activities is not included. As required by the 1993 SNA, own-account production of capital goods is included when separately identified.

The coverage of assets is in general agreement with the 1993 SNA. Thus assets include national defense expenditures on construction and equipment that may potentially be used civilian purposes. Assets also include work-in-progress for the main agricultural products in the quarterly estimates. Lack of adequate information precludes the inclusion of valuables and historical monuments in assets. Because of the paucity of information, which is generally based on reports from establishments, investment in patented entities is excluded. However, the 2009 economic censuses do capture qualitative information on the recording or development of patents and expenditure on payment to use patents; through annual surveys, the concept of payment of royalties for patents and trademarks does exist.

The difficulties involved in capturing information on the production of IT programs for own use, together with their appraisal, means that comprehensive data on this category is unobtainable. The same is true for literary and artistic works.

Although financial leasing is not a common way of financing capital goods acquisition in Mexico, significant transactions with the public sector, specifically in the energy sector (Investment Projects with Deferred Impact on Expenditure), have been identified and included in the accounts, recording the corresponding items in the capital and financial accounts.

## 2.3 Classification/sectorization

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

The classification of institutional units, transactions and other flows in Mexico's national accounts is consistent with the recommendations of the 1993 SNA. The classification of economic activities is based on the 2002 NAICS, which is a classification system prepared and adopted jointly with Canada and the United States, and which corresponds to the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 3.1. The classifications for the base year 2003 implemented the Central Product Classification (Version 1.1.) for the coding of products and commodities. Consistent with international recommendations, household consumption expenditures are classified in accordance with the "Classification of Individual Consumption According to Purpose" (COICOP), while government consumption is classified in accordance with the "Classification of the Functions of Government" (COFOG).

## 2.4 Basis for recording

# 2.4.1 Market prices are used to value flows and stocks

The Mexican national accounts record all transactions at market prices prevailing at the time the transactions take place, in accordance with the valuation principles of the 1993 SNA. Production is valued at basic prices, while intermediate consumption is valued at purchase prices, excluding the deductible portion of the value added tax (VAT). The components of expenditure on final goods are valued at purchase prices, i.e., including trade margins and taxes on the corresponding products. Production for home consumption is valued at basic prices for equivalent market production in the case of services of owner-occupied dwellings, and at cost in the case of other products. In the Mexican accounts, adjustments to market prices are made when transfer pricing is detected between a parent company and its subsidiaries, particularly in the automotive industry and the oil industry. Consistent with the 1993 SNA guidelines, total exports and imports are valued at free on board (f.o.b.) prices.

Transactions in foreign currency are converted using the mid-point exchange rate prevailing in the market at the moment they take place.

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

Most transactions are recorded on an accrual basis. Construction work-in-progress, industrial goods involving a long production process and a portion of agricultural work-in-progress is recorded in the period in which they are completed. Agricultural work-in-progress is only recorded for quarterly not annual estimates. Annual estimates are based on harvested output. Government accounting of revenues and expenditures on a quarterly basis is done on a cash basis, as are annual data for government revenues. Annual government expenditures are recorded on an accrual basis. The mission investigated whether the data for rental housing is provided on a cash not accrual basis. The mission found that it is likely that there may be

some cases where quarterly rental housing and quarterly private education services are recorded on a cash basis (see 3.3.2 ahead).

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

Consistent with the 1993 SNA guidelines, transactions between establishments of the same enterprise are recorded on a gross basis.

# 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

INEGI has a regular program of five-year economic censuses and monthly and annual surveys covering most economic activities. The directories of establishments that serve as the sampling frame are based on the economic censuses and are therefore thoroughly updated every five years. The census collects data on the visible economic activity of households in areas with more than 2,500 inhabitants and the head areas within municipalities. The census also captures the economic activity of manufacturing, domestic trade and service units in rural areas through a probabilistic sample by federal state and economic sector. The sampling frame includes 138,000 establishments mainly from large and medium enterprises, which generate 80 percent of total output, except the ones in agriculture, livestock and forestry, passenger transport, political parties and embassies, whose data are collected from other sources. The sampling frame does not include a random sample of small enterprises, which is a deviation from best practices. This might compromise the coverage of some service activities, since they are mainly provided by small atomized enterprises.

Census data was collected through Personal Digital Assistants (PDA/Palm Pilot) and downloaded into a database.

Between censuses, partial updates of business registers are conducted as only large establishments are monitored through the Large Establishments Monitoring (SEG) program, which uses data obtained from chamber organizations and producers' associations and public agencies, as well as daily monitoring of the media.

INEGI also has a sampling frame monitoring unit that it uses for planning fieldwork for economic censuses and surveys. The sample for these surveys is based on the sampling frame derived from the economic censuses.

As noted earlier, INEGI has a regular program for surveying establishments on a monthly and annual basis. The economic censuses for 2004 were one of the main data sources for compiling estimates for the base year 2003. Those censuses collected information for calendar year 2003 for all economic activities except agriculture, for which data were taken

from the Agriculture, Food and Fishery Information Service—a decentralized entity of the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA).

The 2004 economic census collected detailed information at the six-digit level of the NAICS 2002. Information of relevance to the compilation of national accounts included data on output per product (finished goods) in quantities and values, and sales, data on major inputs consumed, also in quantities and values, other detailed production expenses, monthly compensation of workers, separated into wages and salaries, number of persons employed, capital formation and stock of capital by type of good, own-account fixed capital formation and inventory stocks at the beginning and end of the period, broken down by type of inventory (finished products, work-in-progress, and raw materials). The 2009 economic census with data for 2008 is being processed and will be used as the basis for the preparation of a continuously updated directory of establishments.

The annual surveys gather information on the value of output and sales at aggregated levels, not by product (this detail is available in the monthly survey). Information on intermediate consumption disaggregated by commodity is not collected, which is not in line with international standards; however, there are series disaggregated by 12 expenditure categories such as wrappings and packaging; fuels and lubricants; electric power consumed; spare parts and accessories, and other expenditure connected with freight paid, inter alia.

Other data from the annual economic surveys are similar in coverage and detail to those of the economic censuses. The annual data represent the 6-digit level of the above-mentioned economic activity classification for the activities covered. The annual survey covers manufacturing, trade, non-financial private services, and construction. For the latter, only the formal sector is covered. The surveys on manufacturing and domestic trade collect data on inventories that are not used in the compilation of national accounts.

Monthly surveys are representative at the 6-digit level of the classification used at the national level, although they do not cover all activities, which means that they must be supplemented with special research. There are monthly surveys available for manufacturing, mining, trade, non-financial private services, and construction companies. Monthly manufacturing surveys provide information on output and sales by product, in values and quantities, as well as data on compensation and persons employed, and hours worked by the categories of personnel on the payroll, whether as staff or non-staff. Monthly surveys on non-financial services, goods for processing, and domestic trade provide information on intermediate consumption, which is not used in the compilation of national accounts.

Manufacturing and trade surveys are based on a deterministic representative sample. In the case of manufacturing, 205 classes of activity were selected in the base year 2003, and in 2005 the coverage was broadened to 231, within which establishments were identified that accounted for 80 percent of production. Surveys of construction companies and some services are probabilistic. Information is available for 118 classes for the service industries, 20 industrial classes in mining, and 28 classes for the construction industry. The sampling frame for the monthly surveys on services is the economic census of 2003. The methods used for imputing data in the event of nonresponse are generally adequate: the expansion factor is corrected in the case of probabilistic surveys and appropriate methods are used for imputing

values in the case of non-random surveys, which could be further enhanced by applying the cluster analysis technique to impute nonresponse with data from establishments/enterprises of the same class/group with similar number of employees and technology and located in the same geographical area.

Between 40 and 90 percent of the data from annual and monthly surveys is collected through the Internet and the rest through e-mail and establishment visits.

INEGI has a regular established program of household surveys, with varying periodicity: the National Urban Employment Survey (ENEU), which is monthly; the National Employment Survey (ENE), which is quarterly and annual; both until 2004; the ENOE with quarterly and monthly periodicity, with the latter beginning in 2005; non-regular surveys, such as the National Survey of Demographic Dynamics (ENDID) and the National Microbusiness Survey (ENAMIN); and the ENIGH, which is conducted every two years.

The ENIGH is nationally representative, covering all geographic zones and the entire population, both urban and rural. The survey is based on a multi-stage random sample design. It provides estimates of household expenditure to a disaggregation of 700 groups of goods and services. Its results, however, are not widely used in the national accounts, in part because these surveys collect information only during a three-month period, from August 15 to November 28, of the reference year, instead of during a complete calendar year, and the data might have seasonality. Despite the potential usefulness of the ENIGH for national accounts purposes, this survey is mainly used for calculating the basket and weights of the consumer price index (CPI).

INEGI receives complete annual data on government finance, including budgetary performance and nonbudgetary expenditures of the federal government, the Social Security system, and state and local governments. Budgetary outturn data for the federal government, including nonbudgetary items, are obtained in detailed form from the SHCP.

INEGI compiles its own annual and quarterly statistics for "State and Municipal Government Finance," based on information obtained directly from the finance secretariats of the state and the government of the federal district, and this allows it to compile estimates for these institutional subsectors in the national accounts. Quarterly data on a cash basis are available for the federal government only.

The available quarterly data are considered adequate for compiling reliable estimates of GDP by the production approach. As noted above, monthly surveys are conducted for manufacturing, construction, trade and nonfinancial private services. For the agriculture, forestry and fishery sector, monthly information is obtained from administrative records. For services not covered by the surveys, special research projects are conducted periodically. In short, there are adequate indicators available for each economic activity at the six-digit level.

Quarterly estimates of GDP from the expenditure side are adapted to the availability of periodic information from economic surveys, foreign trade and balance of payments statistics, price indices, and administrative records. Reflecting the sources available, household consumption and gross fixed capital formation are estimated through the

commodity flow approach. No quarterly data on inventories are collected. Although the stocks of inventories at the beginning and end of the year are investigated in the manufacturing and domestic trade surveys, these data are not used in the compilation of annual GDP by expenditure.

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

Source data reasonably approximate the concepts, definitions and scope of data required for compiling the national accounts. The high level of disaggregation in the source data allows for corrections to the classifications. Valuation adjustments are made to data from the manufacturing survey, since output values are reported at producer prices and not at basic prices. Pilot tests have been conducted to ensure that data collected will allow compilation of estimates according to international guidelines.

The coverage of total economic activities (in terms of value added) by all data sources is good since most economic activities are covered. In general, the coverage of activities within the most important industrial groups is also good (80 to 85 percent).

Calculations for freight and insurance have improved by virtue of the fact that in the change of the base year to 2003, work was carried out to compute freight and insurance by tariff item, identifying various factors influencing their amount such as the weight of the merchandise, the distance covered, and those percentage rates have been used since then.

The improvement continues to be dependent on the extent to which it is possible to identify freight and insurance on the basis of tariff items from the original information source (Customs and BM), in order to make a direct allocation by product or class of activity.

# 3.1.3 Source data are timely

In practice, the data for compiling the national accounts are received on time for use in monthly, quarterly and annual estimates. These data are supplied by other units of INEGI in accordance with a strict delivery schedule that reflects the production cycle for the national accounts. Likewise, there is no problem of timeliness with the data produced by other entities. Consumer and producer price indices compiled by the BM are received on time, as are the farm price indices supplied by SAGARPA, the detailed foreign trade and balance of payments statistics (also from BM), monetary statistics and government finance data.

## 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

Information is available on sampling errors for probabilistic surveys, as well as on nonresponse and imputation methods. Survey results are monitored and atypical values are

clarified and/or corrected with the respondents. Surveys and censuses are audited to verify the accuracy of the individual survey data. Normally, survey data are compared with other sources where available.

Administrative records and other secondary sources are continuously evaluated by the national accounts compilers, who review them for consistency and accuracy and consult the sources on any inconsistencies. For international trade, there is a process for verifying consistency between foreign trade statistics, the balance of payments and customs records before they are included in the SCNM. Tariff item records are also reviewed so that temporary and definitive exports and imports can be determined and classified properly.

## 3.3 Statistical techniques

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

Mexico's national accounts employ procedures for adjusting and improving coverage, definitions, classifications, and valuations to meet international guidance. To improve coverage, special studies are carried out to research those activities for which there are no surveys or administrative records or are activities that have only recently appeared in the domestic economy.

When it comes to definitions, there are procedures in place for making source-data definitions compatible with national accounts needs.

With respect to classifications, to ensure international comparability there is a procedure for harmonizing the available classifiers (*ISIC*, COFOG, COICOP, etc.), and the NAICS is the classification used by decree in all INEGI's statistical products.

The SCNM calculations use procedures for measuring unrecorded activities, such as those related to farming, sand quarrying, cottage industry and services such as street vendors, miscellaneous repairs, domestic service, sex workers, among others. However,

SCNM data do not include illegal activities such as the manufacture and distribution of narcotics and psychotropic substances; usury; ticket scalping; unauthorized surgery; trade and transportation of contraband, etc., because of the difficulty inherent in estimating such activities without consistent and constant data.

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

## **Production approach procedures**

Production estimates are compiled separately for approximately 722 activities at the six-digit level of the NAICS classification. These are grouped into 19 sectors, 78 subsectors and 248 branches of economic activity, which correspond to the divisions, groups, subgroups, and classes of the ISIC. Intermediate consumption data are compiled at the same level of detail as that used for production, *i.e.*, complete production accounts are prepared at the 6-digit level

of the NAICS. Value added at current prices is derived from the extrapolation of the base year data by nominal indicators of output and intermediate consumption.

In general, the use of fixed coefficients for estimating current prices is limited to activities such as cottage industry and certain personal and business services, where continuous information on cost structures is lacking. The use of fixed input-output coefficients (single indicator method) is more common when it comes to estimating value added at constant prices, and applies to about 35 percent of GDP. Fixed input-output coefficients at 2003 prices are used in estimates for manufacturing industry and for a portion of agricultural production.

The estimates of imputed rents for owner-occupied dwellings are based on market rental prices for similar dwellings. The base-year estimate for the housing stock was obtained from the 2000 population census, updated to 2005 with data on capital formation in housing (with figures from the population and housing count), and rental data were obtained from the ENIGH. Periodic estimates are made by extrapolating base-year estimates with the housing stock index and the rent price indices compiled by the BM.

The Mexican national accounts record production of construction work-in-progress, tree plantations, livestock, and the construction of durable equipment (lasting longer than one year).

Goods production is estimated on the basis of output and price data, obviating the need to adjust for gains or losses from holding inventories of finished products. Nevertheless, output estimates for manufacturing in the 2003 base year included unadjusted book values for the change of inventories of work-in-progress. Periodic estimates for the manufacturing industry are based on extrapolation with volume and nominal value indices. For homogeneous products, the volume index is derived by valuation of quantities at prices of the base year. For heterogeneous products, the respective volume index is derived by deflating the current values by the implicit aggregate deflators of the homogeneous products in the same activity.

With regard to changes in inventories of finished products and work-in-progress, the valuation of the data supplied by the Annual Industry Survey is being evaluated by the National Accounts Directorate (DCN).

Intermediate consumption was estimated for the base year from quantities and prices of inputs consumed in the production process, so that an adjustment for gains from holding inventories of raw materials was not necessary. In the periodic annual estimates, however, intermediate consumption at current prices is generally derived by extrapolation from base year data with nominal value indices reported in the economic surveys. These data could imply a valuation distinct from market replacement prices, as required by international guidance.

It should be mentioned that the method used to estimate intermediate consumption at current prices is not consistent with the method used to compile intermediate consumption at constant prices. The latter is derived by assuming fixed ratios between input and output in the base year, whereas intermediate consumption at current prices is obtained by extrapolating base-year values using a nominal value index obtained from the surveys. The inconsistency

of the methods is reflected in the implicit deflators of intermediate consumption, which show not only changes in prices but also changes in the structure of production costs between the base year and the current year. Consistent estimates of intermediate consumption on the assumption of fixed proportions between input and output require inflating the estimates at constant prices of this aggregate with the appropriate price indices (calculated by using the weight structure of intermediate consumption expenditure by branch/class of the previous year (subject to data availability) or from the 2003 input-output table).

A series on intermediate consumption at constant prices (2003–2008) was prepared using the methodology of deflating current values with price indices weighted by the main specific inputs for each class of activity in the manufacturing industry. The purpose was to estimate value added at constant prices by applying the double deflation method, and it was found that the results are similar with insignificant deviation between one method and another; the method suggested by the 2002 Data ROSC mission is being assessed by the DCN.

Consumption of fixed capital is estimated by the perpetual inventory method. These estimates exclude fixed capital consumption by general government, except for the Social Security subsector. As a result, estimates of gross government output may be understated by the value of fixed capital consumption not included in the estimates. The calculations for consumption of fixed capital for the new base are carried out using the same assumptions as for previous base years.

Estimates at constant prices, both quarterly and annual, are generally obtained by extrapolation of production value from the base-year, using a Laspeyres-type volume index with a fixed 2003 base. These indices are constructed from detailed monthly output data derived from economic surveys, and average product prices in the base year. The estimates of the indices of production volume are calculated using the information supplied by the Monthly Industrial Survey with a lengthy list of products differentiated at the level of 231 classes of activity—this catalogue is based on the results of the census surveys and is revised annually, incorporating new products or discontinuing those products which respondents no longer report.

Intermediate consumption at constant prices for goods-producing industries is obtained by assuming fixed input-ratios from the base year. In the case of some services, a double indicator method is used, deflating intermediate consumption at current prices with a Laspeyres price index, although at a sufficiently detailed level by branch of activity.

Government output is obtained by the sum of production costs at constant prices, where compensation of employees is calculated by extrapolation with an employment index, and government intermediate purchases are deflated by corresponding price indices.

Even though INEGI has worked on the calculation and allocation by use of the output of financial services indirectly measured (FISIM) as well as of central bank's services, consistent with the *System of National Accounts, 2008*, the sources and methods used need considerable improvement. The stocks of loans and deposits of the banking sector are being deflated by an index of real interest rates instead of by a general price index, such as the GDP deflator excluding the financial activity or the CPI, and in some cases, the stocks of securities

are included in the calculation, which is a departure from best practices. Moreover, the classification of central bank' output in market and non-market output is based on revenues only instead of on a combination of revenues and the cost approach.

The volume index of net taxes on products is assumed to be identical to the volume index of value added for the entire economy and this is inconsistent with internationally accepted practice, where tax rates for the base year are applied only to transactions subject to taxes/subsidies.

To obtain net taxes on products at constant prices, exercises have been conducted using price indices to deflate the various taxes; however, the results have not been consistent; given that the deflation of taxes and subsidies is a deviation from best practice. Volume measures of taxes/subsidies on products should be estimated by applying base-year-tax rates to the volume of transactions subject to a specific tax/subsidy or by extrapolating the base-year tax/subsidy using a volume extrapolator of transactions (mainly by use) subject to a specific tax/subsidy.

At the same time, the trade margins at constant prices are calculated using an appropriate procedure by applying the pertinent rates for the base year to the volumes of transactions channeled through trade on a detailed basis.

As noted above, GDP estimates at constant prices have a fixed 2003 base, and so no chain indices are used for calculating volume measures. INEGI has implemented a change in the base year to 2003, primarily on account of the availability of an economic census and due to the conditions of economic and social stability in the country. This work was used as a basis of updating the time series for SCNM products.

It should be mentioned that the annual supply and use tables do not include a disaggregation of intermediate consumption by industrial origin of each economic activity, but just for the entire economy. Detailed estimates of intermediate consumption are available only for the base year.

#### **Expenditure approach procedures**

There are no independent estimates available for annual household consumption, gross fixed capital formation, and inventories. The first two are estimated based on the flow of commodity approach. Although the stocks of inventories at the beginning and end of the year are investigated in the manufacturing and domestic trade surveys, the change in inventories is estimated as a residual by reconciling the supply and use tables at the two-digit level of the activity classification used.

Estimates of household consumption expenditure are produced at detailed levels, according to the origin of the goods, at the 6-digit level of the activity classification for the domestic component and for imports. Household consumption expenditure is classified by the COICOP categories, and also between durable, semidurable, and nondurable goods. Government consumption expenditure is classified in accordance with the COFOG. Gross fixed capital formation is compiled by economic branch of origin, type of good and by

institutional sector. Changes in inventories are not calculated by type, but as a residual by industrial branch of origin.

The use of fixed coefficients in the estimates of household consumption and capital formation was updated with a change in the base year to 2003.

Government final expenditure excludes incidental sales. Household consumption expenditure includes household expenditures abroad and excludes expenditures in the country by nonresidents, consistent with best practice. Household expenditures on valuables are only partially included in the estimates.

Estimates of household consumption at constant prices are obtained by extrapolation of the domestic component by using the detailed volume indices of output and deflating the imported component of expenditure by unit value indices for the respective imports. Exports of goods and services are obtained at constant prices by deflating current values with price indices prepared for the purpose, and with the use of international indicators. Imports of goods and services are deflated with appropriate price indices for each class of activity. Government final consumption is obtained by the sum of production costs at constant prices, where compensation of employees is calculated by extrapolation with an employment index, and intermediate purchases are deflated by corresponding price indices.

#### Specific techniques for quarterly compilation

With the change of the base year to 2003, the estimates of quarterly GDP at current prices were modified. The calculations are prepared for 668 classes of activity (NAICS). These classes have data on production value or output value of services, and these are used to prepare value indices on the basis of which base year production is extrapolated; for those classes lacking information on current values, such information is estimates on the basis of constant production values, using representative price indices for the activity in question.

Components of the production account (output, intermediate consumption, and value added) are estimated at current prices, separately. Quarterly intermediate consumption at current prices is estimated by using the input-output ratios from the annual calculations from the previous year or, in some cases, by estimating the ratios to be applied in the current year with the value changes reported in the surveys for classes related to the main inputs, even though there is available data on intermediate consumption from some monthly surveys. The usage of fixed intermediate consumption coefficients at current prices is a method that departs from best practices and is causing a step problem in the first quarter. This method should be replaced by the inflation of constant price estimates of intermediate consumption by corresponding price indices of main inputs. The price indices are to be calculated by using detailed CPI and producer price index (PPI) data weighted by the percentage composition of main inputs from the 2003 input-output table by activity class and to the extent of possible by including also the price indices of imported raw materials used in production.

For the change in base year to 2003, a detailed study was carried out of the various methods and packages used internationally to reconcile quarterly estimates with annual data. As a result, the authorities chose the Denton technique from Statistics Canada, and elected to

develop a specialized software for the SCNM's short-term and regional series, "Bench-Mexico," which facilitates alignment at the level of NAICS activity class while optimizing response time and minimizing errors.

Bench-Mexico is applied to all monthly, quarterly, and regional products of the SCNM with the greatest possible disaggregation, based on the preliminary results for the 2003 base. This is an improvement since the 2002 ROSC.

For output and intermediate consumption, the Denton technique is applied at the level of class of economic activity, obtaining as a residual the value added at current prices. However, agriculture is not benchmarked to the annual data since the agricultural work-in-progress, which is quarterly estimated, is not included in the annual estimates owing to differences in coverage. In addition, the average benchmark-to-indicator ratio (BI) of the previous year is used for aligning quarterly estimates to annual data, instead of the BI of the fourth quarter of the previous year as the IMF's *Quarterly National Accounts Manual 2001 (QNAM)* recommends in Annex 6.2. When series present a strong seasonality in the fourth quarter, then those series should be seasonally adjusted and the trend of the fourth quarter extrapolated forward by an indicator. The use of the average BI of the previous year along with the usage of fixed input-output ratios at current prices is causing a step problem in the estimates of the first quarter.

The compilation system generates original data, *i.e.*, not seasonally adjusted. Seasonally adjusted data for quarterly GDP are calculated with the X12-ARIMA (Autoregressive Integrated Moving Average model) software from the US Census Bureau. The series are also adjusted for calendar and public holiday effects. However, adjustments were made in 2009 to education and government services in the non-seasonally adjusted (original) data as a result of the H1N1 Influenza.

There is no direct measure of output and value added for the trade industry, with output, that is, the trade margin, compiled based on the flow of goods channeled through trade establishments. No adjustments for changes in inventories held by the trade industry are made.

Public education at constant prices is estimated for level of education based on the number of students enrolled, corrected each quarter by the effective number of days of classes. The adjustments for the effective days of classes other than for strike activity made in the education services is not a common practice in the compilation of national accounts. Enrollment is the most common volume indicator; annual changes in enrollment are smoothly distributed within the quarters of the year with the aim of avoiding a step problem in the quarterly growth rates between quarters belonging to successive scholar years. Although attendance to classes in the case of education services (or total hours worked in the case of government services) may also be indicators of output, the methods and indicators used should be consistent with those used for the annual estimates, which are based on enrollment (and employment for government).

Estimates of education services provided by the private sector are based on the service surveys, with a volume indicator derived from deflation of reported revenue. As in the case of rentals (see ahead) there is evidence in some cases that recording is on cash basis.

Real estate accounts for about 90 percent of the industry of real estate, rental, and leasing services. Actual (paid) rents at constant prices are derived by deflation of the rentals (output) by the price index of rentals (CPI for dwellings and the PPI for commercial buildings). There seems to be an issue with the representativeness of the monthly economic survey on real estate and there is evidence that income from rentals in some cases is reported on a cash basis rather than on an accrual basis

Regarding adjustments for working/trading days in irregular situations, the best approach is to take account of the number of working/trading days in calculating economic activity on a seasonally adjusted basis as the *QNAM* suggests on page 133 so that the irregular event is captured by the irregular component of the series; the adjustment for working/trading day effects should be treated as an integral part of the seasonal adjustment process, not as a separate process as was done in the case of the H1N1 Influenza. Also, if adjustments to the non-seasonally adjusted quarterly estimates are incorporated and no adjustment is made to the annual estimates, there will be discrepancies between annual and quarterly estimates.

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

# 3.4.1 Intermediate results are validated against other information, where applicable

The source data used in national accounts compilation are compared with alternative data, whenever possible. For example, farm prices supplied by SAGARPA are checked against PPI prices compiled by the BM, and foreign trade records.

Regarding consistency with related data sources, a comparison is made with alternative information sources that show correlation, whether in terms of the levels or in terms of trends in the observed variables. For example, for the manufacturing industry, information originating from surveys is compared with data supplied by chambers of producers, producers associations and foreign trade statistics; financial information originating from public entities and enterprises is compared with the Account of the Federal Public Treasury, and other sources.

Intermediate results of surveys are validated against historical information and by obtaining basic relationships between related variables.

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

Wherever necessary, discrepancies affecting the variables are investigated and measures are taken to eliminate them.

The surveys use a validation model that makes it possible to detect statistical discrepancies or inconsistencies, which are investigated directly by checking against information sources.

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

Although the supply and use framework is used to make GDP data consistent, there are no discrepancies in the Mexican national accounts between GDP estimates by economic activity and GDP by expenditure component, since there is no independent estimate of changes in inventories, which are calculated as the residual between the value of GDP by activity and the sum of other expenditure components. Changes in inventories have been systematically positive for the series 2003-2008, while it is financially costly for enterprises to maintain such levels of inventories. So independent verification of GDP data is not undertaken, statistical discrepancies cannot be observed and appropriately addressed.

GDP estimates are comprehensive and are not compared with any unofficial estimates prepared by other organizations.

#### 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 national accounts office maintains a constant watch for differences in the trend and magnitude of preliminary and final data, resulting from updates in information sources and/or calculation methods used. Studies of revisions identify the sources of any discrepancy, and appropriate adjustment mechanisms are used. The studies, however, are not published in detail, and only the most significant differences are disclosed.

The results of research on revisions in data compilation have made national accounts compilers aware of the need to work more closely with respondents and the sources of basic statistics, in order to improve the content, quality, timeliness, disaggregation, coverage and concepts of basic statistics in subsequent periods, and thereby enhance the calculations.

## 4. Serviceability

## 4.1 Periodicity and timeliness

## 4.1.1 Periodicity follows dissemination standards

GDP estimates are quarterly compiled and are in compliance with the requirements of the Special Data Dissemination Standards (SDDS) in terms of coverage, periodicity, timeliness, and dissemination of advance release calendars to meet users' needs.

#### 4.1.2 Timeliness follows dissemination standards

Having subscribed to the SDDS, Mexico meets the requirements of periodicity and timeliness for the quarterly accounts, and in fact exceeds those requirements. Quarterly GDP estimates at constant prices by economic activity are published 45 days after the end of the

reference period, and the corresponding estimates at current prices are published within 52 days.

## 4.2 Consistency

#### 4.2.1 Statistics are consistent within the dataset

GDP estimates are derived from the balances in the supply and use tables, from which consistent estimates of GDP by economic activity and by final expenditure component are derived. The latter estimates are not calculated independently, since household consumption and fixed capital formation are based on the flow of commodity approach and inventories are residuals (total supply less the sum of other final expenditure components). Statistical discrepancies cannot be calculated separately and appropriately addressed.

Quarterly GDP estimates are mainly consistent with the annual estimates, since both use the same concepts, definitions and classifications. The source data and compilation methods are also similar, except when it comes to measuring agricultural activity, since agricultural work-in-progress is quarterly estimated, but it is not incorporated in the annual figures. Annual estimates for agriculture are based on the harvested output.

The quarterly data are adjusted to annual values so that the sum of the quarters coincides with the annual figure, with the exception of agriculture. Any discrepancies between annual rates of change in GDP and the corresponding rate of change in the four-quarter totals are insignificant, and no more than a tenth of a percentage point. This approach is strengthened thanks to the new techniques used to make adjustments at the end and at the beginning of the year.

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

Mexico's national accounts series are consistent over long periods of time. The current series, with base year 2003, includes estimates from 2003 to the most recent period (2008). When the base year is changed, historical revisions are made to the series to keep them consistent over long-time periods: for example, for the base year 2003 the quarterly series were recalculated backwards to 1993; for the base year 1993, the series underwent backward extrapolation to 1980; for the base year 1980, the series were recalculated backwards to 1960. Historical revisions of the series are also undertaken when new data become available from the economic and population censuses, and when revisions are made to the source data or to other statistical systems that provide input for the national accounts. The revisions and their rationale are explained in the publications.

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

The national accounts statistics are reconcilable with statistics on the balance of payments, and the net lending/borrowing figure in the national accounts coincides with the current account balance in the balance of payments, plus capital transfers. The discrepancies between data on general government savings in the national accounts and those in the government

finance statistics are due to the fact that the sector is covered more broadly in the national accounts. However, there is no reconciliation/harmonization process of the flow of funds table compiled by INEGI and that on the financial sector compiled by BM. The treatment of the oil stabilization fund is not consistent across data sets. Regular meetings to reconcile across datasets are not undertaken.

# 4.3 Revision policy and practice

#### 4.3.1 Revisions follow a regular and transparent schedule

Mexico follows an established and stable cycle for producing and revising the national accounts, and this is public knowledge. A release calendar is prepared each December for the following year, and is publicized through the media and on the INEGI website. When the annual data-based estimates are published at the end of the year following the reference period, estimates for the preceding two years are generally revised, as are quarterly estimates for those years and for the current period. Quarterly estimates for the current year are also revised when data for a new quarter are published.

New publications containing the results of the change in base year have incorporated comments on substantive differences from one series to another, in addition to showing improvements in the estimates. However, the major revisions (change of the base year) do not have a well established cycle (*i.e.*, every five years as international standards recommend).

## 4.3.2 Preliminary and/or revised data are clearly identified

The introduction to each publication explains that the data for the last two years are preliminary and subject to revision. However, the preliminary nature of the figures is not indicated with an appropriate symbol in the tables, but it is indicated on the covers of the publications, and in the publicly accessible Economic Information Database of the INEGI.

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

Historical series revisions, as in the case of changes to the base year, are documented and the explanation of differences from previous series is widely publicized. Although revisions are supervised on an ongoing basis in the change of base year, revision studies are focused on keeping users informed of key impacts in the calculations for subsequent periods.

## 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 annual national accounts statistics are published in tables containing absolute values, together with supplementary tables that include percentage compositions and percentage

changes, volume indices, productivity indices and implicit price indices. In addition to supplementary tables, the short-term statistics offer graphs and seasonally-adjusted or trend series to facilitate analysis.

The presentation, the disaggregation and the classifications of SCNM statistical product series are maintained over time in order to facilitate identification, comparison and consultation by users. The degree of detail in the variables depends on the type of product offered and its periodicity. Although very detailed annual estimates are compiled, the published breakdown is not sufficient for detailed analysis of economic activities and main products. The breakdown of quarterly estimates is sufficient for short-term analysis. The linked 1993-2003 series is only available for the quarterly estimates.

The results of SCNM statistical products are published with a press release describing the principal results for the period under study.

The timing and level of detail of publications of SCNM statistical output vary. Statistical products are presented in monthly, quarterly and annual series and with national and regional geographic coverage and are supplemented by satellite accounts.

GDP, Total Supply and Demand, and Supply and Use tables are published quarterly; Industrial Activity, Gross Fixed Capital Formation (for the national total); Manufacturing Output and Power Generation and Supply for the Federal States and by economic activity are published monthly.

The following are published annually: Goods and Services Accounts; Institutional Sectors Accounts; Gross Domestic Product by Federal State; Macroeconomic Indicators for the Public Sector; Current and Accumulation Accounts; Production Accounts by Purpose for State Governments; Informal Household Sector; System of Economic and Ecological Accounts of Mexico; and Tourism in Mexico.

INEGI has prepared an inventory of all SCNM statistical products, listing titles, series, variables, content, year of publication, etc.

The following seasonally-adjusted national accounts series are published: quarterly gross domestic product, industrial activity, global indicator of economic activity, quarterly supply and demand components, and gross fixed capital formation (as a monthly index); and Manufacturing Output and Electricity Generation and Distribution by Federal State and by Economic Activity.

## 5.1.2 Dissemination media and format are adequate

Statistics are published simultaneously through a press release and at the INEGI website, in full text PDF format. Hardcopy is subsequently released for annual publications.

Printed publications with annual series for the base years 1970, 1980, 1993, and 2003 are offered for sale at a nominal price. The 2003 base version is currently available and is disseminated in PDF format, accompanied by the Excel version for statistical tables and

methodological texts, in Word to make it easier for users to consult data located on the webpage, and in the Economic Information Bank (BIE). However, the BIE is not that user-friendly.

Special requests from users are also handled. Short-term calculations are available in the Market Statistics Information System (SIEC) and in the BIE, on the INEGI website.

## 5.1.3 Statistics are released on a preannounced schedule

With respect to quarterly GDP information, the "Market Information Release Calendar" is now published over the Internet, a calendar for the coming year is published each December, and revision is undertaken one month before the beginning of the quarter in question. The calendar is posted on the Internet and disseminated in the form of an information bulletin. All annual statistical products of the SCNM intended for recurrent publication are recorded in the INEGI publications program. There is no publication calendar for the annual series, but there is an internal schedule that is established as of October of the previous year. In addition, there is a site on the INEGI webpage known as the "Press Room" (Sala de prensa) where the release calendar is located, as are the press releases and information notes which the INEGI provides to the entire user community.

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

The data are disclosed at the same time to all users, on the date established in the Market Information Release Calendar, at 2:30 PM.

On publication day, a note is sent at the same time to the Office of the President of the Republic. The data are published in a press bulletin bearing the logo of INEGI, which spells out the main results, including texts explaining the corresponding indicator, user notes, methodological notes, and the main information sources; it is also emphasized that the information provided was prepared by the INEGI itself.

Regular annual publications are also released at the same time to all interested users, at the dates stipulated in the internal release calendar.

## 5.1.5 Statistics not routinely disseminated are made available upon request

The DGACN has a general policy of providing only published information, to which specific aggregations may be added; upon specific and formal request, data can be provided at greater levels of detail, as long as they do not violate the principle of confidentiality, and the information is prepared in accordance with specific requirements made through formal channels (one of which is the free serve site—Customer Service—which is to be found on the INEGI's webpage, where information requests and queries on related issues are channeled).

It is important to point out that there are additional options for consulting the information produced or disseminated by INEGI, such as national or international telephone lines (free of charge); some of the data are made available to users for consultation via cell phone and

Personal Digital Assistant (PDA/Palm Pilot), and in addition, there is a special e-mail address for such queries in addition to a communications media service directory.

All services connected with the supply of information and the information thus provided is free of charge. All publications mention that users may receive information on methodological and conceptual issues over and above the published information.

## 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 metadata (for each one of the indicators and publications) are prepared, which are available at the INEGI website and in printed publications, where methodological details are shown providing the primary information sources and general calculation methods used. No metadata is available on the 2003 input-output table.

Methodological summaries for the SDDS and OECD metadata for certain economic indicators are prepared in accordance with each agency's specifications, and are updated as changes are introduced.

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

Brochures and trifolds have been prepared and published on the national accounts, and a summary table of statistical series is included at the end of the regular annual publications.

Most SCNM publications include a section with information on sources and general methods for the production accounts, supply and use tables, and institutional accounts, which is updated regularly. However, more detailed metadata on compilation methods by economic activity and expenditure component is needed.

In addition, supporting and reference materials have been prepared with concise descriptions of the principal concepts in the national accounts, known as the "ABC of Accounts by Institutional Sector" and the "ABC of National Accounts," which have been published since 1981 in countless editions and been widely disseminated throughout Latin America and the Caribbean.

#### 5.3 Assistance to users

#### 5.3.1 Contact points for each subject field are publicized

Some publications and the INEGI website provide the area, e-mail, telephone number and address of persons responsible for preparing the data presented, and the telephone number and e-mail of the public service section of INEGI. Users receive personalized attention at the INEGI's Consultation and Marketing Centers (CCCINEGI) and in the national accounts office.

Publications include a list of related or supplementary information on their back page.

The customer service area records the opinions and information requests of users at the CCCINEGI, as well as those that arrive by e-mail (atencion.usuarios@inegi.gob.mx) in order to channel users' requests to the relevant area for response. Responses from specialized units are logged in the same manner—i.e., responses are also monitored by the customer service to ensure that questions have been addressed in a timely and satisfactory fashion.

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

INEGI publishes a catalog of products and services, and this is updated annually. It is organized by topic, and each title contains a brief description of its contents. Product catalogs are available in hardcopy and online, and the price of each item is indicated clearly for the services rendered and direct sale on line.

Products and services are offered for sale by specialized personnel at the CCCINEGI. Order forms are easy to use and contain user-friendly instructions for completing them.

Table 1. Mexico: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts (Compiling Agency: National Institute of Statistics and Geography)

Key to symbols: NA = Not Applicable; O = Practice Ob	ee Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria					
Element	NA			sment		Comments
	1111	О	LO	LNO	NO	Comments
0. Prerequisites of quality	1		1	<del>                                     </del>		T
0.1 Legal and institutional environment			X			Need to strengthen coordination issues within the INEGI regarding the lack of usage of available data on inventories and intermediate consumption. A similar issue arises with the definition of methodology to be used for compiling FISIM and central bank's output.
0.2 Resources		X				
0.3 Relevance			X			No regular process of consultation with users.
0.4 Other quality management		X				
1. Assurances of 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			Quarterly government transactions are recorded on a cash basis and, it is likely, in some cases also quarterly rental housing and private education services. Annual estimates for agriculture are based on harvested output and work-in-progress is not recorded.
3. Accuracy and reliability						
3.1 Source data			X			Most samples exclude a random sample of small enterprises. To date partial updates of the business directory have been conducted between censuses, although there is work underway to continuously update the business directory.
3.2 Assessment of source data		X				
3.3 Statistical techniques			X			Wide usage of the single indicator method (fixed ratios at constant prices) to estimate GDP (no double deflation) even though there are detailed data on price indices and production cost structures from annual and some monthly surveys. Fixed ratios of intermediate consumption at current prices are used in quarterly GDP, which is not consistent with best practices. The average benchmark-to-indicator of the previous year is used for benchmarking quarterly estimates to annual data, which along the usage of fixed input-output ratios at current prices from the previous year is causing a step problem in the first quarter. Taxes and subsidies on products at constant prices not properly estimated.

Table 1. Mexico: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts (Compiling Agency: National Institute of Statistics and Geography)

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		
Element	IVA	O	LO	LO LNO NO	NO	Comments		
3.4 Assessment and validation of			X			Inventories are calculated as residuals. Statistical discrepancies cannot be		
intermediate data and statistical						calculated separately and appropriately addressed.		
outputs								
3.5 Revision studies		X						
4. Serviceability								
4.1 Periodicity and timeliness		X						
<ul><li>4.2 Consistency</li><li>4.3 Revision policy and practice</li></ul>			X			No regular reconciliation meetings with other domains are conducted. Coverage of national accounts and government finance statistics differ. Work-in progress for agriculture is quarterly but not annually calculated so leading to an inconsistency between the quarter and annual data. The sector treatment of the oil stabilization fund is not consistent across data sets. No harmonization of flow of funds table compiled by INEGI and by BM.  Major revisions (change of the base year) do not have a well established cycle.		
5. Accessibility	<u> </u>	ı	ı	I	1			
5.1 Data accessibility			X			Although very detailed annual estimates are compiled, the published breakdown is not sufficient for detailed analysis of economic activities and main products. The linked 1993-2003 series is only available for the quarterly estimates.		
5.2 Metadata accessibility			X			More detail on compilation methods is needed. No metadata is available on the 2003 input-output table.		
5.3 Assistance to users		X						

#### Recommendations

- Conduct regular reconciliation exercises to verify consistency among the macroeconomic datasets.
- Begin an active, systematic process of consulting users on the quality of macroeconomic statistics.
- Update the business register (directory) continuously and use it also to select samples of small enterprises for expanding population coverage in the economic surveys.
- Use available data on inventories and intermediate consumption in the national accounts.
- Directly estimate changes in inventories and compile an expenditure measure of GDP independent of the production measure. Investigate inventories in all annual surveys, the method of inventory valuation (first-in-first out (FIFO), last-in-first out (LIFO), etc.), and the average time that goods are held as inventories.
- Consider the use of chain indices for calculating volume measures.
- Estimate preliminary (before benchmarking to annual results) quarterly intermediate consumption at current prices by inflating data at constant prices by a composite weighted price index of the corresponding PPI and CPI items, and to the extent of possible, also consider price indices of imported raw materials.
- Conduct an integrated enterprise/establishment survey for a representative sample of
  enterprises by economic activity that collects data on production, inputs, fixed capital
  formation, inventories, income statement, and balance sheet in order to reduce the
  discrepancies between the estimates by economic activity and by institutional sector
  for the non-financial corporation sector.
- Incorporate annual agricultural work-in-progress in the production and assets boundary, given the importance of agriculture activities in the Mexican economy. Use the quarterly estimates of work-in-progress to enhance the annual estimates for crops that take more than a year to be completed or consider conducting a survey on cost distribution by calendar year for the most relevant crops.
- Improve the benchmarking technique of quarterly and annual data by applying the benchmark-to-indicator ratio of the fourth quarter of the previous year to estimate the quarters of the following year until the annual data for that year are available.
- Further investigate the recording of actual rents and private education services in the monthly survey.

- Take account of the number of working/trading days in calculating economic activity on a seasonally adjusted basis, as the QNAM recommends.
- Improve the sources and methods of FISIM and central bank's services at current and constant prices.
- Improve the estimates of taxes and subsidies on products at constant prices by applying the base-year-tax rates to the volume of transactions (uses) subject to the specific tax/subsidy or by extrapolating the base-year tax/subsidy using a volume index of transactions subject to that specific tax/subsidy.
- Study the compilation of a supply and use table of illegal goods including illegal trade (contraband).
- Increase the level of detail of disseminated annual data at four digits of the NAICS, or at least at three digits.
- The linked annual series for 1993–2003 should be disseminated in official publications.
- Explain in more detail the compilation methods and the causes of routine and major revisions to the NA data in INEGI's; national accounts publication.
- Develop a more user-friendly webpage for posting all national accounts data and metadata together.

#### II. GOVERNMENT FINANCE 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

Fiscal statistics on the central government and other levels of public sector aggregation are compiled and disseminated by the Secretariat of Finance and Public Credit (SHCP), in accordance with the terms and conditions established in the following laws and regulations and their amendments: (a) the Political Constitution of the United Mexican States, last modified August 24, 2009; (b) the National System of Statistical and Geographical Information Law, dated April 16, 2008; (c) the Organic Law of the Federal Public Administration, last modified June 17, 2009; (d) the Budget and Fiscal Responsibility Federal Law, last modified December 31, 2008; (e) the Transparency and Access to Public Information Federal Law, last modified June 6, 2006; (f) the Public Debt General Law, published December 31, 1976; (g) the Government Accounting General Law, published December 31, 2008; (h) the SHCP By-laws, last modified July 18, 2006; and (i) the Tax Administration Service Law, last modified May 5, 2009.

Article 26 of the Constitution states that the State shall have a National System of Statistical and Geographic Information (SNIEG), and that the data it generates will be considered official. It also says that the system will follow the principles of access to the information, transparency, objectivity, and independence. The responsibility for setting the norms and coordinating the system will belong to an entity with technical and operating autonomy, legal personality and its own capital. This entity will have the power necessary to regulate the collection, processing and dissemination of the information generated by the system.

Article 33 of the SNIEG Law states that public entities must follow the norms and principles established by the National Institute of Statistics and Geography (INEGI), when undertaking activities related to the compilation and dissemination of information of national interest, except when authorized by law to undertake such activities. In the latter case, the mandate of the specific law shall be observed. Article 31 of the Organic Law of the Federal Public Administration assigns to SHCP, among other, the tasks of projecting and estimating the revenues and expenditures of the federal government and parastatal entities, and to control public debt operations. Article 107 of the Budget and Fiscal Responsibility Federal Law states that SHCP shall provide Congress monthly and quarterly reports on the state of public finances and public debt; while Article 108 states SHCP shall establish the guidelines of the revenue and expenditure information system. Article 22 of the Tax Administration Service Law states that the Federal Executive shall provide Congress monthly and quarterly reports on the evolution of revenue collection.

Article 7 of the Transparency and Access to Public Information Federal Law states that except for the information deemed restricted and confidential by the law, SHCP must make available to the public information on the economic situation, public finances, and public

debt. Article 5 of the Public Debt General Law states that SHCP shall keep the debt records of federal public sector; while Article 27 states that SHCP shall publish periodically information on the public debt.

Article 16 of the SHCP By-laws states that the Economic Planning of Public Finance Unit, through the Adjunct General Directorate of Public Finance Statistics (DGAEHP), is responsible for integrating, consolidating, and disseminating timely fiscal statistics on the revenues, expenditures, and financing of the federal government, non-financial parastatal entities, budgetary public sector, and federal public sector. It is also responsible for the design and integration the fiscal information from states and municipalities, and for coordinating the dissemination of fiscal information within SHCP in collaboration with the Social Communication Unit. Article 18 states that the Adjunct General Directorate of Public Debt is responsible for concentrating the statistical information on the public debt; while Articles 38 and 40 state that the Revenue Policy Unit, through the Adjunct General Directorate of Economic and Revenue Statistics Analysis, is responsible for maintaining a fiscal-economic statistical system.

The task of compiling fiscal statistics on the central government and other levels of public sector aggregation is assigned to two SHCP areas: (a) the Adjunct General Directorate of Public Finance Statistics, and (b) the Debt Statistics Department (DED) of the Public Credit Unit. The DGAEHP compiles fiscal statistics on the operations of the central government and other levels of public sector aggregation, consolidates the statistics on general government operations, and disseminates all fiscal statistics (including public debt), while the DED compiles statistics on central government and federal public sector debt. It should be noted that both the Bank of Mexico (BM) and the INEGI disseminate in their publications fiscal statistics compiled by the DGAEHP and the DED. Lastly, INEGI is responsible for compiling and disseminating fiscal statistics on the operations of state and municipalities (local) governments.

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

The DGAEHP maintains close communications and information flows with the SHCP departments responsible for compiling statistics related to public finance, and with the departments that manage accounting or financial resources operation centers. In addition, collaboration and information sharing with INEGI and the BM are adequate. Collaboration is close with the departments and units mentioned above, therefore, in addition to the relevant laws and regulations, informal arrangements have been established to streamline coordination and information sharing.

The Budget and Fiscal Responsibility Federal Law year mandates the Executive to submit to the Congress of the Union, through the SHCP, reports on the economy, public finance, and public debt, no later than 30 days after the end of each quarter, and statistical information on public debt, 30 days after the end of each month. The statistics included in such reports are compiled by the DGAEHP and the DEH and are consistent with the monthly and quarterly fiscal statistics disseminated by the SHCP. In addition, the SHCP's Unit of Government Accounting and Reports on Public Management (UGARPM) compiles and submits annually

to the Congress of the Union the Public Account, by April of the following year. Furthermore, the DGAEHP and the DEH provide BM and INEGI information needed to compile timely statistics for the national accounts and balance of payments. Meeting these deadlines and ensuring timely compilation and dissemination of statistics requires effective coordination and data sharing arrangements and procedures.

There are three units that centralize public sector information, namely, the SHCP, the BM, and the Secretariat of the Office of the Public Function. These three units compose the Technical Information Committee, which operates an Integrated Information System for Government Revenue and Expenditure (SII) at the SHCP. The purpose of this system is to avoid duplication of efforts and unnecessary work on the collection of information from the various reporting units and entities. Units of the federal government and parastatal entities send the required information using forms that are forwarded electronically to the SII, which is responsible for distributing the information to the respective users.

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

The confidentiality of data received from respondents is protected by the National System of Statistical and Geographical Information Law. Article 38 of the law states that data and reports provided by individuals for statistical purposes or obtained from administrative records must be handled in accordance with the principles of confidentiality and secrecy. Articles 13, 14, and 15 of the Transparency and Access to Public Information Federal Law establish the criteria to be used to determine the government information that is to be treated as confidential and secret.

In the particular case of decentralized public sector agencies (including government corporations), information is presented on individual entities, but care is always taken to maintain confidentiality on aspects necessary for the proper management of the entity in question. Decentralized agencies are aware of the rules and procedures regarding the confidentiality of information reported.

Article 47 of the Federal Law on the Responsibilities of Public Servants establishes, among other, the obligation of all civil servants to use the restricted information to which they have access through their functions exclusively for the assigned purposes and to safeguard and protect any documentation or information under their care or to which they have access because of their functions, responsibilities, or commissions, and to prevent the misuse of such data. Any failure to meet this obligation may incur sanctions, including dismissal. The law is available in the Intranet of the SHCP.

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

Article 33 of the National System of Statistical and Geographical Information Law states the obligation of all units of the federal government, states, and municipalities to provide to INEGI directly or through its coordinating agency the information it may request.

For the federal public sector, there are legal and administrative provisions for collecting the information necessary for the compilation of fiscal statistics. Article 5, 14, 107, and 108 of the Budget and Fiscal Responsibility Federal Law establish the obligation of all units of the federal public sector to provide SHCP the information necessary to prepare the monthly and quarterly reports to Congress, as well as the Public Account; and to submit information to the SII in accordance with the guidelines set on its structure, deadlines, and modalities. Article 10 of the Parastatal Entities Federal Law states that parastatal entities are required to provide to other entities in the sector in which they are grouped, as well as to the State Secretariats and Administrative Departments, any information or data they may request. Lastly, the Decree Approving the Expenditure Budget of the Federation establishes that all entities are required to provide any information necessary for monitoring the budget within the deadlines stipulated.

There are currently no administrative procedures for ensuring the timely reporting of information by states and municipalities. However, Article 7, 9, and 50 of the Government Accounting General Law state the states and municipalities must adopt and implement the decisions of the National Council for Accounting Harmonization. This council has the power to establish the accounting standards and information requirements for purposes of fiscal statistics, national accounts, and reporting to international organizations of which Mexico is a member. Thus, information from states and municipalities is expected to become available within 2 to 3 years. See Section 3.1.1 below.

#### 0.2 Resources

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

The human resources assigned to compiling fiscal statistics are adequate to perform current tasks. A significant number of staff is approaching retirement, replacements will need to be hired and given training. Currently the positions of staff that retire are abolished. Public sector salaries have been frozen for several years, and salaries of staff are lower than in other areas of the SHCP. Staff training in methodological aspects is mainly internal, and some staff has attended courses on government finance statistics (GFS) at the IMF Institute. Opportunities are limited for staff rotation. The physical facilities, furniture, and equipment are adequate. The necessary resources are available in computer hardware and other modern technologies, and facilitate the timely compilation and dissemination of quality fiscal statistics. Funding is reasonably secure for the identified needs of the statistical program.

INEGI has introduced a remote training program for the staff of Regional Directorates and State Coordinating Agencies. The program aims to train field staff in the collection of data from states and municipalities.

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

The costs associated with the compilation of fiscal statistics are not directly calculated and there is no confirmed information on whether the available resources are used as efficiently

as possible. However, budgeting procedures allow cost control and allocation of resources. The increasing adoption of automated processes for compilation of statistics has resulted in substantial savings in terms of the person-hours for such tasks. There are areas where further efficiency gains are possible, as the new government accounting law and information system are developed. See Section 3.1.1 below.

#### 0.3 Relevance

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

Fiscal statistics follow the same time horizon as the budget elaboration and monitoring process, and are the main statistics used to take decisions on fiscal policy matters. The methodology and classification structure generally satisfy the needs of official users. The SHCP's website where fiscal statistics are disseminated provides a telephone number and e-mail address for users to request additional information, ask methodological questions, and express their views on the statistics.

New data requirements originate mainly from information requirements of the budgetary process. The on-going implementation of the new government accounting law and the development of a new integrated information system will have a significant positive impact on fiscal statistics. Both these initiatives are being undertaken in consultation with various government agencies and private associations, including a new Advisory Committee under the government accounting law, to ensure the new accounting standards and financial information reports meet the needs of interested parties.

## 0.4 Other quality management

# 0.4.1 Processes are in place to focus on quality

The SHCP is fully aware that quality is the key for maintaining public confidence in fiscal statistics. To this end, a major effort has been under way for several years to compile and disseminate a larger amount of statistics, with increasing coverage and timeliness, and to adopt new ways of measuring public sector financial requirements.

The on-going implementation of the new government accounting law includes the adoption of the best international accounting standards at all levels of government, and meeting the information requirements for the national accounts and from international organizations. The introduction of a new modern information system, which is receiving technical assistance and financing from the World Bank, will lead to the availability of budgetary and financial data in real time (See Section 3.1.1). Both these initiatives should enhance the quality of fiscal statistics in the near future. In addition, Mexico participates in and observes the Special Data Dissemination Standards (SDDS).

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

Mechanisms are in place for assessing the quality of the compilation and dissemination of fiscal statistics. These mechanisms are oriented primarily to ensuring the consistency of the primary information with the resulting statistics. In particular, steps have been taken to encourage automation of the various processes for producing and cross-checking data.

The UGARPM approves the accounting rules applicable to all budgetary units. Thus, all units of the centralized public administration use the same chart of accounts. The parastatal entities use a different chart of accounts that follows criteria of private accounting, but this is also approved by the same Unit. Consequently, fiscal statistics are compiled and verified in accordance with prevailing accounting rules.

Procedures have been established for controlling the quality of the information submitted to the SII. The information must be consistent with that provided in other forums, identified as preliminary or final, include explanations of any major changes compared with previous versions, and it must be accurate (it is not valid to omit data or make estimates).

Also, as stated above, the SHCP's website provides users with an e-mail address and a telephone number so that they can raise queries or request further information.

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

Formal processes have not been established for assessing the quality of the statistics and the information disseminated. However, continuous efforts are made to ensure the internal consistency of the data and to improve their quality in general. For example, in 2006 monthly information began to be published no later than 30 days after the end of each month; previously this lag had been 45–105 days. Also, the growing dissemination of fiscal statistics, primarily through the SHCP's website, is an incentive for compilers to improve the quality of their products.

Work is under way to develop the Integrated Federal Financial Administration System (SIDAFF), which will facilitate the availability of public finance data through fully automated, real-time processes. The launching of this system will be gradual, beginning in 2010, and will provide ample and timely information for the centralized public administration and thereby for the compilation of fiscal statistics.

## 1. Assurances of integrity

## 1.1 Professionalism

#### 1.1.1 Statistics are produced on an impartial basis

Article 26 of the Constitution grants INEGI technical and operating autonomy. Article 47 of the Federal Law on the Administrative Responsibilities of Civil Servants states that it is the

duty of all civil servants to inform the head of the department or agency at which they work, in writing of any reasonable doubts they may have regarding the legality of orders they receive.

Fiscal statistics are compiled on the basis of accounting records and administrative reports from the accounting centers, which follow charts of accounts and budgetary rules derived from the legal framework. Also, compilation practices are described in methodological notes posted on the SHCP's website.

# 1.1.2 Choices of sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations

Statisticians are free of political influence in the choice of the most appropriate data sources and methods for compiling fiscal statistics, and changes in statistical procedures are made on the basis of technical rather than political criteria. Data sources are selected according to both the basis of recording and the availability of the information needed to compile and disseminate quality statistics. The choice of compilation methods to be used is dictated by the objective of measuring public sector borrowing requirements from a national budget monitoring standpoint.

Dissemination of statistics is based solely on statistical considerations, and generally follows international standards regarding dissemination calendars, periodicity, timeliness, and coverage. Also, since 1996 Mexico has subscribed to the Special Data Dissemination Standards.

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

Fiscal statistics are disseminated by the Adjunct General Directorate of Public Finance Statistics, in coordination with the SHCP's Social Communication Unit (Press Office). The latter's role also includes monitoring press coverage and issuing any necessary clarifications for the proper interpretation of statistics. In addition, when fiscal statistics are disseminated, a press release is distributed to announce the event. Press releases on monthly fiscal statistics highlight the principal results for the month, while those associated with quarterly fiscal statistics include an interpretation by the authorities of the principal results. Finally, methodological notes are posted on the SHCP's website to facilitate understanding of the statistics.

Compilers of fiscal statistics are authorized to address queries about technical aspects and to respond to requests by users for further information. They are, however, not allowed to express opinions on government policies.

# 1.2 Transparency

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

The laws, regulations, methodologies, and manuals for classifying expenditure that govern compilation and dissemination of fiscal statistics are available to the public on the SHCP's website. There are no explicit restrictions on the aggregate information produced by the Adjunct General Directorate of Public Finance Statistics, and users can be provided with any further information they may request, provided it is available and the rules of confidentiality of the information are observed.

The procedures authorizing the dissemination of fiscal statistics are deemed internal arrangements and are not published. The dissemination of the statistics is authorized by the Head of the Economic Planning of Public Finance Unit. In accordance with the Transparency and Access to Public Information Federal Law, the manuals on procedures must be made available to the public upon request.

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

No official or public agency outside of the SHCP has access to fiscal statistics prior to their dissemination. These statistics are released simultaneously to the general public through the SHCP's website. Congress receives the statistics shortly before their public release. That there is prior access is not disclosed to the general public. Also, as indicated in section 1.1.3 above, a press release is issued informing the public of the availability of the statistics.

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

The compilation of fiscal statistics is a task assigned exclusively within SHCP to the DGAEHP and the DED of the SHCP. Within INEGI the task is assigned to the Public Sector Statistics Department. The tables disseminated by the SHCP identify the area responsible for their compilation. The tables disseminated by the BM and INEGI identify the Economic Planning of Public Finance Unit as the source of the information. The publications printed or posted on the INEGI's website identify the producer of the information in question.

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

Methodological changes are usually described in the Draft Expenditure Budget of the Federation and in the General Economic Policy Criteria for the relevant year. Such changes are normally indicated in footnotes to fiscal statistics. Similar procedures apply to the recording of special operations and other methodological changes (e.g., in institutional coverage).

#### 1.3 Ethical standards

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

In compliance with Article 7 of the National System of Statistical and Geographical Information Law, INEGI has issued a code of ethics that regulates the standards of behavior to be followed by all staff that undertakes statistical and geographic activities, and that is available to the public on its website.

Article 47 of the Federal Law on the Responsibilities of Public Servants establishes the duties of civil servants for ensuring legality, integrity, loyalty, impartiality, and efficiency in the exercise of their functions, tasks, and commissions. Failure to comply will lead to prosecution and appropriate sanctions. The sanctions envisaged in the Law are applied in practice, including dismissal in certain cases.

## 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 compilation and dissemination of fiscal statistics follows national concepts and definitions, which are similar to the recommendations in *A Manual on Government Finance Statistics*, 1986 (GFSM 1986). There is a direct, reasonably transparent relationship with international standards. Overall, fiscal statistics are of good quality.

The authorities have no explicit plan to migrate to the *Government Finance Statistics Manual*, 2001 (GFSM 2001). However, they do intend to incorporate into the new information system and government accounting standards the ability to collect and process the information necessary to compile GFS according to the GFSM 2001. Also, the new government accounting law will introduce accrual accounting for all public entities, and the need to meet information requirements of international organizations. Furthermore, the authorities have expressed their agreement in principle to report to STA monthly and annual fiscal statistics in the format of the GFSM 2001 for publication in *International Financial Statistics* (IFS) and the *Government Finance Statistics Yearbook* (GFS Yearbook).

# 2.2 Scope

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

To facilitate understanding the scope of the fiscal statistics compiled and disseminated by Mexico, and their relationship to international standards, the structure of the federal public sector is set out and discussed below.

## **Federal Public Sector**

## I. Autonomous Bodies and Entities

- 1. Legislature
- 2. Judiciary
- 3. Federal Electoral Institute
- 4. National Commission on Human Rights

# **II. National Institute of Statistics and Geography**

### **III. Federal Executive**

## A. Centralized Public Administration

- 1. State Secretariats
- 2. Secretariat Agencies (without legal personality or own capital, attached to a secretariat)
- 3. Agrarian Courts
- 4. Federal Court of Fiscal and Administrative Justice
- 5. Attorney-General's Office of the Republic
- 6. Legal Advisory Office to the Federal Executive

## **B.** Parastatal Public Administration

- 1. Decentralized Agencies (with legal personality and own capital)
- 2. Entities with majority state ownership
- 3. National Credit Corporations (development banks)
- 4. Trusts with an organic structure, financial and nonfinancial
- 5. Bank of Mexico

The following definitions related to the institutional coverage of fiscal statistics used by the Mexican authorities are also useful to better understanding their scope:

- Federal government: Autonomous bodies and entities, plus the centralized public administration (I+II+IIIA);
- Federal government plus social security (Mexican Social Security Institute (IMSS), State Workers Security and Social Services Institute (ISSSTE): Central government (I+II+IIIA+2 decentralized agencies);
- General government: Central government, plus state governments (states and federal district), plus local (municipal) governments;
- Budgetary public sector: Federal government, plus 4 nonfinancial parastatal entities (Mexican Petroleum (Pemex), Federal Electricity Commission (CFE), IMSS, ISSSTE;<sup>1</sup> (I+II+IIIA+4 decentralized agencies);
- Parastatal entities: entities that belong to the parastatal public administration (IIIB);
- Entities under indirect budgetary control (152 entities): nonfinancial public sector, minus budgetary public sector (IIIB.1 less Pemex, CFE, IMSS, and ISSSTE+ IIIB.2 nonfinancial+ IIIB.4 nonfinancial);
- Nonfinancial public sector (NFPS): Federal government, plus nonfinancial parastatal public administration (I+II+IIIA+IIIB nonfinancial);
- Federal public sector: Nonfinancial public sector, plus financial parastatal public administration (I+II+IIIA+IIIB nonfinancial +IIIB financial);
- Public/economic balance or deficit/surplus of the NFPS: Revenue minus expenditure
  of the budgetary public sector, plus the deficit/surplus of the entities under indirect
  budgetary control;
- Public sector borrowing requirements (PSBR): Public balance (deficit/surplus) of the NFPS, plus financing requirements for other NFPS transactions not included in the public balance, plus the financing requirements of development banks and financial trusts.

Fiscal statistics are compiled and disseminated by the DGAEHP for the federal government (budgetary central government), federal government plus social security (consolidated central government), budgetary public sector, nonfinancial public sector, and public sector borrowing requirements. Fiscal statistics for general government are not compiled regularly, but could be provided on request. The focus of the fiscal statistics compiled and disseminated

<sup>&</sup>lt;sup>1</sup>In 2009, there were five nonfinancial parastatal entities: Pemex, CFE, Light and Energy of the Center, IMSS, and ISSSTE. In earlier years there were more such entities.

is on the federal government, the budgetary public sector, the NFPS, and the PSBR; and not on consolidated central government or general government as recommended in the *GFSM 1986*. The presentation formats of fiscal statistics differ from the tables recommended in the *GFSM 1986*, but their content is similar. Information is available for preparing the recommended revenue, expenditure, financing, and debt tables for most levels of coverage (except state and local governments). Fiscal statistics are compiled based on comprehensive information for all institutional units of a given government subsector. Thus, there are no preliminary data based on partial coverage. Financing and debt are not classified by residency of the counterparty to the liabilities, instead are classified by place of issue of the liabilities. Fiscal statistics for the state and municipal (local) governments are compiled and disseminated by INEGI.

The institutional coverage of the fiscal statistics for the consolidated central government used differs from the international guidelines because it does not include the decentralized agencies (IIIB, 1) engaging in noncommercial activities or the armed forces social security fund (which are included in the NFPS). This difference also applies to the general government coverage. It is important to note that these decentralized agencies do not engage in financing and that most of their revenue consists of subsidies and transfers from the federal government, which are recorded as expenditure. As a result, the institutional coverage of the fiscal statistics for federal government plus social security include virtually all the operations of the consolidated central government, as defined by international standards. The institutional coverage of the NFPS excludes state and local governments.

The DGAEHP posts every month on the SHCP's website (www.shcp.gob.mx), under Estadísticas Oportunas de Finanzas Públicas y Deuda Pública [Timely Public Finance and *Public Debt Statistics*], a set of 8 tables that provide monthly and cumulative figures on the financial position (revenue, expenditure, financing, overall balance) of the federal government, consolidated central government, budgetary public sector, and NFPS. In addition, it also posts a set of 6 tables with monthly data from 1990 to date, both in nominal terms and as percentage of GDP, that provide figures for domestic and foreign debt of the federal government and of the federal public sector (budgetary public sector debt appears only in the Public Account). Other information of national interest is also posted, such as federal resources transferred to states and municipalities, and budget execution data by unit of government. Furthermore, on a quarterly basis, the DGAEHP posts consolidated flows of funds by unit of government; detailed tables on the structure of revenue, expenditure, and financing for the budgetary public sector; debt tables with detail by currency, country, and maturity; and tables on the public sector borrowing requirements and broad national debt (historic stock of the public sector borrowing requirements). Finally, the SHCP publishes every quarter a document entitled *Informes sobre la Situación Económica*, las Finanzas Públicas y la Deuda Pública [Reports on the Economy, Public Finance, and Public Debt], which is also posted on the SHCP's website. This document contains, among other information, tables with formats similar to those referred to above.

Every month the BM publishes a document entitled *Indicadores Económicos* [*Economic Indicators*], which is also posted on its website (www.banxico.org.mx). This document contains, among other information, fiscal statistics compiled by the DGAEHP, for the federal

government, budgetary public sector, and NFPS. Lastly, on an annual basis, the INEGI publishes a document entitled *Estadísticas de Finanzas Públicas Estatales y Municipales de México* [*State and Local Public Finance Statistics of Mexico*], which is posted on its website (<a href="www.inegi.org.mx">www.inegi.org.mx</a>). This document contains detailed information on revenue and expenditure for states and municipalities, and other information for the 300 most important municipalities. INEGI also has available for online query a database for the 32 federal entities and 2440 municipalities.

# 2.3 Classification/sectorization

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

Fiscal statistics are provided separately for the various levels of government. The classification of revenue, expenditure, financing, and debt is in accordance with national concepts and definitions, broadly similar to those recommended in the *GFSM 1986*, but with major presentation differences. In general, a link can be established between the national classifications and those recommended in the *GFSM 1986*.

The revenues of the federal (and central) government are classified as established in the Fiscal Code of the Federation, in: taxes, social security contributions, and nontax revenue, with sub-classifications of tax revenues and nontax revenues. The revenue of the parastatal entities is classified in: sales of goods and services, social security contributions, and financial and other products. Various internal standards define these concepts, not always in line with international guidelines. The principal differences are: (a) the total amount collected as federal taxes is recorded under tax revenue of the federal (and central) government, including the portion allocated to other levels of government under fiscal coordination agreements in return for transferring their tax powers to the Federation (share of federal revenue to federative entities); (b) the nontax revenues of the federal (and central) government are defined by law, and include revenues from administrative fees and duties that bear no relationship to the service provided (for hunting, fishing, import, and commercial vehicle permits); and (c) revenues from investment in financial assets are recorded as nontax revenue, and not under lending minus repayments in expenditure. Revenues are also classified by institution receiving the revenue, and by whether or not it is derived from oil related activities.

Expenditures are classified in accordance with the current Classifier by Purpose of Expenditure, which allows for the identification of expenditure by economic type, that is, as current expenditure and capital expenditure, and includes sub-classifications (personnel services, materials and supplies; general services; subsidies and transfers; physical investment; etc.). A functional classification of expenditures is also used, grouping together expenditure items by public sector activity, into three major functions: (a) social development, (b) government functions, and (c) productive activities. These groups are subdivided by specific function.

In addition, an institutional classification of expenditures is used in accordance with the Expenditure Policy Guidelines for the corresponding year which, for budgetary purposes, groups federal government expenditure into administrative branches and general branches. The former are associated with the activity of a department, and the latter relate to overall expenditure items that cannot be associated with the activity of a department. The expenditures of parastatal entities are identified by entity.

Finally, expenditures are also classified as programmable or non-programmable. The former group contains expenditure items directly associated with a public program for carrying out government functions and social or productive activities, while the latter group contains expenditure items that cannot be associated with any specific program, such as interest payments, participations to states (of federal revenues), debit items from previous financial years, and expenditures incurred on behalf of third parties.

The main differences between the national concepts of expenditure and the international guidelines are: (a) the so-called third party operations are recorded as expenditure, these include transactions on behalf of third parties by the federal government and operations pending budgetary regularization that cannot be classified in timely fashion; (b) the financial cost is presented net of interest revenue, and includes in addition to interest, commissions and expenditures associated to public debt, as well as the fiscal cost derived from programs in support of bank debtors and soundness of the financial system; and (c) loans and equity contributions for policy purposes are recorded as capital expenditure, and not under lending minus repayments.

Financing is classified as domestic or external. In turn, domestic financing is divided into central bank, banks and other financial institutions, and private sector. Financing is also classified as federal government and agencies and enterprises. There is no domestic financing classification by instrument, nor any classification of external financing by instrument or by holder

Federal government debt is classified as domestic or foreign, and presented both in nominal terms and as percentage of GDP. Domestic debt and foreign debt flows and stocks are presented for any given period classified by instrument, but not by holder. The social security and decentralized agencies that conceptually form part of central government have neither domestic nor foreign debt. Debt guaranteed by the federal government is classified by beneficiary and is not broken down into domestic and foreign debt.

Federal public sector debt is classified as domestic or foreign. The external debt of the NFPS and the federal public sector is classified by location of the issuance of the instrument, by direct debtor to the rest of the world, by user of the resources, by country and currency, and by term; but it is not classified by residence of the creditor.

The classification of financing and debt as domestic or foreign is not classified based on the residence of the counterparty to the liabilities, instead it is classified by place of issue of the liabilities. Accordingly, domestic financing or debt is the one contracted on the local market and payable within Mexico in domestic or foreign currency, while foreign financing or debt

is the one contracted abroad and payable abroad in domestic or foreign currency. (Surveys are not carried out to determine the residence of debt holders.)

Finally, a number of items in the PSBR are not treated in conformity with the guidelines of the *GFSM 1986*. In particular: (a) increases in the cash reserves of the IMSS and the Housing Fund of ISSSTE are treated as investment expenditure instead of as financial assets (actuarial reserves that must, be retained by law, and are unavailable for financing operational expenditure of the entity, unless the event for which they were constituted arises); (b) all net loans to the private sector and operational losses of development banks are treated as expenditure, whereas only the subsidy component of such lending operations and related operational losses should be included as expenditure; and (c) contributions to funds are recorded as expenditures, instead of recording the nature of the actual expenditures of the funds.

A major event affecting fiscal statistics occurred in 2009. As a result of the new Pemex Law published in October 2008 and an associated modification of the Budget and Fiscal Responsibility Federal Law, the treatment of Pemex's PIDIREGAS (Long Term Productive Infrastructure Projects financed by the private sector) in the government budgetary accounts was changed. In previous years, when a buy-sell contract between the government and a private company for the construction of a non-financial asset existed, at the time the asset was delivered to the government a contingent government debt was recorded, instead of the acquisition of an asset and the associated expenditure (at the full value of the asset). Then, as the government made payments on the debt over time, expenditure in the acquisition of a non-financial asset and an increase in the assets of the government were recorded in the government budgetary accounts, equal to the amount of the payment on the period. This treatment resulted in significantly lower expenditure (and deficits) for the periods when the assets were actually acquired, as the full value of the acquisition was not recorded on that period but only gradually over time; and is inconsistent with international guidelines, which require the full value of the asset to be recorded at the time of acquisition.<sup>2</sup> However, the PSBR correctly recorded these transactions, as the expenditure on the acquisition of nonfinancial assets was recorded based on progress payments.

As a result of the laws mentioned, the contingent debt associated with Pemex's PIDIREGAS was recognized in the government accounts on January 31, 2009. Expenditure, public debt, and the assets of the government increased by the amount of the contingent debt recognized. In addition, a large pre-payment of the recognized debt took place, which lowered the outstanding public debt. This contingent debt recognition is in line with international guidelines, except that for statistical purposes the amount of the debt recognized should be distributed to the periods when the expenditures and debt were incurred. The large amount involved in this recognition distorts the government budgetary accounts for 2009, a reason

<sup>&</sup>lt;sup>2</sup> The treatment of an acquisition of a non-financial asset is different according to the guidelines of the *GFSM 1986* and the *GFSM 2001*. The 1986 guidelines would record the acquisition as a capital expenditure at the time of acquisition, while the 2001 guidelines record the acquisition as a nonfinancial asset and associated financing transactions, which does not affect expense or net worth.

why the figures for the year are shown without the impact of these transactions, and the amounts involved in the transactions are shown separately.

The treatment of stabilization funds and the classification of its transactions in fiscal statistics merit comment. There is an oil stabilization fund and other stabilization funds that aim to stabilize the flow of funds to government from oil and other resources. These stabilization funds are government trust funds at Nacional Financiera (NAFIN), their accounts are not incorporated into the fiscal statistics (which considers these entities to be financial entities) although INEGI considers them part of general government for purposes of the national accounts. The flow of funds from the government to the stabilization funds are classified as expenditure (capital expenditure in financial investment), and from the stabilization funds to the government as revenue (non-tax revenue). The classification of these transactions is not in accordance with international guidelines, which would treat them as financial transactions, whether the stabilization funds are a general government unit or a financial unit. It should also be mentioned that the oil stabilization fund engages in oil price hedging transactions using financial derivatives through the BM. These hedging transactions on the price of oil are treated as financial transactions of the stabilization fund and are not reflected in government accounts.

The legislature of each state and municipality approves its own revenue laws and expenditure budgets, as well as associated revenue and expenditure classifiers. Because state and local governments do not all have the same classifiers or use the same concepts, INEGI undertakes a process of methodological and conceptual harmonization, which allows the compilation of standardized statistics for states and municipalities.

## 2.4 Basis for recording

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

Revenue, expenditure, financing, and the public balance are presented on a modified cash basis. For budget monitoring purposes these include: (a) cash transactions; (b) offset operations (not involving cash movements) between revenue and expenditure and between expenditure and financing; and (c) operations in kind, at commercial value.

Debt is valued at face value. All transactions are recorded at the time of their placement and on the dates when the principal and the financial cost are paid. Domestic debt is recorded in domestic currency and foreign debt is recorded in the original currency. Gross domestic debt is recorded at face value, except in the case of treasury bills [CETES], which are recorded at discount value. Gross external debt is recorded at face value. Valuation is consistent with the guidelines of the GFSM 1986.

When reports are presented on external debt, other currencies are converted into U.S. dollars at the exchange rate prevailing at the end of the reference period, provided by the BM. To convert dollar denominated debt to national currency the exchange rate published by BM on its website is used. This rate is an average of the rates prevailing in the banking system and exchange houses two days before. Monthly debt flows are converted using the average

exchange rate for the period, and not the rate at which each transaction took place or the average for the day the transaction occurred. Debt stocks are converted using the rate for the end of the period.

### 2.4.2 Recording is done on an accrual basis

Transactions are recorded at a time close to payment, and more specifically when the Treasury of the Federation (Treasury) transfers its liquid resources in the banking system to the beneficiary. This represents the penultimate or last phase in the expenditure process, depending on whether the transfer is made directly to the ultimate beneficiary (90 percent of the cases) or not. Recording is consistent with the guidelines of the *GFSM 1986*.

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

All transactions are expressed on a gross basis, except for financing transactions and the acquisition of goods for resale by parastatal entities (change in inventories), which are correctly shown on a net basis.

## 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 main sources of information for the compilation of fiscal statistics on the federal government are the administrative and accounting systems that monitor budget execution and cover all budgetary units. These sources provide information on the whole range of economic flows and stocks. The information comes mainly from the accounting centers administered by the SHCP (Revenues, Federal Funds, and Public Debt). In particular, public expenditure figures are obtained from the accounts payable certified as paid by the Treasury (Federal Funds accounting center). This information is supplemented with information from other sources, primarily the Public Credit Unit.

The main source of information for parastatal entities is the Integrated Information System, briefly described in section 0.1.2 above. Through this system, all parastatal entities submit every month most of the information necessary for compiling fiscal statistics. In addition, parastatal entities submit every month directly to the Public Credit Unit, comprehensive information on flows and stocks of domestic and external debt. Only Pemex, CFE, and development banks are allowed to contract debt.

Once Congress approves the Public Account prepared by the Unit of Government Accounting and Reports on Public Management, currently in April of the following year, it becomes the source of information for compilation of final fiscal statistics on the budgetary public sector. The Public Account shows only annual figures, but procedures are in place for

adjusting the corresponding monthly information. More specifically, the adjustments made to the Public Account in its review and audit processes are incorporated into the fiscal accounts in the corresponding month.

The main source of information for the state and local (municipal) governments is INEGI's annual publication entitled *Estadísticas de Finanzas Públicas Estatales y Municipales de México* [State and Local Public Finance Statistics of Mexico]. The sources of information for this publication are: (a) for state governments, the administrative accounting records on the public accounts of each federal unit; and (b) for municipalities. INEGI is gradually discontinuing the use of a questionnaire and relying instead on their administrative accounting records (currently for the municipalities of 15 states).

The information necessary for compiling consolidated fiscal statistics for the various levels of government is available. Moreover, fiscal statistics are normally presented on a consolidated basis.

There are two major developments that will have a significant favorable effect on the quality of fiscal statistics in the near future: (a) the implementation of the Government Accounting General Law, and (b) the introduction of a new information system. The government accounting law mandates that national accounting standards follow the best international standards, applies to the three levels of government (federal, state, municipalities), is fully aligned with the budget process, and its records will constitute the official source for all statistics.

A tripartite National Council for Accounting Harmonization has been established to implement the law, with a timetable for the key actions to be taken to make the mandates of the law effective. The Council's website provides information on progress to date (www.conac.gob.mx). The SHCP's Unit of Government Accounting and Reports on Public Management acts as the Technical Secretariat for the Council, and an Advisory Committee composed of accounting and auditing experts—both public and private supports the work of the Technical Secretariat and the Council. Significant progress implementing the law has been made to date. It is expected that the mandates of the law be fully operational for the federal government by December 31, 2011 and for states and parastatal entities by December 31, 2012. By this latter date municipalities are expected to provide information on a regular basis.

A timetable for the implementation of the government accounting law is established in the law, which states that certain key actions must be taken by certain dates. Thus, the National Council for Accounting Harmonization by end 2009 must have issued the plan of accounts, budget classifiers, norms and methodology to determine the time of recording of revenues and expenditures, and the norms applicable to financial information and statements. This was met. By end 2010 the Council must issue the basic principles, the recording and valuation rules for assets, the structure of the charts of accounts and accounting manuals, and the methodological framework for public finances. The federal government and states by end 2009 must have drafted a program to implement the law. This was met. By end 2010 they must have their accounts aligned with the plan of accounts, harmonized budget classifiers,

norms for the time of recording of revenues and expenditures, and provide regular budgetary and accounting information in line with these technical specifications. By end 2011 the federal government accounting must operate in real time, the accounting records must be on an accrual basis, all entities must have charts of accounts and accounting manuals, and provide budgetary and accounting information. Finally, by end 2012, the accounting for states and federal parastatal entities must operate in real time, keep accounting records of assets and their valuation, publish budgetary and accounting information on their websites, and issue public accounts in the prescribed manner.

In November 2008 a technical assistance agreement was signed with the World Bank for the development of the Integrated Federal Financial Administration System (SIDAFF). This system was established by Article 14 of the Federal Law on Budget and Fiscal Responsibility, and the main technical characteristics of the financial information to be processed are described in articles of the General Public Accounting Law. The system should generate in real time budgetary, financial and economic statements for each public entity, and for each consolidated institutional aggregate, useful to: (a) meet the legal requirements associated with the presentation of financial information; (b) support the decision making process by the officials responsible for managing the public finances, and (c) enhance the transparency of public accounts and improve the quality of accountability to Congress and society as a whole. Among the expected outputs of the information system are fiscal statistics and information for the national accounts, for the general government and NFPS. It is expected that the information system be operational for the Executive by January 1, 2011 and fully operational by December 31, 2012.

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

The budgetary chart of accounts, and thereby the source data, are generally consistent with the classifications recommended in the *GFSM 1986*. There is no automated mechanism for generating fiscal statistics directly from budget execution data, but compilers know the procedures to be followed for converting the primary sources to the concepts in the *GFSM 1986*. The times of recording and valuation are in conformity with international guidelines. Fiscal statistics are fully reconcilable with the data presented in the Public Account, the official government accounts presented to Congress; the main difference is that for the Public Account, programmable expenditure is recorded on an accrual basis, whereas in the fiscal statistics it is recorded on a cash basis.

# 3.1.3 Source data are timely

Accounting and administrative records provide comprehensive, up-to-date data on the budgetary and non-budgetary federal public sector. The information is available 15–30 days after the end of the month, except for investment projects financed by the private sector, on which information is obtained 20 days after the end of every quarter.

No annual, up-to-date information is available in a timely way for compilation of fiscal statistics on the state and local governments, and thereby general government. Preliminary

data for state and local governments are available 8-12 months after the end of the previous year, while final data are available with a 17 month lag. It should be noted that notwithstanding the long lag, significant progress has been made in recent years to shorten the lag, which exceeded 30 months in the past.

# 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 non sampling error; the results of the assessments are monitored and made available to guide statistical processes

There are no significant problems in the coverage or integrity of statistical compilation. As pointed out above, fiscal statistics are compiled on the basis of complete information. The main sources of information on the federal public sector are cross-checked with other accounting or administrative records that allow for verification of their accuracy. Similarly, differences are checked between transaction flows and changes in stocks.

Preliminary fiscal statistics are compiled using the most up-to-date data that are appropriate for formulating and analyzing fiscal policy. All fiscal statistics are preliminary until the last revision is done with final, audited information, and the pertinent tables are labeled as preliminary. If discrepancies are noted later, corrections are made as applicable.

## 3.3 Statistical techniques

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

Fiscal statistics are based on complete information; as a result, procedures have not been established to allow for the estimation of omissions in the data. Even the data for fiscal statistics on the state and local governments are based on complete information for states, and 87 percent coverage of municipalities (by number of municipalities, higher as proportion of total revenue and expenditure). Consolidation of data for institutional aggregates follows international guidelines.

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

Not particularly relevant to the compilation of fiscal statistics. Bridge tables have been constructed in some cases to convert national presentations to international presentations.

# 3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information, where applicable

Information on revenue, expenditure, financing, and debt is routinely reconciled with the budgetary records of various SHCP departments, and with the bank balances of the entities in question.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Significant statistical discrepancies are investigated and the pertinent series are adjusted or corrected, depending on the outcome.

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

Financing data in the fiscal statistics are compared every month with the corresponding monetary data from BM at a very aggregate level, and large differences are investigated. The official public balance is derived from the sources of financing, *i.e.*, from changes in debt and in available financial assets. Any statistical discrepancy with revenues and expenditures is included as a separate item in the fiscal statistics. Such statistical discrepancies relate mainly to temporary operations and exchange rate differences, and are generally small.

#### 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)

Revisions incorporate all changes resulting from available up-to-date data. The characteristics, reasons, sense, and magnitude of changes in the source data that give rise to revisions are known. Source data reliability is continuously assessed. Studies on revisions to fiscal statistics are carried out routinely and used to improve the quality of the statistics, but are not disseminated.

# 4. Serviceability

## 4.1 Periodicity and timeliness

#### 4.1.1 Periodicity follows dissemination standards

Statistics for central government operations and for NFPS operations are disseminated monthly and annually, and statistics for central government debt are disseminated monthly. Thus, SDDS periodicity requirements are met.

## 4.1.2 Timeliness follows dissemination standards

Monthly statistics for central government operations are released no later than 30 days after the end of the reference month, which meets the SDDS requirement. Mexico adopted in the past a flexibility option for the timeliness of these statistics, but no longer requires it and has requested to discontinue its use.

Annual statistics for general government operations are not disseminated routinely and are available only 9 to 17 months after the end of the reference period, i.e., exceed the one quarter period stipulated by the SDDS. For this reason, Mexico has adopted a flexibility option for the timeliness of statistics for general government.

Quarterly statistics for central government debt are disseminated no later than 30 days after the end of the reference quarter, i.e., within the one quarter period stipulated by the SDDS. Monthly statistics are disseminated with the same lag.

# 4.2 Consistency

#### 4.2.1 Statistics are consistent within the dataset

The various accounting identities (deficit/surplus = financing, principal components = sum of the components, functional expenditure = expenditure by economic type, domestic financing = change in domestic debt, external financing = change in external debt, paid transfers = received transfers) are observed for fiscal statistics. The only exception occurs in the case of the statistics for the state and local governments, in which consistency is not verified between domestic financing and the change in domestic debt (these entities have no external debt), and no satisfactory checks can be made of transfers between state and local governments for resources classified as financing.

Monthly statistics use the same concepts, definitions, and classifications used for annual statistics. Also, the sum of monthly statistics equals quarterly and annual statistics.

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

Statistics are consistent with expected trends and reflect discretionary changes, external shocks, and economic activity. Time series are presented with the same methodology and coverage for adequate periods of time. Breaks in the time series and the reasons for them are clearly identified.

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

Fiscal statistics are provided quarterly to INEGI to compile quarterly national accounts. INEGI uses this information for the federal government and collects directly the information for the rest of the general government sector. INEGI uses the Public Account as its source for annual national accounts, which is also the source for final fiscal statistics. SHCP and INEGI classify the stabilization funds in different sectors, as well as some other small institutions.

This difference in coverage, as well as the difference in basis of recording (cash versus accrual), lead to differences between fiscal statistics and national accounts statistics.

For the data on government financing transactions with nonresidents, residence is determined by location of issue of the liabilities and not by residence of the creditor, and on public external debt as described in 2.3.1 above; data are consistent with balance of payments data. Banking sector transactions in fiscal statistics are broadly consistent with monetary statistics.

In general, reconciliation of data across macroeconomic datasets is not done on a regular basis.

# 4.3 Revision policy and practice

## 4.3.1 Revisions follow a regular and transparent schedule

The main revision of data occurs when the information for the Public Account becomes available. This information is audited and final, and is currently available four months after the end of a year. Revisions are also made in the month following publication of preliminary data. In practice, revisions follow a regular cycle known by users but do not follow an established schedule. No documentation of the revisions is provided to users.

#### 4.3.2 Preliminary and/or revised data are clearly identified

Preliminary data and revised data are clearly indicated in statistical publications. Revised data are disseminated in the same media and with the same level of detail as original data. There is sufficient consistency between the preliminary data and the final data, so preliminary data can be used confidently in policy formulation and analysis.

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

The public is not provided with information on data revisions, and analyses comparing preliminary data with final data are not disseminated for major aggregates.

## 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)

Fiscal statistics can be and are used in the process of budget preparation and monitoring, and in the formulation of other government economic and fiscal policies. The statistics are presented in a way that allows identification and comparison of the principal aggregates. Time series are also supplied. In recent years the public has been provided with increasing amounts of information on government finance and public debt. The presentation of the information can be improved to facilitate its comprehension by general users and

international comparisons. To this end, the inclusion of a few selected tables highlighting the principal balances and following the guidelines of the *GFSM 1986* would be useful.

Fiscal statistics compiled and disseminated focus on the federal government, budgetary public sector, NFPS, and PSBR levels, rather than on consolidated central government and general government. In general, a link can be made between the national classifications and those in the *GFSM 1986*, but this requires in some cases access to detailed information on that link, which is not available to the public. As a result, the current presentation of the statistics does not facilitate international comparison.

# 5.1.2 Dissemination media and format are adequate

Monthly, quarterly, and annual fiscal statistics are posted on the SHCP's website. Press releases usually accompany the release of new statistics. Fiscal statistics are disseminated in a way that facilitates access by users, and long time series are available.

## 5.1.3 Statistics are released on a preannounced schedule

A data release calendar is announced one year in advance on the SHCP's. The publication date can be adjusted one week in advance, but usually it coincides with the pre-announced date. INEGI does not have an advance release calendar for the dissemination of fiscal statistics of states and municipalities.

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

Fiscal statistics are released at the same time to all parties through the SHCP's website. Congress receives the statistics shortly before their public release. In addition, a press release is published, informing the public that the statistics are available, usually from 2.30 p.m. on the appointed day.

#### 5.1.5 Statistics not routinely disseminated are made available upon request

Non-published, non-confidential disaggregated data are supplied on request. To this end, users are provided, on the SHCP's website, with a name, telephone number, and e-mail address.

# 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

Four methodological notes with concepts, sources, and methods are posted on the SHCP's website: one on nonfinancial public sector operations, one on public sector borrowing requirements, one on public debt statistics, and one on the fiscal balance in Mexico. In addition, as Mexico is an SDDS subscriber country, methodological notes are published on

the IMF's Dissemination Standards Bulletin Board (DSBB) concerning central government and general government (and NFPS) operations, as well as on central government debt. The documentation indicates some of the differences from internationally accepted standards. Finally, bridge tables could be provided upon request, showing the existing links between the source data and fiscal statistics.

INEGI provides a brief methodological note on conceptual and coverage matters of municipal statistics. In addition, a document containing detailed information on the compilation process for state and municipal statistics is published on the institution's website.

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

General technical descriptions are published on the concepts, sources, and methods used. However, experts may need to seek further information to assess the attributes and shortcomings of the fiscal statistics.

#### 5.3 Assistance to users

# 5.3.1 Contact points for each subject field are publicized

The name, telephone number, and e-mail address of the person who can be consulted regarding fiscal statistics are posted on the SHCP website. This person provides efficient support and advice to all users, regardless of their level of specialization, and can provide technical corrections on any incorrect use of the statistics. Contact information is also posted on INEGI's website.

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

A detailed catalog of the services provided by the SHCP is posted on the SHCP's website.

Table 2. Mexico: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics (Compiling Agency: Secretariat of Finance and Public Credit)

	NA	52, 50		ment		argely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria
Element		0		LNO	NO	Comments
0. Prerequisites of quality	l .			21.10	1,0	
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity			•			
1.1 Professionalism		X				
1.2 Transparency			X			Congress has prior access to fiscal statistics, which is not made public.
1.3 Ethical standards		X				
2. Methodological soundness			•			
2.1 Concepts and definitions			X			There are no current plans to migrate to the GFSM 2001.
2.2 Scope				X		Fiscal statistics for the general government are not routinely compiled. The tables recommended by the <i>GFSM 1986</i> are not compiled.
2.3 Classification/sectorization				X		There are major presentational differences with <i>GFSM 1986</i> . The residence criterion for classification as domestic or foreign is not followed.
2.4 Basis for recording		X				•
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability	1	I				
4.1 Periodicity and timeliness			X			Annual statistics for general government are not disseminated routinely, and would only available upon request with a minimum 9 month lag.
4.2 Consistency			X			Reconciliation of data across macroeconomic datasets is not done on a regular basis.
4.3 Revision policy and practice			X			Revision studies are not made public. Revisions do not follow an established schedule.
5. Accessibility						
5.1 Data accessibility			X			No advance release schedule for state and local government statistics.
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

#### Recommendations

- Continue working to improve the timeliness of source data for state and local government with a view to complying with SDDS requirements on the timeliness of statistics on general government operations.
- Establish regular meetings with users to obtain feedback on whether their data needs are being met.
- Make public the prior access to fiscal statistics by Congress.
- Adopt the *GFSM 2001* methodology for the compilation of fiscal statistics, and compile and disseminate fiscal statistics for general government on a regular basis.
- Use the residency criterion to classify financing and debt as domestic or foreign.
- Include the armed forces social security fund together with the other social security funds, in the coverage of the federal government plus social security (consolidated central government).
- Reassign for statistical purposes the total amount of the Pemex's PIDIREGAS
  contingent debt recognized in 2009 to the periods when the expenditures and debt
  were incurred.
- Recognize in the government budgetary accounts any outstanding contingent debt associated with PIDIREGAS and similar transactions, and record new transactions of similar nature in accordance with international standards.
- Convert foreign currency flows into domestic currency preferably using the exchange rate at which the transaction took place, or at least the average exchange rate for the day the transaction took place.
- Undertake regular reconciliation of data across macroeconomic datasets.
- Establish a regular schedule for data revisions, and make revision studies public.
- Include in the SHCP's website a few selected tables highlighting the principal balances following the guidelines of the *GFSM 1986*.
- Update the presentation and navigation of the website to make it more user friendly.
- Ensure trained staff that retires is replaced by qualified personnel in an orderly manner.
- Ensure the new government accounting standards to be introduced are aligned with international standards, and develop the new government information system such that government finance statistics can be compiled automatically from budgetary accounts in accordance with international methodology.

#### III. MONETARY STATISTICS

## 0. Prerequisites of Quality

# 0.1 Legal and institutional environment

0.1.1 The responsibility for collecting, compiling and disseminating statistics is clearly assigned

The Mexican banking system is governed by the Political Constitution of the United Mexican States (Article 28, paragraphs 6 and 7) and the following laws that have undergone various amendments and additions: the Bank of Mexico Law, the Law on Credit Institutions, the General Law on Auxiliary Credit Organizations and Activities, the Law on Financial Groups, and the Credit Bureau Law.

The Bank of Mexico (BM) is in practice responsible for collecting, compiling, and disseminating monetary statistics (MS), even though the data source is shared with other institutions, such as the Secretariat of Finance and Public Credit (SHCP) and the National Banking and Securities Commission (CNBV). The legal right of the BM to compile MS derives essentially from Article 62 of the Bank of Mexico Law. That law establishes that the BM may, in coordination with the other aforementioned competent authorities, prepare, compile, and publish economic and financial statistics, as well as operate information systems based on them and collect the data required for those purposes.

Articles 40 and 41 of the BM's By-laws establish guidelines for publication of accounting information. Those articles stipulate that the BM must publish: (1) its general balance sheet within five business days following the date on which it is approved; (2) consolidated statements of accounts for the months that have elapsed in the current fiscal year up to the date of approval of the balance sheet within 15 business days following said approval; (3) the consolidated statement of accounts of the immediately preceding month (except December) within the first 20 business days of each month; and (4) every week, summary information on its assets, liabilities, and net worth in the official gazette *Diario Oficial de la Nación*, with preliminary figures at close of business each Friday and within the following three business days. That information must be signed by the Director of Accounting, and, in his/her absence, by the Manager of Budget and Accounting. The BM also produces other publications on a daily, weekly, or monthly basis that are directly related to decisions of the BM's Governing Board, in order to disseminate the evolution of indicators and the principal macrofinancial variables, such as the financial and MS for the banks as a whole and for each group of nonbank financial intermediaries.

The CNBV is an entity separate from the BM, endowed with technical but not budgetary autonomy, given that for budgetary purposes it depends on the SHCP. In addition, the CNBV receives contributions from supervised financial corporations to help cover inspection costs. The CNBV (a devolved agency) has its own legal framework known as the National Banking and Securities Commission Law. It has the authority to establish rules regarding accounting information of its supervised financial institutions and the criteria to govern their recording,

valuation, and presentation of financial information by the CNBV. The CNBV publishes statistical data for each financial institution it supervises pursuant to Article 4 of the CNBV Law. SHCP does not disseminate financial statistics.

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

The BM has introduced procedures to guarantee the flow of information between the Office of the Manager of Budget and Accounting (GPC) and the Office of the Manager of Macrofinancial Analysis (GAM) with regard to the BM's statement of accounts. In addition, the BM has an institutional mechanism for sharing non-confidential information from financial corporations among BM users, which is stored in the Economic Information System (SIE) database. The flow of information takes place through automated systems that allow authorized BM staff access to the SIE. There is also information sharing between the BM and the CNBV through online communication servers.

In order to coordinate on matters related to the information provided by the financial corporations, resolve issues related to data requirements and data sharing, and avoid duplication in reporting requirements, a Committee to Coordinate Information Flows among Authorities (Committee) was established on July 6, 2000, composed of representatives of the SHCP, the BM, the CNBV, the Bank Savings Protection Institute, and the National Commission for the Defense of Customers and Financial Services. The Committee held periodic meetings until an agreement was reached on a single set of report forms (Catálogo Mínimo Sectorizado - *CMS Report*) shared by the referred institutions, which has been used since December 2005. However, this Committee has not met since then. Instead, issues related to financial sector data are discussed bilaterally among institutions when they arise. Beginning in December 2005, the CNBV has collected the data in the *CMS Report* and made it available to the BM through the online servers mentioned in the previous paragraph.

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

The confidentiality of the data that financial corporations provide to the BM directly or through the CNBV is established in Article 58 of the BM Law. That article on bank secrecy applies to the BM, the members of its Governing Board, and to its officers and employees. Moreover, Article 117 of the General Conditions of Employment of the Bank of Mexico (CGT) established that revealing operating secrets or confidential BM matters are grounds for dismissal, without the BM incurring any liability.

Whenever the BM requests information protected by bank, trustee, or similar secrecy provisions, that information is kept confidential. For instance, the form called List of Liabilities (Relación de Responsabilidades), which contains the name of each enterprise or individual engaged in borrowing transactions cannot be divulged, except as part of some aggregate of the type of debtor or loans characteristics. Furthermore, when information is collected by means of surveys (for instance, credit card, consumer, and mortgage credit, bank credit market conditions, factors influencing banks' cash balances, customers' perceptions of bank lending), individual reporters are consulted in advance regarding the nature of the data

to be collected and the purpose of the survey. The aggregated statistical findings are also shared with respondents.

The BM has some automated procedures to prevent the dissemination of confidential data. Access to confidential data is restricted to authorized BM personnel using access passwords. In addition, there is a registry of access to information and changes made (Bitácora). Aggregation rules have been established to avoid disclosing confidential data from individual or very large banks.

0.1.4 Statistical reporting is supported by legal mandate and/or measures implemented to encourage voluntary response

The legal provisions underpinning the obligation of financial corporations to report to the BM are contained in the BM Law. Article 36 stipulates (1) that financial corporations are obliged to provide the BM with the information it requires regarding their operations in order to fulfill its functions appropriately; and (2) that, at the request of the BM, the financial system oversight commissions shall visit the financial corporations to review, verify, and evaluate the information they may have presented. BM staff may take part in those visits. The BM also reaches voluntary agreements with the financial corporations in order to gather information (surveys) on short-term issues related to developments in the principal macrofinancial variables.

Article 97 of the Law on Credit Institutions establishes that financial corporations must provide the information and documentation requested by the SHCP, the BM, and the CNBV, by the deadlines stipulated by those institutions. Pursuant to this provision, the financial corporations provide the CNBV with their institution's data on operational and financial programs, income and expenditure, integrated indicators, and any other financial information needed to assess the performance and development of the Mexican banking system.

In addition, Article 51-A of the General Law on Organizations and Auxiliary Credit Activities stipulates that bonded warehouses<sup>3</sup> and exchange bureaus shall submit the information and documentation requested by the SHCP, the BM, and the CNBV, by the established deadline. According to Article 12 of the Credit Bureau Law, Credit Rating Agencies are governed in their operations and activities by this Law and by any general provisions issued by the BM. Article 17 establishes that these Agencies shall be subject to inspection and supervision by the CNBV, to which they must pay contributions in an amount assessed by the SHCP.

The BM Law contemplates a generic set of sanctions for noncompliance. However, the level of compliance by financial corporations is generally acceptable and it is not necessary to impose sanctions for failure to provide information. The BM maintains close contact with the Mexican Bankers' Association (the professional association for banking institutions) and, when the need arises, this forum is used to discuss problems of noncompliance or

<sup>&</sup>lt;sup>3</sup> Since the last reform of the Law in August 2008.

information quality with the representatives of the institutions concerned. Nevertheless, in serious cases, fines can be levied for reprocessing data, by charging the single account that the BM holds for each institution, although no such cases have occurred in at least the past 15 years. If inaccurate data are provided by an institution that substantially distort the statistics published by the BM, the public will be informed of the revisions made via a press release and fines imposed on the institution for the beach of regulations. There are no recent examples.

The BM provides appropriate support with regard to the preparation and presentation of the forms used by reporting financial corporations. In addition to providing pertinent instructions and procedures for preparation and validation of the data, the BM also appoints an officer of the Bank to assist the financial corporations with all aspects related to the reporting of information. BM fosters the collaboration of respondents by trying to build an atmosphere of good faith.

#### 0.2 Resources

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

The MS are compiled by two BM divisions, the Office of the Manager for Monetary Analysis (Sub-Gerencia de Análisis Monetario, SGAM) and the Office of the Manager for Financial Information (Sub-Gerencia de Información Financiera, SGIF), consisting of a professional staff of 24 members (seven accountants, five business administrators, nine economists, two actuaries, and one engineer). Each employee has a personal computer and access to the Internet. The human resources directly involved in collecting, validating, and disseminating MS are considered adequate.

On average, the staff engaged in the production of these statistics has had a solid academic education (with at least a degree in accounting or economics), as well as general and specific training provided by the BM. This group consists of persons with (on average) some 15 years of experience in monetary statistics. They attend courses taught by the IMF on the methodology of the IMF's *Monetary and Financial Statistics Manual 2000 (MFSM 2000)*, other courses offered in cooperation with the Escola de Administração Fazendária (CECAB) in Brazil, the Center for Latin American Monetary Studies (CEMLA), as well as training courses at various central banks in the European Community. Each MS compiler is responsible for all aspects of the financial corporations for which he or she is responsible. Rotation of work usually occurs every two years and consists of changes in the responsibility for individual financial corporations. Final validation of each institution's figures is done by a coordinator, who is also responsible for incorporating the files in the Basic Banking Information System (SBIB) database.

# 0.2.2 Measures to ensure efficient use of resources are implemented

The Managers' Offices within the BM's Directorate General of Economic Research that are engaged in compiling MS follow procedures that guarantee efficient use of resources. They include: (1) informing staff in advance of plans to introduce new statistical tables or improvements to already existing tables; (2) cross-checking macroeconomic data in order to identify and minimize the differences between them, thereby fostering the standardization of methodologies; and (3) applying various validation mechanisms during data processing to ensure that the data are as reliable as possible. While no cost is imputed to the preparation of MS, since 2005 the responsibility for collecting individual other depository corporations (ODC) data has been given to the CNBV only, avoiding duplication of effort. Source data for ODC are collected by MS compilers through access to the CNBV server. Once that phase is completed, the information is stored in the Basic Banking Information System (SBIB) and in the SIE. In the latter, concepts and data series are linked for classification and automated generation of the MS, including those published on the BM's website. Subsequently, the information is processed in various personal computers and then, when the databases have been integrated, they are also managed by the servers. The procedures guarantee efficiency in data gathering and storage.

At present there is no system for establishing the cost of each area of responsibility. However, program funds are subject to execution priorities, which are analyzed by a committee made up of systems specialists and users.

#### 0.3 Relevance

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

The BM recognizes the importance of keeping users involved in changes on its statistics<sup>4</sup>. To this end, whenever there is a change of methodology, consultations and meetings are held with users. Also the BM invites the financial community to presentations of its statistical bulletins and research papers. Moreover, the BM staff responsible for compiling MS routinely participate in relevant statistical meetings and conferences organized by international and regional agencies.

The BM monitors developments in the financial sector and incorporates any major changes in the statistics. It keeps track of new laws and regulations affecting the financial system. It also keeps track of the financial press and, when called for, explanations are given and published. The BM does not conduct periodic user surveys, or regular meetings with users. <sup>5</sup> Its policy is to reply to all the e-mails it receives (under the Transparency Law), and through the replies it keeps track of user satisfaction.

<sup>&</sup>lt;sup>4</sup> See example of user involvement in footnote of Section 0.4.1.

<sup>&</sup>lt;sup>5</sup> Currently, the GAM is developing a survey to assess the usefulness of the monetary statistics.

# 0.4 Other quality management

## 0.4.1 Processes are in place to focus on quality

The BM recognizes that the quality of the statistics is essential for accurate analysis of the monetary situation and for formulating and implementing monetary policy. In addition, quality fosters users' confidence in the data. Accordingly, BM staff compiling MS exercise continuous and rigorous control of the coverage, timeliness, and veracity of the data. To that end, the methodology employed in compiling MS is discussed in working groups<sup>6</sup> in the Directorate General of Economic Research.

At the same time, the BM provides compilers and users of MS with appropriate basic infrastructure to foster data quality. For instance, the information on financial corporations is available in databases that allow cross-checking of various aspects of a transaction conducted by those corporations.

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

An internal management review mechanism has been implemented with regard to the MS compilation process. This mechanism consists of a manual of procedures where the different tasks performed by MS compilers are documented. Internal audits, carried out by an independent BM unit, are conducted periodically to ensure that the manual of procedures is followed. It is expected that this mechanism will help streamline administrative processes since the purpose of the audit is to examine the effectiveness of the controls in place and ensure their application by each analyst.

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

Recognizing the fact that there are alternative dimensions of data quality, the BM aims at timely dissemination of accurate data, but when a trade-off arises, it publishes provisional data, indicating such with a footnote. Once quality requirements have been met, data become final. Improvement in data availability and presentation are identified through contacts with internal users of MS and other institutions responsible for the production of source data, such as the CNBV.

Compilers of MS receive IT support from the Directorate of Systematization of Economic Information and Services (DSIES). MS compilers and DSIES work closely together to establish the requisite budget appropriations and allocate resources in accordance with the priorities agreed upon as part of an annual program. These tasks are adequately funded and

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<sup>&</sup>lt;sup>6</sup> A recent example related to the introduction of a new pension system by the Government Workers Security and Social Services Institute (ISSSTE), to discuss among compilers and users of MS how to treat the ISSSTE, including the impact on government liabilities and private sector savings.

requests for additional resources are generally accepted by the Governing Board and other internal organs of the BM.

# 1. Assurances of integrity

# 1.1 Professionalism

# 1.1.1 Statistics are compiled on an impartial basis

The autonomy granted to the BM under the constitution and Article 62 of the BM Law establishes that it is competent to collect the information needed to compile economic and financial statistics and provides for coordination among financial authorities. Moreover, to reduce the possibility of breaches in bank secrecy in the production of statistics, the BM, in agreement with the CNBV, publishes only aggregate data. Legal provisions also safeguard the professional autonomy of BM staff.

The tradition and techniques of professionalism are encouraged, as indicated in the articles on the rights and duties of employees in Chapter IV on the *General Conditions of Employment* of the BM.

Professional skills are a prerequisite for the hiring of personnel and they are also a paramount consideration for promotion. The BM encourages professionalism among its staff. The BM promotes participation by staff at international meetings in which BM studies are presented. It also encourages professionalism and productivity by awarding bonuses. The head of the SGIF participates in the IFC Committee on Central Bank Statistics, which operates under the auspices of the Bank for International Settlements.

1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations

The sources selected for the compilation of monetary statistics meet the statistical requirements of the BM's Directorate General of Economic Research. The definitions and methodologies used are those best suited to obtaining the information on financial activities needed for the Board of Governors for decision-making.

The BM encourages its staff to write papers describing the methodology used in compiling monetary statistics (e.g., monetary aggregates, financing of nonbank sectors, financial statistics developments in *Resources and Obligations*), duly supported by research, relevant bibliographical sources and including personal or institutional points of view, where necessary.

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

MS compilers monitor the information published by the press and others that relates to the monetary statistics on a regular basis. BM comments on erroneous interpretation of its

statistics if deemed truly significant and seeks to prevent misinterpretation or misuse of statistics by providing explanatory notes in its press releases. In addition, footnotes provided under the statistical tables contain some information about the changes in the compilation methodology, which is useful to data users, thus contributing to preventing erroneous interpretations. In cases of misinterpretation, the relevant party is contacted informally except in more important instances, which occur very rarely, when the BM invites the party involved to take part in a review of the matter and provides the pertinent arguments, in some cases in the presence of a Deputy Governor.

## 1.2 Transparency

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

Mexico subscribes to the IMF's Special Data Dissemination Standard (SDDS). Its metadata on monetary statistics are accessible on the IMF's Dissemination Standards Bulletin Board (DSBB) and were last updated in December 2009. The BM's website provides a link to the Mexico page on the DSBB. Electronic versions of the relevant laws and regulations are available to the public in Spanish on the BM and CNBV websites. The BM website also has (1) a mailbox for receiving and dealing with users' questions and comments and (2) a search engine by topic and concept. Through these tools, users can access additional information published by the BM.

1.2.2 Internal governmental access to statistics prior to their release is made known to the public

No government agency outside the BM has access to MS prior to their release.

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

All published monetary information bears the BM logo and captions specifying the source of the basic data. There is also a statement to the effect that the statistics are the sole responsibility of the BM. All BM publications cite the data source used.

The BM does not explicitly request acknowledgement of the source when its monetary statistics are reproduced or used by third parties, since it is common practice to identify data sources.

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

Any major change in methodology, data sources, and statistical techniques are announced in advance in articles published in bulletins, briefing sessions, or press releases.<sup>7</sup> The latest

<sup>&</sup>lt;sup>7</sup>In the case of the latest methodological revision of the monetary aggregates, the previous methodology coexisted for two years with the new one, to facilitate comprehension of the scope of the changes made.

major change in methodology occurred in 2000 and since then data based on the old and new methodologies are being disseminated, to allow users understand breaks in some time series.

Methodological changes are also announced—through press releases—when revised statistics are published. They are accompanied by a note explaining the changes in methodology and the appropriate link with the historical data. The BM's website has a link for this purpose.

#### 1.3 Ethical standards

#### 1.3.1 Guidelines for staff behavior are made known to staff

In general, the codes of conduct for staff are found in the BM Law, the Federal Law on the Administrative Responsibilities of Civil Servants, and in the CGT. Article 46 of the BM Law grants the Governing Board authority to approve the CGT between the Bank and its staff and the Bank's by-laws. Article 61 of the BM Law establishes that the Federal Law on the Administrative Responsibilities of Civil Servants applies to members of the Governing Board and to BM staff. Article 8 (section IV) of the same Law requires all civil servants to protect the information to which they have access and to prevent its unlawful use. Furthermore, Article 24 of the CGT specifies that BM personnel must use discretion in the exercise of their duties, keeping BM matters strictly confidential.

Article 26 of the BM Law contains specific provisions regarding the operations of financial institutions, including provisions on reporting requirements. These provisions (Circular 2019 of the BM) clearly establish how data are to be presented and the responsibilities incurred by the institutions. Consequently, there is rarely a conflict of interest.

Senior BM management ensures that ethical standards are observed in their area of responsibility. Under the BM Bylaws, there are special committees, composed of officers from different departments, to settle cases of breaches of regulations. Newly hired personnel are provided with a copy of the CGT, which is also available on the BM intranet.

The BM, the SHCP, the CNBV, and the Chamber of Deputies have on their respective websites a link to their legal framework, providing access to current laws governing the financial sector. The Chamber of Deputies website also carried the Federal Law on the Administrative Responsibilities of Civil Servants.

## 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 concepts and definitions used by the BM in compiling monetary statistics generally follow the guidelines contained in the MFSM 2000; for instance, the concept of residency,

identification of institutional sectors, valuation of financial assets at market prices, accrualbasis accounting, and presentation of assets and liabilities in gross terms.

In accordance with the *MFSM 2000*, the BM compiles the BM's sectoral balance sheet, which includes the BM's principal assets and liabilities. This information is published on a weekly basis as *Principal Headings in the Statement of Accounts* and each month as *Resources and Obligations*. In this statistical framework, assets are classified as (1) international reserves, as defined in the BM Law (that is to say, net of obligations in foreign currency and gold with a maturity of no more than six months; net international assets are included as a memorandum item); (2) investments in government securities; (3) credit to the federal government; (4) credit to various financial intermediaries, distinguishing between commercial banks, development banks, and development trusts; and (5) credit to government agencies (loans taken over by the Bank Savings Protection Institute). Liabilities are classified as (1) monetary base; (2) monetary regulation bonds; (3) deposits of financial intermediaries (commercial and development banks, Fobaproa, Fameval, and other trust funds); (4) monetary regulation deposits; (5) federal government deposits; (6) obligations to the IMF; (7) foreign monetary authorities; and (8) other liabilities and net worth (net of other assets).

The BM also publishes balance sheets for the commercial banks, development banks, and nonbank depository corporations, covering assets and liabilities classified by institutional sector. The sectoral balance sheets contain detailed information on credit to the private and public sectors. The accounts and breakdowns are classified in accordance with the *Resources and Obligations* statistical framework, in which operations are first distinguished between resident or nonresident. The *Resources* category shows all gross assets, grouped according to their degree of liquidity, including (1) currency, (2) bank instruments, (3) loans granted, (4) financial instrument holdings, etc. The *Obligations* category comprises gross liabilities grouped according to maturity, net worth, and outturn. The main headings under *Obligations* are (1) deposits of the general public, (2) bank loans, (3) obligations derived from rediscounting; and (4) financial instruments. The BM also publishes balance sheets for a number of other financial intermediaries that participate in the financial intermediation process. Their balance sheets are also arranged in accordance with the statistical framework of *Resources and Obligations*.

The monetary aggregates (MA) produced and disseminated by the BM are: (1) *Base Money* (currency in circulation and current account sight deposits of commercial and development banks in the BM); (2) *M1 or narrow money* (currency outside banks—currency in circulation minus cash in banks, residents' checking accounts, and current account deposits); (3) *M2* (*M1* plus residents' accounts—sight deposits other than those in checking and current accounts and local and foreign currency-denominated time deposits of the private sector in banks—public and private securities held by residents, and other instruments held by pension funds); (4) *M3* (*M2* plus bank deposits of nonresidents (that is to say, sight and time deposits of persons residing abroad) and federal government securities held by nonresidents; and (5) *M4* (*M3* plus deposits of residents and nonresidents in foreign branches of local banks). In addition, the BM publishes a series of broader monetary aggregates (*M1a*, *M2a*, *M3a*, *and M4a*), which add public sector savings (those of the federal, municipal, and state

governments; nonfinancial state enterprises; and development trust funds) to the private savings reported in monetary aggregates M1-M4.

The broad definitions of MA as disseminated by the BM are neither comparable internationally nor in line with key principles of the *MFSM 2000*. The *MFSM 2000* does not prescribe a uniform definition for MA since definitions vary from one country to another. However, there are principles<sup>8</sup> such as: (1) MA must be liabilities of money issuing sectors (depository corporations), with few exceptions, and assets of money holding sectors; (2) foreign currency liabilities of depository corporations are included only if there is proof of co-circulation of a foreign currency; (3) all liabilities should be short-term (one year in most countries but up to two years in some countries) and unrestricted; (4) liabilities of nonresidents or in foreign branches of domestic banks are never included in the MA. These principles are not followed in the BM's definition of M2, M3, and M4 because these aggregates try to capture financial savings of private and public sectors. Following the previously mentioned principles, this report suggests the BM to consider changing the definition of the MA, separating them from other measures of financial wealth by the private and public sectors included in the current definition of MA.

The MFSM 2000 recommends consolidating data from sectoral balance sheets in surveys containing stock and flow data for the assets and liabilities of the units covered by the respective survey, that is to say, the Central Bank Survey (CBS), Other Depository Corporations Survey (ODCS), and the Depository Corporations (DCS). These surveys contain a basic set of data, which according to the MFSM 2000 constitute a valuable tool for macroeconomic analysis. The survey for each subsector provides an analytical presentation of the intermediation performed by the subsector concerned. The BM began disseminating these surveys since 2003 and continues disseminating them monthly.

## 2.2 Scope

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

The scope of the data (which refers to the depository corporations survey (DCS) for purposes of this exercise) is fully consistent with the guidelines in the *MFSM 2000*. In addition, the MS in Mexico also cover other financial corporations (OFC) that are not depository, making Mexican MS one of the best in terms of coverage in the Latin-American region. The financial corporations sector consist of: (1) the BM; (2) other depository corporations (ODC), comprising commercial banks, development banks, financial leasing companies, factoring companies, financial companies of limited business, savings and loan associations, credit

<sup>&</sup>lt;sup>8</sup> Chapter VI of the *MFSM 2000*, paragraphs 281, 284, and 316 to 324 on money holding and issuing sectors; Box 6.1 defining instruments and sectors, with references to foreign currency and nonresidents; paragraph 291 on foreign currency; paragraph 300, third bullet point on maturity; paragraph 309 on short-term securities other than shares; paragraph 311 on medium-term, defined as two years or less; paragraph 314 on money market funds, which primarily invest in short-term securities; and paragraph 304 on restricted deposits.

unions, and investments funds; and (3) other financial corporations (OFC), comprising insurance companies, pension funds, economic development funds, brokerage firms, bonded warehouses, and surety companies. Banking financial intermediaries (41 commercial banks and six development banks) are predominant in the Mexican financial system, with 11,128 branch offices in June 2009. In December 2008, there were 1,126 active and regulated nonbank financial intermediaries.

In the case of the ODC, institutional coverage includes the activities of the head office and all domestic branches. In addition, there are aggregates that include foreign branches of Mexican banks, which complement the analysis of financial intermediation by Mexican banks abroad.

While no nonbank intermediary is authorized to accept checking account deposits, savings and loan associations, factoring companies, financial leasing companies, credit unions, investment funds, and specialized lending institutions receive time deposits from the general public. Therefore, their function is similar to that of other depository corporations, as defined by the *MFSM 2000*, and they are included in the ODC survey.

Nonbank financial intermediaries report data to the CNBV on a monthly basis, except insurance companies and surety companies that report quarterly.

# 2.3 Classification/sectorization

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

The sectorization currently used in compiling the monetary statistics for the BM and the ODC is largely based on the *MFSM 2000* recommendations. For the central bank and the commercial and development banks, assets and liabilities are classified according to the institutional sector of the counterparts. Thus, assets are classified by debtor sectors and liabilities by creditor sectors.<sup>9</sup>

Institutional units are grouped according to their characteristics. In sectorization, first a distinction is made between residents and nonresidents; then the resident units are grouped together in mutually exclusive economic sectors, as follows: (1) Financial Corporations, as defined in Section 2.2.1; (2) Nonfinancial Corporations, which include private enterprises and enterprises with government participation, including the Government Workers Security and Social Services Institute (ISSSTE), 10 which provides health services to government employees; (3) General Government, consisting of the federal government, state governments, municipal governments, and the Mexican Social Security Institute—IMSS; and

<sup>&</sup>lt;sup>9</sup> The Oil Stabilization Fund assets and liabilities appear within the BM balance sheet. In the balance sheet, a deposit liability with the government is separately identified. However, in the BM balance sheet there is no separation of the assets of the Fund.

<sup>&</sup>lt;sup>10</sup> However, this classification is not consistent with the national accounts, which classifies ISSSTE as part of general government.

(4) Households. The nonprofit institutions serving households sector is not identified as a specific sector and is included in Households.

The *financial instruments* in the sectoral balance sheets of ODC are classified according to degree of liquidity and the legal characteristics describing the underlying relationship between creditors and debtors. In commercial bank and development bank balance sheets, *repos* are recorded as collateralized loan, with the securities under repo agreement separately identified in the assets side of the balance sheet. The BM's gold swap operations are designed to provide coverage of the physical position and are recorded as collateralized loans.

# 2.4 Basis for recording

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

The securities held by commercial and development banks are classified, first, according to what each bank intends to do with them at the time of purchase. Thus, they may be classified as securities for trading, available for sale, or to be kept until maturity. Securities for trading and those available for sale are ascribed a "reasonable value," meaning "the amount for which an instrument may be exchanged between parties disposed to carry out the transaction in a setting free from pressure" (Circular 1448 of the CNBV). This criterion favors valuation at market prices as recommended in the *MFSM 2000*. Securities to be kept until maturity are valued at amortized cost (issuing price plus accrued interest). Whenever it is not possible to ascertain a market price, financial assets are valued at purchase price plus accrued interest.

As regards loans granted, the balance recorded in the loan portfolio is the amount effectively granted to the borrower plus any uncollected accrued interest: in other words, the book value of the loan. This figure does not include expected losses due to default by the borrowers, which are recorded under liabilities as "provisions against possible loan portfolio losses."

Financial derivatives' recording is not always in line with *MFSM 2000* recommendations, as some banks are considering the notional amounts of underlying assets on-balance sheet, i.e., as assets and liabilities by the same amount, which significantly overstate the aggregated balance sheet of the ODC sector. The *MFSM 2000* recommends that only holding gains or losses arising from financial derivative operations be included as asset and liability respectively, if not liquidated. Option contracts are an exception because an asset is recognized by the unit buying the option and a corresponding liability by the unit selling it. MS compilers plan to make adjustments in the historical series to avoid inflating the aggregated balance sheet because of the inclusion of underlying assets and apply the correct treatment, after all ODC are aware of the new treatment, beginning in October 2010.

Repurchase agreements are recorded as collateralized loans, in line with the *MFSM 2000*. However, in addition to the recognition of the loan, the cash provider in the repo operation is recording an asset and corresponding liability representing the securities that are used as collateral. This treatment overstates the aggregated balance sheet of the ODC sector and is not recommended by the *MFSM 2000*. Instead, the cash provider should record an off-

balance sheet position, since the securities still appear in the portfolio of the cash receiver. The BM already had plans to change the recording of repo operations beginning in October 2010.

Financial transactions are recorded at the time of purchase (that is, the date on which ownership is registered), and at market prices (i.e., purchasing cost). In the sectoral balance sheets of the central bank, commercial banks, and development banks, instruments include changes based on valuation and that specific entry is reflected in profits or losses.

Pursuant to Bulletin B-15 of the Mexican Institute of Certified Accountants and in line with the *MFSM 2000*, foreign currency-denominated assets and liabilities are converted into local currency, using the exchange rate of the balance sheet reference date, as published by the BM.

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

In accordance with the 1993 SNA and in observance of the aforementioned accounting principle, the sectoral balance sheets record the Resources and Obligations concepts on an accrual basis. Transactions are recorded at the time ownership is transferred. Interest on financial assets and liabilities accrues continuously throughout the accounting period.

Restructured overdue loans continue to form part of the nonperforming loan portfolio and they continue to be considered as possible losses until evidence of repayment is forthcoming. For as long as the loan is considered part of the nonperforming portfolio, accrued interest is recorded in suspense accounts, which is appropriately included as additional interest accrued by the loans portfolio. If the overdue interest is collected, it is recorded directly in earnings for the accounting period.

Arrears in payments of fees or other charges related to financial instruments are posted under accounts receivable in the balance sheet. In line with the *MFSM 2000* and with the accounting principle of *Historical Value*, operations between intermediaries are recorded simultaneously. Electronic payments systems are in place to ensure simultaneous recording, especially when the BM intervenes in the matching of those operations (through the Bank of Mexico Account Holders Service System and the Expanded Electronic Payments System). When discrepancies arise at the time of recording, it is not possible to make adjustments to achieve consistency, given the difficulty of identifying the exact moment when the counterparties post the operations. Nevertheless, when mismatches do occur in recording dates, an attempt is made to reconcile the accounts in order to detect the nature of the discrepancies, in the following order of priority: central bank, commercial banks, development banks, and other financial intermediaries.

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

As the MFSM 2000 prescribes, data are collected and compiled on a gross basis. This principle is observed in the financial intermediaries reporting form (CMS Report) and in the

financial statistics concepts in *Resources and Obligations* of commercial banks, development banks, and other financial intermediaries, as well as in the BM balance sheet. In this framework, interbank operations are not netted out. The methodology employed to calculate the different financial sector surveys requires consolidation of interbank positions. That is, interbank positions are eliminated in the following order of priority: central bank, commercial banks, development banks, and other financial intermediaries.

# 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 available source data for the central bank and the ODC are comprehensive in scope and constitute an adequate basis for the compilation of monetary statistics in accordance with international standards. In the case of the BM, the basic source of information is the BM statement of accounts (*Cedula contable*), i.e., Bank of Mexico Assets, Liabilities, and Capital Accounts (at the three-digit level) drawn up by the Office of the Manager of Budgets and Accounting (GPC). The statement of accounts is directly linked to the chart of accounts of the institution and is generated by an accounting system known as ARCO on a daily, weekly, and monthly basis.

The source data for compiling the sectoral balance sheet of the ODC is the *CMS Report* (data reporting forms) that commercial, development banks, and other nonbank financial intermediaries transmit electronically to the CNBV each month. Each ODC prepares the *CMS Report* in line with the Detailed Chart of Accounts, making it possible to identify, in considerable detail, the operations associated with the institutional sector with which they were carried out. Thus the *CMS Report* covers the complete range of financial instruments and institutional sectors. The latest version has been in place since December 2005. Although, generally speaking, the accounting information provided in the *CMS Report* is sufficiently extensive and available on a monthly basis, if necessary, it can be supplemented with surveys designed to elicit qualitative factors and other administrative data, such as the Regional Deposits Report (*Informe de captación regional*), the Deposit by Range Report (*Informe de captación por rangos*), and the Current Survey of the Credit Market (*Encuesta de evaluación coyuntural del mercado crediticio*).

The branches of the ODC send the information to the head office, which prepares the *CMS Report* and submits it to the BM. The *CMS Report* consolidates the head office data and those of both local branches and offices residing abroad. The BM also receives a separate report on the operations conducted by the offices abroad, which allows it to derive the data corresponding to domestic banks (that includes only the head office and its branches in Mexico). Aggregated balance sheets are compiled and disseminated both for domestic ODC and ODC including foreign branches. In line of the recommendations of the *MFSM 2000*, the ODC survey does not include the foreign branches of Mexican banks.

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

The BM has made significant efforts to improve the primary sources of information and to tailor them to meet internationally recommended standards in this area. The structure and degree of detail of the BM balance sheet make it possible to adopt the sectorization standards of the *MFSM 2000* and to apply them to the BM's asset and liability operations (even for the weekly data).

Using the *CMS Report* as a basic source of information for the ODC has resulted in considerable improvements in the quality of monetary statistics. The data obtained via the *CMS Report* are broadly consistent with the *MFSM 2000* concepts and definitions; therefore, adjustments to produce monetary statistics are not necessary. The level of "other assets" and "other liabilities" is insignificant. In December 2009, commercial banks declared 2.3 percent of their assets, and 1.4 percent of their liabilities, respectively, as "not classified."

Although the *CMS Report* is the principal source of data for the ODC, the BM is aware of possible discrepancies with secondary data sources and continuously strives to identify and reconcile any such differences.

## 3.1.3 Source data are timely

The data compilation system depends on timely reporting of source data that help produce the sectoral balance sheets of the central bank and the ODC by the established deadlines. As regards the central bank, the GAM's Office of the Assistant Manager of Monetary Analysis (SAM) receives specific information from the GPC on a weekly basis and has direct access to the ARCO system, which contains historical and up-to-date (even daily) information. In this way, the compilers of monetary statistics obtain the information needed to produce the central bank sectoral balance sheet, published every week on the Internet as *Principales Renglones del Estado de Cuenta del Banco de México (Principal Headings in the Statement of Account of the Bank of Mexico*) and as *Recursos y Obligaciones (Resources and Obligations*). The BM's balance sheet is also the source for other analytical tables prepared for internal use by the BM. Moreover, the GPC provides the GAM with additional information (not itemized in the balance sheet) needed to perform its functions.

The commercial and development banks are required to send their *CMS Reports* to the CNBV within the first five business days following the balance sheet reference date (another five days are needed by the CNBV to validate the data). Other nonbank ODC are required to send their *Reports* to the CNBV within the first 10 business days, with an additional 10 business data used by the CNBV for data validation. The compilation of monetary statistics takes approximately two weeks; consequently, itemized monetary statistics are available on the Internet 30 days after the end of the reference month for the banking subsector and after 40 days for the whole ODC sector.

Banks represent 84 percent of the ODC in terms of total assets. Nonbank ODC represent the remaining 16 percent. The BM should discuss with the CNBV the possibility of requiring the

largest nonbank ODC to report with the same timeliness as banks, *i.e.*, within the first five business days following the balance sheet reference date. In addition, CNBV and MS compilers should look into shortening the time devoted to validating the data (currently of up to 25 days between the two institutions.)

# 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

The process of assessing and validating the source data is automated. In the case of the central bank balance sheet, source data are based on accounting records that use a variety of comparison and revision tools to minimize errors and ensure the quality of the information. The data provided by the ODC in the *CMS Report* undergo a series of automated checks, using several validation and accounting consistency tools. Any doubts about the data are investigated through the CNBV or directly with the reporting ODC, which are asked to provide written explanations and, if need be, to send in a new *CMS Report* to update the statistics. Major corrections and clarifications received from reporting entities are appropriately filed for future reference.

Source data are scrutinized for omissions and reporting errors. The availability of databases facilitates analysis of the historical series and ensures the consistency of the data. The SBIB stores the original accounting and sectorization information, and the SIE stores the structured information as historical series.

Moreover, when the figures reported by the ODC show major shifts, the information is cross-checked with other sources available in various databases in the BM and with the CNBV. For instance, the flow of funds table is used to check consistency between accounts. The findings are shared with the agency responsible for collecting the relevant data.

# 3.3 Statistical techniques

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

The data compiling procedures are fully automated, thereby reducing the number of processing errors that can occur in coding, revising, and tabulating the source data. With respect to the central bank balance sheet, there are various comparison and revision mechanisms that help minimize errors. For the ODC, the CMS Report has built-in validation criteria that are applied when it is prepared by the respective ODC.

The BM retrieves the ODC CMS Reports for each institution from the CNBV server and stores them in the SBIB database. The Office of Data Banking Integration within SGIF verifies the coherence of the data and, if necessary, consults with the CNBV or the ODC. Once the information has been validated, the CMS Reports are aggregated and sent to the

SIE database, which stores each entity's accounting and sectorization data from 1980 onwards. The data are classified in accordance with the arrangement required for presentation in Resources and Obligations, while the series for each concept are maintained in the SIE database, from which the accounts of the ODC and OFC are compiled and disseminated.

It is unusual that an institution would fail to report its data for a particular date. However, should it happen, the figures of the previous month are repeated.

The GAM has an organizational manual describing the responsibilities and activities of each area, as well as the process for classifying the information, supporting charts, and references to the automated methodology used for data compilation. There is also a description available of the methodology employed for each statistical exercise. A record and progress report of new projects and improvements is kept every year. The manual was last revised in May 2009.

3.3.2 Other statistical procedures (e.g., data adjustments and transformations and statistical analysis) are also based on sound statistical techniques

Given the accounting basis of the source data, it is unusual to make statistical adjustments or estimates for the central bank balance sheet and the MA. The sectoral balance sheets of ODC encompass all intermediaries issuing deposits or close substitutes of deposits and are based on their accounting records.

Currently there is no ODC undergoing liquidation. In the past, whenever there was any ODC under liquidation, the practice followed in the preparation of *Resources and Obligations* was to include each month the updated information that the "provisionally administered" institutions reported to the CNBV. MS disseminated by the BM are not seasonally adjusted.

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

3.4.1 Intermediate results are validated against other information where applicable

In general, the SGIF uses secondary sources to verify the information reported by the ODC, with a view to reconcile the counterpart data involving the ODC with the BM and other financial institutions. The Office of the Assistant Manager of Government Finance Analysis also uses securities market data to cross-check the ODC asset holdings data.

3.4.2 Statistical discrepancies in the intermediate data are assessed and investigated

Whenever statistical discrepancies are detected in the intermediate data, the SGAM investigates their nature and origin.

3.4.3 Statistical discrepancies and other indicators of potential problems with other output data are investigated

The ODC data are checked to prevent statistical discrepancies due to errors in classification or omissions. The SGIF investigates any unexplained fluctuation through the CNBV or directly with the reporting ODC and crosses information with other institutions and sources.

#### 3.5 Revision studies

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

The SGIF and SGAM routinely analyze the data and compare the preliminary figures with the final. The findings are kept in a register of changes. When necessary, the ODC are asked to report revisions of their preliminary data. The BM and the reporting institutions remain in close contact to identify discrepancies in the data and their findings are taken into account in the compilation of data for subsequent periods.

# 4. Serviceability

## 4.1 Periodicity and timeliness

## 4.1.1 Periodicity follows dissemination standards

Preliminary monetary statistics on the central bank and the banking system are disseminated on a monthly basis in accordance with SDDS requirements, along with data for the nonbank intermediaries.

# 4.1.2 Timeliness follows dissemination standards

Central bank data are disseminated monthly on the BM's website within the first five business days following the end of the reference month. In addition, some monetary data, such as monetary base, are published every day and the main categories of the BM's balance sheet are published weekly, with a two-day lag. The timeliness of the central bank data surpasses SDDS requirements.

As regards ODC, a section on the BM's website called *Financiamiento e Información Financiera de Intermediarios Financieros* (*Financing and other financial information of financial intermediaries*) contains preliminary summary monthly data with a 25-to 30-day lag, which meets SDDS requirements. The information includes the main headings of the ODC balance sheets. Subsequently, in *Financing and other financial information of financial intermediaries*, preliminary itemized monthly statistics are published with a 40-day lag. This delay is due to the longer time lag required to the nonbank ODC by the CNBV for data reporting.

Commercial and development banks represent around 84 percent of the ODC in terms of total assets. Nonbank ODC have the remaining 16 percent. For the timely construction of the monetary aggregates, the contribution of the nonbank ODC<sup>11</sup> to the aggregates is estimated using the data of the previous month.

# 4.2 Consistency

4.2.1 Statistics are internally consistent within the dataset (e.g., accounting identities are observed)

The monetary statistics presented in the sectoral balance sheets of the central bank and the ODC are internally consistent. Consistency between the statistics of the BM and the ODC is facilitated by the use of electronic fund transfer systems, which support simultaneity in interbank transactions. Nevertheless, occasionally, and especially towards the end of the month, differences in recording may occur due to operations in transit, but they can be reconciled.

The BM also verifies the internal consistency of the data, by cross-checking the information prepared in the different departments of the BM, taking into account that the source data come from different working groups (accounting, operational) in the reporting institutions.

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

The BM's time series are consistent. The central bank data published since 1985 are based on the same methodology. As regards commercial banks and development banks, time series are available from December 1980 onwards, divided into two segments, each of which is based on a different methodology. The first segment covers the 1980–1996 period (based on the Estado Analitico—EA report), while the second begins in January 1997 (based on the *Informe Contable y de Sectorización*—ICS Report from 1997–2005 period, and on the CMS Report from 2005 onwards). <sup>12</sup> Historical data prior to 1997 had to be revised. The methodological changes in the series are indicated in footnotes to the tables in the BM publications. Data are still disseminated using the three methodologies.

In general, major fluctuations are explained in the monthly press release on *Monetary Aggregates and Financial Activity*, which is published on the BM website, as well as in other BM publications, such as *Informe sobre la Política Monetaria* (*Half-yearly Report on Monetary Policy*), *Informe sobre la Inflación* (*Quarterly Inflation Report*), and the *Annual* 

<sup>&</sup>lt;sup>11</sup> Saving and loan associations only, since these institutions are the most important deposit takers outside banks.

<sup>&</sup>lt;sup>12</sup> A new Report was introduced in December 2005, to unify reporting requirements of the BM for monetary analysis and financial stability analysis with those of the CNBV, i.e., to create a single set of reporting forms for the two institutions. However, no major methodological changes or data requirements regarding the monetary data were introduced in the new report.

*Report.* The SBIB has a module which allows significant comments to be incorporated into the database itself, for internal consultation in the BM.

# 4.2.3 Statistics are consistent or reconcilable with those obtained from other data sources or statistical frameworks

MS are reconcilable with balance of payments and public finance data, which are compiled by the BM's Office of the Assistant Manager of External Sector Analysis and the Office of the Assistant Manager of Information and Government Finance Analysis, respectively. Foreign assets and liabilities included in the monetary statistics are compatible with the balance of payments, and the flow of funds table<sup>13</sup> consolidates this information. Any differences between the balance of payments and the monetary accounts are explicitly noted in line 16 ("statistical discrepancy") of the flow of funds table. However, MS compilers do not conduct a regular reconciliation exercise in coordination with BOP compilers and there is a difference in treatment of nonresident branches of Mexican banks.

Fiscal data on federal government deposits in depository institutions and on the loans it obtains from these institutions are compatible with the corresponding data in monetary statistics. Furthermore, reconciliation exercises are carried out on the data for the public sector financing requirement, which are compiled using alternative information sources. The figures are reconciled monthly at an aggregated level and large discrepancies investigated. This reconciliation is conducted by staff of the Office of the Assistant Director General of Financial Statistics in the SHCP and the Office of the Assistant Manager of Information and Government Finance Analysis in the BM. However, a detailed reconciliation is not undertaken, so potentially permitting inconsistencies in the sectorization of institutions. The BM is regularly updating a public sector classification chart for use by the various units that need this information to prepare their accounts.

The BM does not reconcile its flow of funds (FOF) data with the more detailed FOF data from the INEGI.

# 4.3 Revision policy and practice

#### 4.3.1 Revisions follow a regular and transparent schedule

The data revision cycle follows a set of internal procedures and a schedule, which establish publication dates. Under this arrangement, published figures remain preliminary for three months, after which they are considered final. The contents of the statistics are reviewed on a continuous basis and any change that arises is immediately incorporated into the database, and users are notified by means of footnotes or an explanation in *Resources and Obligations*, *Monetary Aggregates and Financial Activity*, or in other reports, as appropriate.

**Monetary Statistics** 

<sup>&</sup>lt;sup>13</sup> Each year, the BM publishes a flow-of-funds table (FOF) in its *Annual Report*. FOF are compiled quarterly for internal use only and are used to check the consistency of monetary, fiscal, and balance of payment statistics.

## 4.3.2 Preliminary and/or revised data are clearly identified

A general footnote explains to users that the published data are preliminary and subject to revisions. This footnote correctly identify that the three months shown by default on all MS disseminated by the BM are preliminary. However, the same footnote is used in press releases using longer time series, giving the impression that all data published are preliminary. This report recommends specifying in the footnote that only the latest three months are preliminary, but not the previous ones. The revised data are published with the same level of detail as the previous data.

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

The BM carries out routine consistency studies between the preliminary and the revised data. These studies are for the BM's internal use and are therefore not published. When significant revisions take place, the BM announces them in press releases, informing of the starting date for which the revisions were made.

# 5. Accessibility

# 5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparison (layout and clarity of text, tables and charts)

The presentation of monetary statistics facilitates their interpretation and enables monitoring of monetary and financial developments, although the design of tables have room for improvement when downloaded as Excel files. In addition, there is no possibility to print the presentation used in the BM webpage.

The presentation is flexible enough to allow users to rearrange the statistics to better serve their interests (by issuer of an instrument, holder of an instrument, public sector or private sector, residents and nonresidents, etc.). The *Monetary Aggregates and Financial Activity*, the *Boletín Semanal sobre Estado de Cuenta del Banco de México* (Weekly Bulletin on Statement of Account of Bank of Mexico), and the whole set of Indicadores Económicos y Financieros (Economic and Financial Indicators) contain charts and tables that provide an efficient way to follow developments in the principal monetary and credit aggregates. However, these publications do not include all balance sheets and surveys of the financial corporations, which are nonetheless available on the website. On its website, the BM publishes accounts with a more detailed breakdown, while preserving the presentation and structure of the information by means of (1) a table for the last three dates and (2) time series.

#### 5.1.2 Dissemination media and formats are adequate

The media and formats used in the dissemination of data are adequate, particularly for users who have access to the Internet, as both recent data and the historical series can be consulted

on the BM website. The BM also publishes the information in a timely fashion in press releases.

## 5.1.3 Statistics are released on a pre-announced schedule

Statistics are released according to a pre-announced schedule in keeping with SDDS requirements (it shows exact dates of publication with three month's notice). The schedule is available on the BM website.

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

The BM has provisions and procedures in place to ensure that monetary statistics are published on the dates specified in the advance release calendar. The statistics are made available to interested users at the same time on the BM website. In addition, weekly BM data are published in the BM *Weekly Bulletin* on the Statement of Account of Bank of Mexico. Banking sector data are also disseminated on the Internet.

# 5.1.5 Statistics not routinely disseminated are made available upon request

The BM provides sub-aggregates of unpublished data, upon request, provided that the information involved is not confidential. However, the BM does not announce the availability of additional, unpublished information.

## 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 noted

The BM publishes brief methodological notes on its website and, in particular, in the *Annual Report*. To comply with the IMF's Special Data Dissemination Standards, the BM prepared summaries of the methodology, which can be found on the IMF's website for the Dissemination Standards Bulletin Board (DSBB). Metadata included in the DSBB are regularly updated. A document posted on the BM website explains more in detail the definitions and background on the construction of the monetary aggregates. Another document also posted on the BM website explains the construction of the different financial sector surveys. However, there is not a note (road map) explaining the analytical differences between the tables presenting MS. For example, this note could explain the differences between *Resources and Obligations* and the Surveys, and clarify the existing versions of aggregated balance sheets (with and without foreign branches, old and new methodology, etc. An update of the methodology for the compilation of the MA is also needed.

#### 5.2.2 The degree of detail is adapted to the needs of users, to ensure their satisfaction

The detail of the monetary statistics available on the BM website is quite extensive. The BM discussed the structure of the tables and sub-aggregates of the series presented with monetary

analysts and specialists. Thus, the section entitled "Monetary Aggregates and Flow of Funds (Agregados monetarios y flujo de fondos) and Financing and other financial information of financial intermediaries" contains, inter alia, itemized information on (1) assets and liabilities of the BM, commercial banks, development banks, nonbank ODC, and OFC;

- (2) credit granted by commercial and development banks, by type of business activity;
- (3) regional distribution of commercial bank deposit taking by principal instrument;
- (4) monetary aggregates; and (5) financing for nonbank sectors. It also contains a historical series of Resources and Obligations of the Bank of Mexico, which provides a more detailed balance sheet consistent with the weekly information.

There is no detailed documentation available to the public describing the scope and relationships between the different analytical tables that comprise the MS. For example, there are aggregated balance sheets of banks that include foreign branches, other aggregates that exclude them, surveys, and the monetary aggregates. However, there is not a document that explains the usefulness of the several presentations and links among them.

#### 5.3 Assistance to users

## 5.3.1 Contact points for each subject field are publicized

Prompt and knowledgeable service and support is provided to MS users. Data users can reach the contact persons for the monetary statistics identified in the SDDS metadata through the IMF's DSBB. The BM also provides user service via an electronic mailbox, which allows direct access to a member of the Governing Board (Deputy Governor), who passes the queries on to the appropriate area in the BM.

5.3.2 Catalogs of publications, documents and other services, including information on their cost, are easily obtainable

The BM has a catalog of publications listing all available statistics and research papers. Access to this information, which includes the advance release calendar, is through the BM's website. All BM publications are free of charge. Occasional meetings are arranged with different groups of private analysts and the media to brief them regarding the information published by the BM and to answer any questions they might have.

Table 3. Mexico: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics (Compiling Agency: Bank of Mexico)

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
		O	LO	LNO	NO	Comments
0. Prerequisites of quality	, ,		1	, ,		
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance			X			Data users are not consulted actively or systematically.
0.4 Other quality management		X				
1. Assurances of integrity			Y	· · · · · · · · · · · · · · · · · · ·		
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			Broad monetary aggregates not consistent with key principles in the <i>MFSM 2000</i> .
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording			X			Financial derivatives and repos' recording are overstating the ODC aggregated balance sheet.
3. Accuracy and reliability						
3.1 Source data			X			Time delays in the submission by, and processing of, the reports of nonbank ODC impedes timely dissemination of the ODC survey.
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of source data		X				
3.5 Assessment and validation of intermediate data and		X				
statistical outputs						
3.6 Revision studies		X				
4. Serviceability	, ,		1	, ,		
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice			X			Studies and analyses of revisions are not disseminated, although experience has shown that revisions are not very significant.
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility			X			More detailed documentation is needed on the methodology used.
5.3 Assistance to users		X				

#### Recommendations

- Review the definition of monetary aggregates with the purpose of improving their international comparability. (Financial wealth aggregates are useful and should continue to be compiled separately.)
- Promote external users feedback on the quality of macroeconomic statistics through active and systematic consultation, for example via user meetings and surveys.
- Revise the treatment of financial derivatives and repurchase agreements to avoid overstating the aggregated balance sheet of the ODC.
- Conduct regular reconciliation exercises to verify consistency among the macroeconomic datasets.
- Give greater priority to the periodic conduct and dissemination of revision studies to better inform users.
- Collaborate with the CNBV to improve timeliness in the submission by and processing of nonbank ODC data, which will allow for a more timely dissemination of the ODC survey.
- Prepare and disseminate detailed documentation on the methodology used for compiling MS, including (1) an update of the methodology for the compilation of the monetary aggregates (if the BM decides to change their definitions as suggested in this report) and (2) a road map explaining the analytical differences between the tables comprised in the MS.
- Improve the format of MS in Excel. In addition to the time series format, a presentation similar to the one in the BM's webpage could facilitate interpretation of the data. Add a print option to the tables disseminated on the BM's website.
- A general footnote explains to users that the published data are preliminary and subject to revision. This report recommends specifying in the footnote that only the latest three months are preliminary, but not the previous ones.

#### IV. BALANCE OF PAYMENTS 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 Bank of Mexico (BM) compiles, processes, and disseminates balance of payments, International Investment Position (IIP), total external debt and reserves template statistics. The Bank of Mexico Law, which entered into force on April 1, 1994, does not specifically assign these functions to the BM. However, Article 62. I of the Law indicate that "The BM, in coordination with the other competent authorities, may prepare, compile, and publish economic and financial statistics, as well as operate information systems based on these statistics, and collect the necessary data for these purposes." In addition, the Presidential Decree of December 31, 1952, amending Article 12 of the text of Mexico's agreement to join the International Monetary Fund (IMF), establishes that agencies of the federal government, local governments, municipalities, private businesses and individuals are required to provide the BM with any data or information it may request in compliance with the above-referenced agreement. The Decree establishes sanctions for submitting incomplete or inaccurate data or reports, but the amounts of these sanctions have not been revised.

The statistics compiled and published by INEGI are regulated by the Law of the National System of Information on Statistics and Geography (LSNIEG) of April 2008. The new Law covers all data producing organizations that have been granted autonomy by the Constitution, and consequently entitled to be part of the National System of Statistics and Geographic Information (SNIEG). The BM, in charge of compiling external sector statistics, forms part of the system.

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

The BM has established institutional procedures and frequent contact with other public sector agencies for performing the tasks of data compilation, validation, reconciliation, and dissemination.

An institutional agreement in the area of foreign direct investment guarantees ongoing consultation and information sharing. External trade data are handled by The Technical Committee on External Trade Statistics comprising the BM, the National Institute of Statistics and Geography (INEGI), the Secretariat of Economy, and the Customs General Administration (AGA). This Committee discusses the methodological and operative aspects of the information, with the BM in charge of preparing the trade balance statistics on the basis of customs information provided by AGA.

The BM has established operational mechanisms to obtain information on components of the balance of payments from public and private sector entities. The AGA provides monthly information on imports and exports electronically; the National Migration Institute provides

monthly information on the number of international tourists; and the Directorate General of Public Credit of the Secretariat of Finance and Public Credit (SHCP) provides information on public external debt. In addition, the BM obtains information on services directly from surveys and specific questionnaires addressed to the private sector. Information on foreign direct investment in the country is obtained in coordination with the Secretariat of Economy. Data on Mexican direct investment abroad are originated in a survey applied to Mexican firms by BM.

Suitable mechanisms have also been put in place for obtaining data from other departments or areas of the BM, such as the General Direction of Central Banking Operations, the General Direction of Financial Sector Analysis, the General Direction of Budgets and Accounting and the Direction of Macroeconomic Analysis.

The BM holds periodic meetings with various public sector agencies, such as the National Migration Institute, and Secretariat of Tourism, for the purpose of coordinating information requirements on travel and avoiding the duplication of efforts. There are also regular meetings with the SHCP to coordinate the information required on foreign public external debt and with the Secretariat of Economy to coordinate information under the Foreign Direct Investment (FDI) heading. BM staff consults in person and by telephone with the principal companies providing basic data for compiling the balance of payments in order to discuss problems and mechanisms for reporting data. In the case of statistics on international travel, the Bank of Mexico has its own system of surveys, which includes permanent survey staff in the country.

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

Section VIII of Article 24, of the General Conditions of Employment of the BM, establishes that "workers are required to act with discretion in discharging their duties, observing the strictest confidentiality with regard to the Bank's business. They shall refrain from disclosing in writing or orally to outsiders the events, dealings, data, analyses, studies, expert opinions, documents, and any other information known or made available to them in the course of their work at the Bank. Failure to comply with the provisions of this section shall be considered serious misconduct and shall result in termination of appointment, without the Bank incurring any liability." Additionally, some individual information is made available to members of the Board of Governors during the meeting where balance of payments results are presented to it. This information is provided verbally to explain breaks in the series, or revisions of relevant magnitude. However, such information has to remain confidential as Article 43, Section V of The Bank of Mexico Law explicitly establishes that members of the Board of Governors are required to protect the confidentiality of the individual information provided to it by natural and legal persons, whereas Article 45 states that information disclosed in the Board of Governors meetings cannot be disseminated by any person attending those meetings without an explicit authorization by the Board.

The cover letter that accompanies surveys and other requests for statistical information informs companies or institutions that the information requested of them will be treated in a

strictly confidential manner generally and for the purpose of compiling balance of payments statistics. The SNIEG also establishes that data on private individuals or legal entities must not be provided or published individually, but rather as part of overall figures, except with prior authorization from the party that provided the data. For these purposes, overall figures shall be deemed to mean those that refer to three or more individuals or legal entities. Moreover, Article 8 of the Federal Law on the Administrative Responsibilities of Civil Servants establishes in sections III and IV the duty to maintain the confidentiality of the information they handle.

In the BM, access to individual data is restricted to staff of the Office of the Deputy Manager for External Sector Analysis (SASE), who require such information for balance of payments compilation. Some measures related to data processing and consultation mechanisms have been taken to protect the information on individual companies.

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

The Presidential Decree of December 31, 1952, amending Article 12 of the text of Mexico's agreement to join the IMF, establishes that agencies of the federal government, local governments, municipalities, and individual businesses and persons are required to provide the BM with any data or information it may request in compliance with the above-referenced agreement. The Decree establishes economic sanctions for the submission of incomplete or inaccurate data or reports, but these sanctions have not been updated. The BM adheres to various nonformal agreements on data compilation with other public sector agencies, such as with the Customs Office and PEMEX. Other nonformal agreements have been arranged with the Securities Institute (INDEVAL) and with other securities custodians.

The Bank of Mexico Law does not specifically assign the BM the role of compiling balance of payments statistics and the BM is not empowered by the Law to require the reporting of information by the nonfinancial private sector companies and individuals for purposes of compiling the balance of payments statistics. Given that the BM does not have legal authority to request information from the nonfinancial private sector, it is likewise unable to impose sanctions on those who do not report. However an exception to the former is the set of rules published in the Official Gazette of October 29, 2002, aimed at improving the coverage of workers' remittances statistics. These rules establish the obligation for firms professionally involved in the business of personal money transfers to fill a set of monthly reports that are used to elaborate the statistics. Even though the rules are compulsory in their fulfillment, no sanctions are established. Notwithstanding, compliance is very good. As for the rest of balance of payments items, BM staff have established procedures to encourage voluntary reporting, e.g., in the letter that accompanies surveys the BM explains to respondents the importance of the information being requested of them for purposes of compiling the balance of payments, the confidentiality that will be kept and asks for their cooperation in providing the information sought in the surveys.

In some cases, the BM gathers direct information from public and private companies for purposes of compiling the balance of payments, such as direct investment companies. In

order to ensure adequate reporting, BM staff visit companies to provide support. An e-mail address of a contact person who can answer questions is provided, so BM can give assistance over the telephone in filling out the form to those companies that request it. The same support is offered to respondents with whom there is verbal contact, such as on specific questions on company imports/exports to cross check customs data, in addition to providing them with the name of an expert who can guide them through the survey process.

To encourage respondents to cooperate, the BM participates, at the request of interested parties, in seminars with private sector organizations and sends statistical information to companies that provide data to the BM for balance of payments compilation purposes. With the aim to improve coverage of transactions in some items of the balance of payments, SASE with INEGI, the Ministry of Economy, and ProMexico<sup>14</sup> are coordinating and discussing statistical needs to update INEGI's Directory of Enterprises that is very useful to SASE as well. The objective of this exercise is to improve the coverage of services.

#### 0.2 Resources

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

Financial, computing, and staff resources are generally sufficient to compile the balance of payments statistics. However, greater coverage of some balance of payments components, such as the services account, will require additional staff and resources. The SASE has 18 professionals who are responsible for compiling and preparing balance of payments statistics. This information is disseminated jointly with the media unit.

The SASE staff has adequate computing resources to compile and disseminate balance of payments statistics. Each staff member has an individual computer with Internet access and appropriate software. The information technology packages used include, in particular: the Economic Information System (SIE), developed in the BM, databases in Excel for quarterly surveys, programs that give access to foreign investment information from the Secretariat of Economy, and to the database used to generate the monetary statistics reports from the BM and the rest of the National Financial System, in addition to programming specifically designed for using the foreign trade data on CD-ROM from AGA, and monthly surveys of international travel. Information on private sector external liabilities is obtained from a survey processed in Java.

The staff has sound knowledge of and familiarity with the concepts and methodology recommended in the *Balance of Payments Manual, Fourth Edition (BPM4)* and *Fifth Edition (BPM5)*. Staff are properly trained in the concepts and methodologies applicable to their specialization in compiling the balance of payments. The more experienced, senior technical

<sup>&</sup>lt;sup>14</sup> ProMexico is the Mexican Government Institution in charge of strengthening Mexico's participation in the international economy. The institution supports the export activities of companies and coordinates actions to attract direct investment to Mexico.

staff have a more comprehensive view of the balance of payments statistics. Most of the members in the SASE have many years of experience and/or have received in-country or overseas training in the balance of payments compilation methodology, particularly the IMF course on balance of payments methodology. New SASE staff members receive theoretical and practical training in data compilation methods from employees with extensive experience, and they are encouraged to participate in courses on balance of payments methodology, being the most recent in the *Balance of Payments Manual, sixth edition* (*BPM6*). The BM promotes staff training through its participation in balance of payments courses and seminars organized by the IMF and the Center for Latin American Monetary Studies (CEMLA). SASE staff train foreigners attending seminars organized by CEMLA and/or visiting the BM in balance of payments issues.

As new staff are hired, they receive practical training in the area to which they are assigned. Technical training, which involves a broader view, is gradual, and considered a worker's right in Article 23, Section XI, of the *General Conditions of Employment* of the BM. The training of new staff is geared toward data handling and processing procedures, and subsequently international statistical standards. However, the SASE retains a group of very experienced persons in balance of payments compilation.

# 0.2.2 Measures to ensure efficient use of resources are implemented

Despite the fact that the SASE budget is prepared at the institutional level in the BM, the SASE is in charge of preparing the budget for the survey of international travelers and border workers conducted at the border points, airports, and sea ports of entry into the country. The resources allocated to these surveys make it possible to maintain a high level of quality in the data compiled by the survey personnel, who are continuously supervised.

Every effort is made to use the most advanced information technology instruments available for data processing and dissemination. External experts are used only on an as-needed basis, but not to evaluate methodologies and systems.

## 0.3 Relevance

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

The Federal Law on Transparency and Access to Government Public Information of 2002, known as the law on transparency, entitles users to request not only statistical information, but also to make questions on statistical procedures. In this way the law provides a vehicle for users to express their needs. However, this instrument has been used mainly to request statistical information or methodological explanations. The SASE keeps records on the questions and expression of data needs with the aim to improve statistical products to all users. SASE staff members regularly participate in statistical meetings and seminars organized by the IMF, CEMLA, and business organizations in the country. However, users are not consulted actively and systematically.

# 0.4 Other quality management

## 0.4.1 Processes are in place to focus on quality

There are no formal quality assessment processes (external audits). However, in recent years, the audit area of BM has undertaken examinations to some balance of payments procedures. In particular, audits have been made on the procedures associated with the surveys of international travelers and on the system for workers' remittances. In addition, there are internal statistical verification procedures to conduct ongoing quality assessment of surveys and verification of data collection and processing. For instance, source information is cross-checked and compared with other statistical series available in the BM on related areas. Among the cross checks the most common relate to customs data, goods, and private external debt. These procedures make it possible to verify the consistency within series of the data incorporated in the balance of payments statistics. In addition, the BM assesses on an ongoing basis the functionality of the systems for data entry, processing, and dissemination.

SASE employees participate in seminars and conferences on the balance of payments and seek to implement international standards in the country, for which they sometimes request assistance from international agencies. With a view to maintaining the quality of balance of payments data, the BM makes adjustments to the primary source data in some items of the balance of payments. For example, oil exports data from PEMEX replace the information provided by customs, prices on certain agricultural exports are taken from the US Ministry of Agriculture, while volume data are taken from the Customs Office.

Even though timeliness is not necessarily inconsistent with accuracy and reliability, the quality of some figures might improve with time, as the corresponding information sources are able to provide more accurate data. This fact is implicit in the dissemination of data subject to later revisions to improve its quality.

Regarding public opinion on the balance of payments statistics, it is not common practice to consult users to learn their views on the balance of payments statistics, however, any comments they may make are registered and considered. Requests and questions on BM information are handled electronically. There is an e-mail address on the BM's website to which requests or inquiries may be sent. Moreover, the law on transparency was issued with the aim to enhance transparency of public information. This law states the obligation for public entities to disclose, to anyone requesting it, information not previously classified as reserved or confidential. This provides the users with an instrument to request information or even express their views to the public entity.

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

The quality of the statistical program is monitored through:

• Auditing of balance of payments procedures. Being the most recent those associated with the surveys of international travelers and on the system for workers' remittances.

- Conducting ongoing quality assessment of surveys and verification of data collection and processing.
- Verifying consistency with other data sources in BM of the data incorporated in the balance of payments and international investment position statistics.
- Assessing on an ongoing basis the functionality of the systems for data entry, processing, and dissemination.
- 0.4.3 Processes are in place to deal with quality considerations in planning the statistical program

The SASE is responsible for the expansion of methodological knowledge on external sector statistics, the development of a general framework, the coherence and the standardization of the statistical processes and the implementation of the frameworks for general statistical methods, quality assurance and process development.

Although explicit processes are not in place, the SASE evaluates work programs in order to identify shortcomings and to determine the need to apply standards for obtaining the necessary data for improving data quality.

# 1. Assurances of integrity

### 1.1 Professionalism

### 1.1.1 Statistics are produced on an impartial basis

Since April 1, 1994, the Constitution of the United Mexican States has granted autonomy to the BM, substantiated by the enactment of its Law on April 1, 1994.

The tradition and techniques of professionalism are encouraged, as indicated in the articles on the rights and duties of employees in Chapter IV on the *General Conditions of Employment* of the BM. The appointment and terms of staff in positions related to the production of balance of payments statistics obey technical criteria. SASE staff has a significant degree of autonomy in their work and are generally guided by international standards in compiling and processing balance of payments statistics. The assignment of tasks in the area of data compilation is based solely on technical and professional criteria.

The BM organizes conferences and seminars in the country individually and in cooperation with CEMLA and some chambers of commerce and industry. It also promotes staff training through attendance at courses organized by international institutions in the country or overseas, such as the IMF and CEMLA. In addition, the BM finances postgraduate courses for its employees (specialization, masters, doctorate), and pays the cost for its staff to attend training courses in the country or overseas. SASE selects the staff to work in the balance of payments area and the BM's personnel management office conducts the hiring process.

Fairly frequently, SASE staff attend national forums at the request of organizations interested in learning about preparing balance of payments statistics. SASE has also accepted invitations to international forums where experiences are shared with other countries. The documents produced by SASE refer to the clarification and explanation of concepts and methodologies for internal use by the BM.

# 1.1.2 Choices of sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations

SASE staff chooses the source data and statistical methodologies used in compiling the balance of payments based on statistical considerations only and on evaluation of the timeliness and quality of alternative sources. The surveys are selected and designed solely on the basis of statistical considerations, taking into account international methodological standards and sound quantitative methods. The criteria for introducing new surveys are based exclusively on improving the quality of information available and broadening of the coverage of Mexico's balance of payments.

Important methodological changes are disseminated in the quarterly press releases on the balance of payments. The BM is the only entity that publishes balance of payments and IIP statistics and the *Data Template on International Reserves and Foreign Currency Liquidity* (Data Template). Once the BM has published these statistics, balance of payments information is also input into the database on economic variables that is accessible to the public at INEGI, citing the BM as the data source. The BM presents to the public a report that analyses the balance of payments with objectivity and independence. These are reports mainly included in the BM Annual Report and in the Quarterly Press Releases of balance of payments. INEGI disseminates balance of trade data on a monthly basis, whereas the SHCP does so for public external debt statistics. For its part, the Secretariat of Economy is responsible for dissemination of foreign direct investment statistics.

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

If an incorrect interpretation is detected regarding the published balance of payments statistical statements in general, or in a particular item, efforts are made to contact the person or organization having interpreted the data to explain that interpretation. In addition to real time electronic media, the balance of payments is disseminated in the *Annual Report* of the BM and in quarterly and sufficiently extensive press releases, which provide guidelines to the user for interpreting the figures. The *Statistics (Monetary Policy and Inflation)* section published on the BM website includes quarterly balance of payments data but not explanatory notes. However, the press releases that accompany the quarterly publication of the balance of payments include these explanatory notes. The BM holds press conferences to disseminate the reports on inflation, in which it analyzes general developments in the economy, including balance of payments data.

# 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 statistics are compiled and disseminated are usually made available to reporting entities but not to the public. The metadata providing that information are found on the Mexico pages of the SDDS website. The Bank of Mexico Law is published on the BM website. The name of the contact person for additional information on the balance of payments statistics published by the BM is available on Mexico's SDDS webpage. The Federal Law on Transparency and Access to the Governmental Public Information (Transparency Law) provides users with a vehicle to establish contact with the balance of payments area. As a general policy BM has established in its website a general window for users to make consultations and requests in terms of this Law. Once the consultation and/or request has been made, the area responsible for the compliance of the Law, channels them to the specific area involved in the relevant subject. The LSNIEG is published on the INEGI website.

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

There is no internal government access to the information before release

The federal government and other public entities do not know the statistics until they are announced to the general public, except for the agencies working jointly with the BM, such as the SHCP, INEGI and the Secretariat of Economy, even though this only applies to the particular statistics in which these public agencies are involved (external public debt, merchandise trade, and foreign direct investment, respectively).

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

The name and logo of the BM appear on press releases concerning balance of payments-related issues. The statistical tables are only disseminated on the BM's website and in its annual report. The balance of payments is not disseminated jointly with any other institution. Any official government report that includes balance of payments information always cites the BM as the data source. The INEGI disseminates the balance of trade separately and the Secretariat of Economy disseminates foreign direct investment data. Information disseminated by INEGI clearly names the institutions that are part of the balance of trade working group.

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

Users are notified of changes in methodology or sources used to calculate the balance of payments in the quarterly press releases disseminating the data. However, modifications or changes in methodology are only announced when the amended statistics are published, and not in advance.

Although the methodology used on balance of payments statistics has not changed recently, it is recommended to announce also changes in methodology, source data, and statistical coverage, through press releases on balance of payments at least one month in advance of the dissemination date.

#### 1.3 Ethical standards

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

There are no specific written ethical standards applicable to the staff involved in producing balance of payments statistics. There are ethical standards that apply to the employees of the Bank of Mexico in general, and these are set out in Chapter IV of the *General Conditions of Employment* of the BM. In addition, all new employees sign a letter in which they commit to safeguarding the confidentiality of the information with which they work. *The General Conditions of Employment* of the BM are disseminated on its internal website and made known to all new employees when they assume their positions. In addition, the reputation of the employees of the Bank of Mexico and the Bank's long-standing independence from other public entities, protect the central bank from political interference. The ethical standards of governmental agencies compiling statistics are governed by Article 8 of the Federal Law on the Administrative Responsibilities of Civil Servants.

# 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 structure and classification of the balance of payments statistics are consistent with the methodological standards established in the *BPM4*. The transition to *BPM5* methodology has been ongoing for a number of years. The balance of payments is disseminated using the *BPM5* classification in IMF statistical publications. Some *BPM5* recommendations have been implemented, grouping all the income account items in a single section, and including the liabilities of the BM to the IMF in Other investment. Among the *BPM5* recommendations still to be implemented include a more detailed breakdown of services in the current account, and the identification of capital transfers. The mix of balance of payments methodologies currently used is not conducive to comparability under internationally accepted methodological standards. Early in 2010, through the committee structure of the SNIEG it was decided in principle that Mexico should adopt the *BPM6*.

# 2.2 Scope

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

The balance of payments statistics include the transactions of institutional units resident in Mexico with the rest of the world. The criterion of residence is generally determined on the basis of principles established in the BPM5. However, public and nonfinancial private debt transactions and positions are recorded on the criterion of the place of issue, not the residence of the creditor. Also, due to limitations in the compilation process, some transactions calculated using BPM5 criteria may not be included in the statistics, mainly in the financial account. The item of goods for processing was discontinued in 2006 due to the limitation to identify change of property of goods. The item is now part of total goods. There are no estimates for contraband, undervaluation of imports, or overvaluation of exports. In goods, estimates are made with regard to some agricultural exports. Later in the compilation process, the estimates are substituted with actual data. The coverage of some services is limited by comparison with the breakdown proposed by the BPM5. Mexico's financial account considers the branches of Mexican banks abroad to be resident entities. Some branches are classified as residents due to the fact that they operate as intermediaries between their head offices and the rest of the world and conduct very little business of their own, a situation that still remains true. However, debt operations within affiliated banks are captured as transactions of external debt. Nowadays, the source information used in the compilation (banking sector statistics) allows for an outright distinction between the resident banks and their foreign agencies. Recent years has seen improved coverage of remittances data.

### 2.3 Classification/sectorization

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

The balance of payments statistics are organized according to the structure and classification recommended in the *BPM4*. The unit of account for the balance of payments is the U.S. dollar. Following *BPM4* guidelines, the balance of payments is compiled in accordance with the main standard components, which are classified in two main groups of accounts: the current account, which includes goods, factor services, nonfactor services and transfers; the capital account; and international reserves, which are adjusted for gold valuation. The BM reports the balance of payments to the Fund's Statistics Department using the *BPM5* classification.

Exports and imports are recorded f.o.b., except for some imports via sea ports. This exception could happen when a customs document is incorrectly filled, including freight and insurance. Repairs on goods and nonmonetary gold are included but are not classified separately. In the case of repairs, no identification is possible as the movement of these goods through the customs frontier, is recorded in customs documents in the same way as any other good is recorded. Goods procured in ports by carriers are classified in services as suggested in the *BPM4* and not in goods as in *BPM5*. Some financial services, such as commissions and

royalties, are classified as income. Furthermore, as it is practically impossible to divide transfers into current and capital transfers. This practice may contribute to misclassifications of general government current and capital transfers as well as within the item "other transfers."

The capital account records the financial transactions of the government, financial, and private sectors, as well as direct investment. The *Economic Indicators* section published on the BM website includes quarterly balance of payments data in which the capital account is classified by financial instruments and by institutional sectors. The capital account is broken down into loans and deposits, direct investment, portfolio operations, and assets held abroad. Reserve assets are presented as a below-the-line item. In the capital account, the data on direct investment in the country are obtained from the quarterly reports that companies submit to the Secretariat of Economy. Private and public external debt data are compiled from administrative sources recorded at face value. The data on portfolio investment is obtained from information available in the BM, the SHCP, and the INDEVAL and other local securities custodians. Data on the external transactions of the commercial banks are obtained from the monetary accounts. The data on international reserves are obtained directly from the balance sheet accounts of the BM, denominated in U.S. dollars.

It should be noted that quarterly FDI data are delivered in a timely manner; these data are supplemented with information from an annual questionnaire that companies are required to submit to the Secretariat of Economy. In 2007, the Secretariat of Economy agreed to grant BM access to the annual questionnaires that FDI firms are obliged to fill and submit to the National Register of Foreign Investments. These questionnaires corresponded to the period 1994-2006. However, they have never been validated before which led to the need of implementing systems designed to make such validation. In general, a lot of inconsistencies and non reported items were found, and its correction required to consult with the firms themselves or to try to make reasonable assumptions. Unfortunately this task has proved more complex and demanding than originally foreseen. For instance, key variables, such as the percentage of foreign participation were erased for previous years and only the share for the last year remained. Also, in some years not all the questionnaires had been electronically captured, so BM kept receiving complements to the original information.

# 2.4 Basis for recording

# 2.4.1 Market prices are used to value flows and stocks

Every effort is made to ensure valuation at market prices. However, there are exceptions to this rule, mostly related to the external debt. Both public and private debt are recorded at face value, as in some cases these liabilities are traded on the secondary markets, where they are listed at a discount.

The balance of payments of Mexico is recorded in U.S. dollars, which simplifies the conversion problem, since the majority of transactions are executed and recorded in that currency. When a transaction is not recorded in U.S. dollars and the precise transaction date is known, the exchange rate on the value date is used. However, if the transaction date is not

known, the average exchange rate for the period in which the transaction is known to have occurred is used as a proxy.

# 2.4.2 Recording is done on an accrual basis

An effort is made to follow this criterion, with the exception of the calculation of interest on the public external debt, which is recorded on a cash basis, in other words, as each payment is made. In the case of goods, the statistics are compiled on the basis of customs information, which do not rigorously adhere to the change-of-ownership criterion.

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

The balance of payments is compiled on the basis of the gross figures for each current account item. In the capital account, some concepts are known only in net terms.

## 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 balance of payments of Mexico is combined with information that the SASE obtains from a mix of primary and secondary sources. In many cases, secondary sources are used which, in combination with the primary sources, provide adequate balance of payments coverage. It is felt that the source data used by the SASE in compiling the balance of payments are adequate. The principal sources of information used in compiling the balance of payments are:

In the case of the trade balance, the AGA provides the BM with detailed monthly information on all transactions through customs in the country. Regarding the information on oil revenues this is obtained directly from Pemex. For other items as well, there is a list of special respondents that are surveyed; this list includes companies that provide services, government entities, embassies, and international cooperation agencies. The SASE believes that the data gathered from the sources is sufficiently comprehensive to ensure adequate coverage of balance of payments transactions. Notwithstanding, coverage, it is felt, can always be improved. Regarding information on foreign direct investment companies, management and updating of the directory of these companies is the responsibility of the Secretariat of Economy. As for Mexican direct investment abroad, resident firms that are known to have investments abroad are surveyed. Statistics on international travel are obtained by surveying a sample of tourists defined by the SASE. The methodology applied uses scientific techniques and the sample is duly stratified.

The data on bank transactions are obtained from the monetary accounts area and on central bank activities from the Treasury Department of BM.

The BM uses specialized information systems (Bloomberg, Infosel), which give the details of the largest external financial operations. These sources and the financial press are used to anticipate the amounts of financial transactions reported and to verify that country's large-value external transactions are properly covered in the customary sources. Meetings are held with financial market participants and the business community, not on a regular basis but in response to events which, presumably, might be captured by the compilation system only partially or not at all. With the business community, the meetings are common when large trade and financial transactions are detected.

It is perceived that source data gaps are emerging due to the incomplete coverage of the nonfinancial private sector, in both the current and financial accounts, particularly services, and financial transactions, including trade credits.

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

Specific procedures have been created to adjust the data from the various sources in such a way as to improve coverage, classification, and valuation. For example:

In the case of some agricultural export products, their volumes are correctly reported at customs but not their value, since the price is only known once it is agreed upon at the point of sale. In such cases, the known volume is applied to the prices observed on the destination market. In 2009, this adjustment is equivalent to 3.1 percent of total agricultural exports.

In the travel item, the survey used is designed to obtain a measure of average expenditure per person under different compilation criteria, using different concepts for tourists, excursionists, border visitors, and cruise ship passengers. The number of tourists produced by the migration authorities is applied to these data. However, at the northern border of the country, the migration authorities have no record of the number of border crossings, thus the BM is obliged to estimate that number from partial head counts, so as to infer the total amount using scientific procedures.

Since 2004, BM added a new border survey. This one is aimed at estimating the credit side for compensation of employees in the northern border area. This survey is applied to residents of Mexico who perform a remunerated activity on the US side of the border.

The public external debt is recorded by the SHCP. But, in cases where a liability is traded on a secondary market at a price other than face value, the corresponding adjustment is made provided that the market value is known.

### 3.1.3 Source data are timely

Source data are timely, since both in the questionnaires used and in direct contacts with the sources, deadlines are given for submitting the information. When there are delays in the submission of information, the source is contacted to request the survey. SASE staff consistently follow up on those companies that have not reported data by the deadline

through telephone calls or e-mails. The response rate of surveys prepared by SASE are very high.

### 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

In international travel surveys, all the quality indicators are frequently assessed. In the case of: (a) surveys; (b) reports of respondents, and; (c) administrative records, the data source is consulted and, where necessary, the economic agent. This makes it possible to validate the amount reported in cases where unusually high or low transaction amounts are observed. In the travel survey, atypical cases are excluded in order to maintain the quality of the information and given the fact that the respondent is no longer available to be surveyed. However, there is a range of comprehensive checks for internal consistency, comparisons with other sources, and routine queries when large transactions are detected.

The financial information from banks is not compiled by the SASE, since the SASE is a user of this information. The customs figures used as the basis for external trade statistics are routinely assessed to determine any unusual transactions reported. When these are detected, the customs office is contacted and, where necessary, the company involved as well, to ensure that the data reported by the company and the customs office match.

The data sources that do not strictly meet balance of payments criteria are adjusted, as appropriate, to meet methodological criteria.

There are cases in which the data received from respondents differs considerably from the usual figures during a given period. In these cases, attempts are made to contact the source of the primary data for confirmation. In cases where it is impossible to contact the source in a timely manner, a statistical adjustment is made to adjust the trend to the historical behavior of the series. The series are later revised with actual data after having established contact with the source.

## 3.3 Statistical techniques

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

Procedural manuals for the international tourism survey, the border travelers' survey, the workers' remittances system, as well as the foreign trade of goods system have been produced, in order to document those procedures. The surveys are designed for easy completion and electronic processing. A series of measures have been established to control quality and conduct appropriate and timely verification of the information provided in the surveys, before and after their electronic processing.

In the case of the merchandise and travel accounts, diagnostic tests are scheduled for errors and/or figures that are outside the usual trend or expected seasonal changes. The surveys are designed to facilitate completion by the respondent and for easy processing. The surveys are normally not subject to pilot tests.

The coverage of private external debt, is generally good, but the residence criterion is not applied to public and nonfinancial private debt (see 2.2.1).<sup>15</sup> The IIP, but not external debt, data includes other capital within foreign direct investment. However only balances are available for private debt, so interest amounts are estimated using a combination of interest rates and spreads taken from the survey of debtor enterprises. Data produced on private debt are only available as end-of-month balances (commercial banks) and end-of-quarter balances (nonbank sector), consequently the balance of payments transactions are differences in stocks. No adjustments are made, such as foreign exchange adjustments, because the survey form requires the information to be reported only in US dollars.

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

The coefficient used to estimate freight and insurance is derived from periodic consultation with customs officials. Border trade transactions, which are large enough to warrant declaration at customs, are included in the goods account. If such transactions are small, declaration is not required and they are compiled under the item of travel, with the probability of capture determined by the existing sampling system at the SASE. If the transactions are not selected in this survey, they will then be estimated based on coefficients already established in the sample.

The SASE does not require adjustments to correct underestimation of the total value of exports because all exports are captured given that they are declared at customs, even if they are nontaxable. Specific adjustment are made to exports of agricultural products that do not regularly exceed 3.5 percent of the reported values. Only in those cases in which the data are not available in a timely manner from some basic source of the balance of payments are estimates made, which are subsequently replaced with actual values as soon as they can be obtained from the source.

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

# 3.4.1 Intermediate results are validated against other information, where applicable

Regarding the goods account, automobile exports registered by customs are cross-checked with those reported by companies in the bulletin of the Mexican Automobile Industry Association. Also, there is a close contact with the main resident automobile manufacturers, in order to cross-check information with them any time when data look atypical. In the

<sup>&</sup>lt;sup>15</sup> Outside the scope of the residence-based data, it is understood that some large Mexican entities have offshore affiliates that contract debt.

capital account, information published in the media and in some specialized information systems (Bloomberg and Infosel) is used to corroborate and/or flag major FDI and external debt transactions.

Information on nonbank private sector external debt incorporated in the balance of payments comes from a survey of external creditors managed by another area of the BM. The balance of payments area also conducts a survey of debtor enterprises that has not been used in the balance of payments statistics because its coverage is less extensive, though it has been useful for cross-checking data and assessing quality.

# 3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Statistical discrepancies in the intermediate data are assessed and investigated. For example, in the case of public external debt, data on stocks, flows, and interest come from the same data source and checks are made to ensure that the implicit interest rate on the public external debt is consistent with the level and trend in the international reference rates. In the case of merchandise trade, the system shows operations whose unit value fall out of the typical range of the operation in any specific HS category. Also, those operations that are atypically large, whether for the HS category where they are classified, or for the firm making such operation, are verified with Customs or with the firm itself.

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

The size and sign of the errors and omissions heading is monitored and often used as an indicator of the type of deficiencies in the statistics. Trends in the major balance of payments accounts are monitored using statistical methods.

A reconciliation exercise on a bilateral basis was practiced during 1999 with the figures for merchandise trade with the United States and Canada. The sources of some discrepancies have been identified for the United States, caused by weaknesses in the systems of both countries. One of the main causes of discrepancies in the Mexico-US bilateral trade in previous years was that, for some export oriented firms, the customs document to be filled allowed for the specification of only one country of origin/destination despite the fact that in several cases the transactions reported in such document had been carried out with a number of different countries. Therefore, the usual practice in those cases was to attribute all the transactions to the US. Now, as the customs document has been reformed to allow for country specification for each individual item reported, this source of discrepancy has been corrected.

#### 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 direction and size of the revisions between the preliminary and final data are examined. The size and sign of the errors and omissions heading provide the frame of reference for investigations into the deficiencies in balance of payments statistics. Although the direction and size of the revisions between the preliminary and final data are examined, no formal studies are conducted to inform statistical processes. In the case of major revisions by sources, the latter are consulted on the reason for the revision.

### 4. Serviceability

## 4.1 Periodicity and timeliness

## 4.1.1 Periodicity follows dissemination standards

The periodicity of the data is consistent with the Special Data Dissemination Standards (SDDS) and the data are published on the BM website. Foreign trade statistics are published monthly. Balance of payments data are released quarterly. International reserves are disseminated weekly and calculated daily. The Data Template is prepared and distributed monthly exclusively via the BM website, although BM has expressed the intention to disseminate on the Fund's website. <sup>16</sup>

#### 4.1.2 Timeliness follows dissemination standards

The timeliness of the foreign trade, balance of payments, and international reserves statistics is consistent with the SDDS. The foreign trade statistics are disseminated approximately 23 calendar days after the reference month, according to a calendar made public by INEGI. The quarterly and annual balance of payments data are disseminated in accordance with a calendar placed at the BM's website during November of every year, stating release dates for each of the quarters of the next year (in every case data are released within two months of the close of the reference period). Weekly international reserves are published two days after the reference week. The Data Template is released 30 days after the reference month.

<sup>&</sup>lt;sup>16</sup> On February 24, 2010 Mexico begun the dissemination of its Data Template on the Fund's website at: <a href="http://www.imf.org/external/np/sta/ir/colist.htm">http://www.imf.org/external/np/sta/ir/colist.htm</a>, Time series data for the period January, 2000–December, 2009 were provided.

# 4.2 Consistency

#### 4.2.1 Statistics are consistent within the dataset

The balance of payments time series from 1979–2009 have been reclassified in accordance with the structure of the *BPM5*, which is disseminated in Fund publications *International Financial Statistics (IFS) and in Balance of Payments Statistics Yearbook (BOPSY)*.

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

Balance of payments electronic dissemination formats are available since 1980 and, when changes are made in the source data, the time series are reconstructed if there is enough information to make the estimates. When major methodological changes are made, they are indicated in the external sector section of the *Annual Report* of the Bank of Mexico. No detailed methodological notes are made available to the public. In the quarterly press release incorporating an analytical text on the balance of payments, atypical fluctuations in the figures are noted and explained, where possible, and any methodological changes made over the period are also mentioned.

The annual balance of payments statistics are consistent with the quarterly statistics. The BM continuously revises methodology, procedures, and output in order to ensure the internal consistency of the statistics.

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

The balance of payments statistics are largely reconcilable with the national accounts, monetary and government finance statistics. For instance, the BM works jointly in different working groups on trade and direct investment to reconcile these balance of payments figures with those of other statistics-producing agencies, such as INEGI, SHCP, and the Secretariat of Economy.

The balance of payments statistics are largely compatible with the national accounts statistics as the SNA external account is compiled on the basis of balance of payments current account data. However, some services are classified as income in the balance of payments statistics and services in the national accounts. The asset and liability items of commercial and development banks, as well as those of the Bank of Mexico, are compiled on the basis of money and banking statistics, hence their compatibility with the monetary and financial statistics, but there is a different treatment of nonresident branches of resident banks. Nonresident branches of resident banks are considered residents in external sector statistics. The public external debt data produced by the Secretariat of Finance and Public Credit contain beginning and ending balances, resource allocation, amortization, foreign exchange adjustments, and coverage adjustments. The recording criterion is the place of issuance of the security and not residence of creditor basis, which is applied in the same form in external sector statistics. The concept is fully compatible with the balances and flows recorded in the balance of payments, but not with *BPM5* methodology.

Starting with the end position for 2001, Mexico has been publishing international investment position statistics on a yearly basis. Figures are consistent with those of the balance of payments, except that reserves data in the IIP are included in other functional categories (but are separately identified). Also total external debt data should be reconciled with debt items of the IIP particularly in the item of other capital within foreign direct investment that appears to be omitted from the total external debt table (and not separately identified in the IIP). Previsions made to total external debt tables should be posted on Mexico's SDDS website and reported to the World Bank's QEDS website.

## 4.3 Revision policy and practice

### 4.3.1 Revisions follow a regular and transparent schedule

There is no formal revisions policy, but revisions are carried out on predictable dates and are linked with the quarterly balance of payments dissemination dates. Revisions are part of a normal statistical process of incorporating additional information, as it becomes available, which is reflected in the fact that revisions are made whenever necessary. Whenever a revision is made, it is reported in the press releases in which the information is published.

# 4.3.2 Preliminary and/or revised data are clearly identified

Preliminary data are clearly identified.

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

The factors contributing to preliminary figure discrepancies are explained to the BM authorities. These changes are later published in press releases and in the *Annual Report*. However, they are not included in the databases. No formal procedure has been established for disseminating studies and analyses of revisions.

#### 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 quarterly balance of payments statistics disseminated on the BM website follow the structure and classification recommended in the *BPM4*.

In the releases on merchandise trade and those corresponding to the balance of payments, graphs and tables are added as deemed useful. Furthermore, in the balance of payments

<sup>&</sup>lt;sup>17</sup> Banco de Mexico is improving the methodology in coordination with the Ministry of Economy to obtain separately transactions and positions of other capital in the foreign direct investment account.

format, additional details on the current account, merchandise trade, and international travel are presented. In the press releases a brief analysis is made of the trends and salient points of the main items.

#### 5.1.2 Dissemination media and format are adequate

The formats used for disseminating the balance of payments statistics, like the rest of the BM's statistics, are suitable for electronic dissemination via the Internet. In printed version, balance of payments data are available to the public in the *Annual Report* of Banco de México and also, in the specific Quarterly Press Bulletin on Balance of Payments that report the release of the statistics.

The data are disseminated in a press release, which highlights the most salient aspects of the statistics covering the most recent period. This release is sent to the principal media outlets in the country and, at the same time, is posted on the BM's website. The statistical tables are also posted on the BM's website when the press release is issued. Users can consult the publication on external sector indicators on the website. In this section, the balance of payments is published in greater detail, in particular the merchandise trade statistics. The balance of payments time series may be consulted on the BM's website.

## 5.1.3 Statistics are released on a preannounced schedule

During November of each year, the BM makes public an advance release calendar posted on the website with the dissemination dates for the balance of payments statistics information and press releases for the next calendar year.

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

The figures are made available to all interested parties at the same time via the Internet and the principal media in the country.

#### 5.1.5 Statistics not routinely disseminated are made available upon request

Additional details are provided upon request, respecting the confidentiality criteria laid down in the Statistics Law (LSNIEG). The terms for requesting balance of payments data according to users' needs are not specified.

## 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

No additional metadata other than the SDDS are published, and the amount of detail in concepts, scope and classification is very light. Users are unaware of the concepts, scope and

classification basis of external sector statistics. BM does supply metadata to the IMF for publication in the IMF's *BOPSY*.

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

The BM has not prepared general information sheets for users on balance of payments and other external sector statistics as such information is available on the BM's webpage.

#### 5.3 Assistance to users

## 5.3.1 Contact points for each subject field are publicized

Support and advisory assistance is provided to users on request by e-mail or by means of the Law on Transparency from the BM. Staff of the BM responds promptly to these requests. Such support is not advertised in any of the available media. Balance of payments contact information can be found on the Mexico balance of payments SDDS website. BM website makes available to all users the e-mail address of a deputy governor who can be consulted and/or asked about the activities of the Bank or the statistics it produces.

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

Indexes of publications, documentation, and research papers are categorized, listed, and available on the BM's website free of charge.

Table 4. Mexico: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics (Compiling Agency: Secretariat of Finance and Public Credit)

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		Assessment			Comments		
		0	LO	LNO NO	Comments		
0. Prerequisites of quality	1	1	1	1			
0.1 Legal and institutional environment			X		The law does not assign Bank of Mexico the task of compiling balance of payments, nor allows it to request information from the nonfinancial private sector.		
0.2 Resources		X					
0.3 Relevance			X		Users are not consulted actively and systematically.		
0.4 Other quality management		X					
1. Assurances of integrity							
1.1 Professionalism		X					
1.2 Transparency		X					
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X		Data are compiled using a mix of methodological standards from the Fourth and Fifth editions of the balance of payments manuals.		
2.2 Scope			X		Financial transactions of foreign branches of Mexican banks and nonfinancial private sector debt transactions and positions are not recorded on the basis of the residency criterion.		
2.3 Classification/sectorization				X	The classification of <i>BPM5</i> is not followed in national publications. Some financial services are classified as income.		
2.4 Basis for recording			X		Public and private debt is recorded on a face value, and some interest in not recorded on an accrual basis.		
3. Accuracy and reliability							
3.1 Source data			X		Source data are incomplete to compile some services in the current account, and financial transactions of the nonfinancial private sector.		
3.2 Assessment of source data		X					
3.3 Statistical techniques		X					
3.4 Assessment and validation of intermediate data and statistical outputs		X					
3.5 Revision studies			X		Revision studies are not performed regularly.		
4. Serviceability	1		1	1	1 5 7		
4.1 Periodicity and timeliness		X					
4.2 Consistency			X		Inconsistencies exist with other datasets.		
4.3 Revision policy and practice			X		Revisions follow a regular schedule, although it is not known by the public. Studies and analysis revision are not made public.		
5. Accessibility							
5.1 Data accessibility		X					
5.2 Metadata accessibility				X	Metadata on balance of payments and IIP statistics methodology are not available to users. Some limited information are found only on the Mexico pages of the SDDS website.		
5.3 Assistance to users		X					

#### Recommendations

- Conduct regular reconciliation exercises to verify consistency among the balance of payments, IIP and external debt statistics.
- Begin an active, systematic process of consulting users on the quality of balance of payments statistics.
- Establish procedures for informing users about data revision studies related to external sector statistics.
- Apply *BPM5* criteria when classifying and disseminating the breakdown of income, financial services, financial derivatives, and official reserves assets.
- Apply the residency criteria to foreign branches of resident banks in the compilation of the balance of payments and International Investment Position.
- Apply the residency criteria to public and nonfinancial private sector external debt statistics used to compile balance of payments, IIP and total external debt.
- Improve the coverage of services and transactions in the financial account of the non-financial private sector.
- Develop a transition plan to *BPM6*.
- To the extent possible, record external public and private debt on an accrual basis in the balance of payments using market values, and reconcile total external debt statistics with IIP data on debt liabilities.
- In anticipation of users' needs, compile and disseminate a quarterly IIP.
- Prepare and disseminate detailed documentation on the methodology used for compiling BOP statistics.

# **Appendix I. Summary of the Special Data Dissemination Standard (SDDS)**

The SDDS prescribes the following practices under each of the identified dimensions:

**Data dimension** (coverage, periodicity, and timeliness)

• the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) 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
- the 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; and
- 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.

The IMF staff is monitoring observance of the standard through NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: http://dsbb.imf.org.

Appendix II. Data Quality Assessment Framework—Generic Framework (July 2003 Framework)

Quality Dimensions	Elements	Indicators
0. Prerequisites of quality	<b>0.1 Legal and institutional environment</b> —The environment is supportive of statistics.	0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified. 0.1.2 Data sharing and coordination among data-producing agencies are adequate. 0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only. 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.
	<b>0.2 Resources</b> —Resources are commensurate with needs of statistical programs.	<ul><li>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</li><li>0.2.2 Measures to ensure efficient use of resources are implemented.</li></ul>
	<b>0.3 Relevance</b> —Statistics cover relevant information on the subject field.	0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.
	<b>0.4 Other quality management</b> —Quality is a cornerstone of statistical work.	<ul> <li>0.4.1 Processes are in place to focus on quality.</li> <li>0.4.2 Processes are in place to monitor the quality of the statistical program.</li> <li>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</li> </ul>
integrity The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.	1.1 Professionalism—Statistical policies and practices are guided by professional principles.	1.1.1 Statistics are produced on an impartial basis. 1.1.2 Choices of sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations. 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.
	1.2 Transparency—Statistical policies and practices are transparent.	1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public. 1.2.2 Internal governmental access to statistics prior to their release is publicly identified. 1.2.3 Products of statistical agencies/units are clearly identified as such. 1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.
	<b>1.3 Ethical standards</b> —Policies and practices are guided by ethical standards.	1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

Quality	Elements	Indicators
Dimensions		
2. Methodological	2.1 Concepts and definitions—	2.1.1 The overall structure in terms of concepts and
soundness The methodological	Concepts and definitions used are in accord with	definitions follows internationally accepted
The methodological basis for the	internationally accepted	standards, guidelines, or good practices.
statistics follows	statistical frameworks.	
internationally	2.2 Scope—The scope is in	2.2.1 The scope is broadly consistent with
accepted standards,	accord with internationally	internationally accepted standards, guidelines, or
guidelines, or good	accepted standards, guidelines,	good practices.
practices.	or good practices.	good practices.
p. wettees.	2.3 Classification/	2.3.1 Classification/sectorization systems used are
	sectorization—Classification	broadly consistent with internationally accepted
	and sectorization systems are in	standards, guidelines, or good practices.
	accord with internationally	
	accepted standards, guidelines,	
	or good practices.	
	2.4 Basis for recording—Flows	2.4.1 Market prices are used to value flows and
	and stocks are valued and	stocks.
	recorded according to	2.4.2 Recording is done on an accrual basis.
	internationally accepted	2.4.3 Grossing/netting procedures are broadly
	standards, guidelines, or good	consistent with internationally accepted standards,
	practices	guidelines, or good practices.
3. Accuracy and	3.1 Source data—Source data	3.1.1 Source data are obtained from comprehensive
reliability	available provide an adequate	data collection programs that take into account
Source data and	basis to compile statistics.	country-specific conditions.
statistical techniques		3.1.2 Source data reasonably approximate the
are sound and		definitions, scope, classifications, valuation, and
statistical outputs		time of recording required.
sufficiently portray		3.1.3 Source data are timely.
reality.	3.2 Assessment of source	3.2.1 Source data—including censuses, sample
	data—Source data are regularly	surveys, and administrative records—are routinely
	assessed.	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.
	3.3 Statistical techniques—	3.3.1 Data compilation employs sound statistical
	Statistical techniques employed	techniques to deal with data sources.
	conform to sound statistical	3.3.2 Other statistical procedures (e.g., data
	procedures.	adjustments and transformations, and statistical
	Processing 22.	analysis) employ sound statistical techniques.
	3.4 Assessment and validation	3.4.1 Intermediate results are validated against other
	of intermediate data and	information, where applicable.
	statistical outputs—	3.4.2 Statistical discrepancies in intermediate data
	Intermediate results and	are assessed and investigated.
	statistical outputs are regularly	3.4.3 Statistical discrepancies and other potential
	assessed and validated.	indicators or problems in statistical outputs are
		investigated.
	3.5 Revision studies—	3.5.1 Studies and analyses of revisions are carried
	Revisions, as a gauge of	out routinely and used internally to inform statistical
	reliability, are tracked and	processes (see also 4.3.3).
	mined for the information they	
	may provide.	

Quality		T P /
Dimensions	Elements	Indicators
4. Serviceability Statistics, with adequate periodicity and timeliness, are consistent and	4.1 Periodicity and timeliness—Periodicity and timeliness follow internationally accepted dissemination standards.	4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.
follow a predictable revisions policy.	4.2 Consistency—Statistics are consistent within the dataset, over time, and with major datasets.	<ul> <li>4.2.1 Statistics are consistent within the dataset.</li> <li>4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.</li> <li>4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</li> </ul>
	4.3 Revision policy and practice—Data revisions follow a regular and publicized procedure.	<ul> <li>4.3.1 Revisions follow a regular and transparent schedule.</li> <li>4.3.2 Preliminary and/or revised data are clearly identified.</li> <li>4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).</li> </ul>
Data and metadata are easily available and assistance to users is adequate.  Statistic clear an manner, are adequate where are adequate.  5.2 Met Up-to-data	5.1 Data accessibility— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 5.1.2 Dissemination media and format are adequate. 5.1.3 Statistics are released on a preannounced schedule. 5.1.4 Statistics are made available to all users at the same time. 5.1.5 Statistics not routinely disseminated are made available upon request. 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. 5.2.2 Levels of detail are adapted to the needs of the intended audience.
	5.2 Metadata accessibility— Up-to-date and pertinent metadata are made available.	
	5.3 Assistance to users— Prompt and knowledgeable support service is available.	<ul><li>5.3.1 Contact points for each subject field are publicized.</li><li>5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</li></ul>

#### APPENDIX III. USERS' VIEWS

- 1. With the assistance of INEGI, SHCP, and BM, the Data ROSC mission conducted a survey of users of Mexico's macroeconomic statistics to obtain their views on the quality of these statistics. One hundred and forty responses were received from representatives of the private sector, commercial banks, consulting companies, academic institutions, government agencies, and international organizations. This was a high response. The survey used a questionnaire developed by IMF staff. As a complement to the survey, the mission had two general meetings with about forty users and one meeting with two individual highly specialized users, all organized by INEGI, SHCP, and BM.
- 2. Overall, users generally were satisfied with the quality of macroeconomic statistics. There was some variation among the averages. Respondents felt that the official statistics of Mexico are better (30 percent) or at least as good as (39 percent) those of other countries in the region.
- 3. Most respondents found it easy to access data, reaching an average level of satisfaction of over 75 percent, although government finance statistics got a less favorable rating. The respondents indicated that the official statistics they use the most were prices and national accounts. The majority of respondents obtain official statistics from official press releases and statistical publications, and 81 percent indicated that they refer to official descriptions of the sources and methods. Respondents use official statistics mainly for research, comparison with economic developments in other countries, and for analysis of current development for short-term decision making.
- 4. In terms of the different elements of data quality, among the four domains accessed, on the level of detail the highest level of satisfaction was with monetary statistics. They felt that there is room for improving the coverage and detail of government finance statistics. Most respondents were also generally satisfied with the methodological soundness of the official statistics, particularly for national accounts and monetary statistics. There were low scores across almost all the domains regarding the availability of information on revisions.
- 5. In the meetings with users and written comments provided the mission found a generally positive attitude towards the work of the statistical agencies, but there were some comments on the lack of availability of sufficient long time series data, timeliness in some instances, information about revisions, and lack of regional data. Also, on website design some users expressed difficulty in finding primary sources and specific information on metadata. They also felt that official statistics should clearly state the revision policy. Some users noted that in recent years they have started to compare Mexican data with some other emerging G20 countries as well as Mexico's NAFTA partners and other countries in Latin America.

As regards proposals for the future, there were specific requests. Some users would like to see improvements for downloading BOP and monetary statistics, and to have access to data from the external debt amortization profile by sector.