INTERNATIONAL MONETARY FUND

Staff Country Reports

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

This Report on the Observance of Standards and Codes on the Data Module for Guatemala 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 June 10, 2005. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Guatemala or the Executive Board of the IMF.

The Response by the Authorities on this report and the Detailed Assessments Using the Data Quality Assessment Framework are also included.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
700 19th Street, N.W. • Washington, D.C. 20431
Telephone: (202) 623 7430 • Telefax: (202) 623 7201
E-mail: publications@imf.org • Internet: <http://www.imf.org>

Price: \$15.00 a copy

**International Monetary Fund
Washington, D.C.**

This page intentionally left blank

INTERNATIONAL MONETARY FUND

GUATEMALA

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

Prepared by the Statistics Department

Approved by Robert W. Edwards and Anoop Singh

June 10, 2005

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

The datasets covered in this report are national accounts, consumer price index, government finance, monetary, and balance of payments statistics. The agencies that compile the datasets assessed in this report are the National Institute of Statistics (NIS), the Bank of Guatemala (BG), and the Ministry of Finance (MOF).

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

NIS: (<http://www.ine.gob.gt>)
BG: (<http://www.banguat.gob.gt>)
MOF: (<http://www.minfin.gob.gt>)

This report is based on information provided prior to and during the mission that took place during October 14–28, 2004 and publicly available information. The mission team was headed by Mr. Rosales, and included Mmes. Ocampos and Rivas (all STA), Messrs. Aceituno, Martelino, and Sepúlveda (Experts), and Mrs. French (Administrative Assistant, STA).

Contents	Page
Acronyms.....	3
I. Overall Assessment	4
II. Assessment by Agency and Dataset.....	6
III. Recommendations.....	16
Text Tables	
1. DQAF July 2003—Summary Results.....	7
2a. Assessment of Data Quality—Dimensions 0 and 1—National Institute of Statistics	8
2b. Assessment of Data Quality—Dimensions 0 and 1—Bank of Guatemala.....	9
2c. Assessment of Data Quality—Dimensions 0 and 1—Ministry of Finance	10
3a. Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index	11
3b. Assessment of Data Quality—Dimensions 2 to 5—National Accounts.....	12
3c. Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments	13
3d. Assessment of Data Quality—Dimensions 2 to 5—Monetary and Financial Statistics....	14
3e. Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics.....	15
Appendix Table	
4. Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the Recommendations of the GDDS	21

ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
BG	Bank of Guatemala
BIS	Bank of International Settlements
<i>BPM4</i>	<i>Balance of Payments Statistics Manual</i> , fourth edition
<i>BPM5</i>	<i>Balance of Payments Statistics Manual</i> , fifth edition
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DCS	Depository Corporations Survey
DQAF	Data Quality Assessment Framework, July 2003 version
DSBB	Dissemination Standards Bulletin Board
ENCOVI	Standard of Living Survey
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics</i> , 1986
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual 2001</i>
IFIS	Integrated Financial Information System
<i>IFS</i>	International Financial Statistics
IMF	International Monetary Fund
ITRS	International Transactions Reporting System
MB	Monetary Board
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NIS	National Institute of Statistics
NSHIE	National Survey of Household Income and Expenditure
NSS	National Statistical System
ODC	Other Depository Corporations
OIM	Organization of International Migration
PPI	Producer Price Index
PRONAME	National Program for Improving Economic Statistics
ROSC	Report on the Observance of Standards and Codes
SB	Superintendence of Banks
SDDS	Special Data Dissemination Standard
STA	IMF Statistics Department
WPI	Wholesale Price Index

I. OVERALL ASSESSMENT

1. The legal framework for statistical activity is broadly adequate, and institutions display a commitment to disseminate macroeconomic statistics, largely through the Internet. Stricter implementation of the law and greater public relations efforts could help address reticence by nonfinancial entities to respond to data requests. There is scope to improve the methodological basis and source data underpinning most datasets, as well as the mix and level of resources in a few cases. However, all statistical agencies are well placed to make further statistical progress on the basis of ongoing initiatives and measures taken recently.
2. Guatemala is taking steps to participate in the General Data Dissemination System (GDDS)¹ As noted in the Appendix, Guatemala meets most GDDS recommendations, with those on periodicity met or exceeded across all data categories. As exceptions, coverage of the government finance statistics (GFS) does not extend to the consolidated central and general government and monthly production indices are not available. With few exceptions, the macroeconomic statistics are disseminated within the GDDS recommended periods.
3. In applying the IMF's Data Quality Assessment Framework (DQAF), the mission arrived at the following conclusions.
4. **Prerequisites of quality and assurances of integrity:**
 - The **National Institute of Statistics (NIS)** operates under a law (of 1985) that creates an environment conducive to close coordination among public entities compiling statistics in the context of a National Statistical System (NSS). The National Statistical Commission (envisaged in the law) met for the first time on September 24, 2004 to play an advisory role. Independence of NIS, however, could be seen as hindered by lack of financial autonomy and a governing body comprising representatives from ministries and industry associations. The NIS head is a member of the Board, but lacks the right to vote, which may undermine accountability. Fines for nonreporting and misreporting are low, with no mechanism to preserve their real value, which could complicate future efforts to improve source data by NSS members. Resources are insufficient, including for compiling the consumer price index (CPI). Relevance of the CPI is monitored, but a producer price index is not compiled, and contribution to the compilation of the national accounts is minimal. Some quality management processes are in place, and the NIS has fostered an environment of professionalism, transparency, and adherence to ethical standards.
 - The law of the **Bank of Guatemala (BG)** mandates dissemination of macroeconomic statistics. To inform policymaking and fulfill this mandate, the BG compiles the

¹ Following the mission, Guatemala completed preparations and became a GDDS participant on December 6, 2004. Preparation of socio-demographic metadata is pending.

national accounts, balance of payments, and monetary statistics, thereby filling a legal void regarding a clear assignation of compilation responsibilities among statistical agencies. Resources are adequate in most cases, but efficient use of human resources is hampered by high staff turnover and insufficient emphasis on statistical objectives in the case of the BOP, with staff in some units also involved in noncompilation tasks. Relevance of monetary statistics is assisted by extensive contact with key users. While representing selected interest groups, members of the Monetary Board (MB), are guided by the BG's law on matters of confidentiality. The BG recruits qualified staff and promotes professionalism.

- The **Ministry of Finance** (MOF) has a legal framework that is broadly adequate for compiling statistics on budgetary central government operations, but not for compiling and disseminating statistics for general government. Despite legal requirements, there is rampant nonreporting to the MOF by public sector entities. The relevance of fiscal data also suffers from a lack of consultation with users. Staff and computing resources are sufficient, but more training is needed. MOF officials are objective and impartial, following ethical guidelines contained in several laws and regulations. The transparency of fiscal data could be enhanced by publishing information on practices and procedures for data compilation and dissemination.

5. Most published series have good **methodological foundations**. The methodology and base year of the national accounts are seriously outdated. Commendably, however, the BG is working to produce a higher-quality series, with results expected shortly. Improvements in scope, classification, and sectorization are needed (in varying degrees) for most datasets, with national accounts, balance of payments, and GFS most affected by incomplete coverage. As regards the basis for recording, international standards are not fully applied in all datasets.

6. Paucity of source data is the key factor hindering the **accuracy and reliability** of most published statistics. In particular, compilation of the national accounts and the BOP relies on administrative source data, with virtually no data obtained from surveys. Rampant nonreporting to the MOF by public sector units impedes preparation of statistics on the operations of the general government. Following a long lag in the updating of the CPI weights, the lack of a plan for updating such weights with sufficient frequency is a shortcoming. Also, there are weaknesses in the compilation of the CPI related to the treatment of missing prices, innovations in product quality, and the emergence of new products. Monetary statistics lack sufficient detail to permit accurate classification and sectorization of commercial bank's accounts. Processes for assessment and validation of source, intermediate, and output data are weak in the case of the national accounts and the BOP. Statistical techniques are generally sound, except for the national accounts. For most datasets, revision studies are not conducted on a regular basis.

7. **Serviceability** of disseminated macroeconomic statistics is adequate in most cases. The frequency and timeliness of disseminated data follow or exceed GDSDS recommendations. While CPI timeliness exceeds SDDS standards, there is scope to provide the public with longer series. Compiling agencies could make additional joint efforts to

enhance consistency across macroeconomic datasets. Revision policy and practice are incipient, and revisions are not always identified or explained to the public.

8. Significant efforts have been made to improve the **accessibility** of macroeconomic data. All agencies have improved dissemination through the Internet, but advance release calendars are not published. Greater efforts are needed to release certain data simultaneously to all users and to present statistics in a way that facilitates easy use and proper interpretation. Also, methodological notes and other metadata are seldom published in most cases.

9. Section II of this report provides a summary assessment of data quality by agency and dataset. This is followed by staff recommendations in Section III. The authorities' response to this report and a volume of detailed assessments are presented in separate documents.

II. ASSESSMENT BY AGENCY AND DATASET

10. An assessment of the quality of five macroeconomic datasets—national accounts, consumer price index, government finance, monetary, and balance of payments statistics—was conducted using the Data Quality Assessment Framework (DQAF) and 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 documented for each data-producing agency in Tables 2a–c. The assessments of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF) are presented for each dataset in Tables 3a–3e.

11. To enrich the basis for assessment, the mission elicited the views of selected users of the macroeconomic statistics through a survey and a follow-up meeting. Users were largely satisfied with recent efforts at disseminating macroeconomic statistics through the Internet, but a majority saw scope for substantial improvement in several areas. Many were concerned about weaknesses in the national accounts and related uncertainties about the level and growth rates of GDP. They were uninformed about intense remedial efforts currently underway at the BG. A majority pointed to poor timeliness of annual estimates, expressing a strong desire for quarterly national accounts and balance of payments estimates as well as improved methodology. There was demand for more detail and longer series, including for those variables modified as a result of methodological change. A majority expressed dissatisfaction with available metadata and lack of information on data revisions.

12. In addition, users provided more general insights and recommendations during the meeting. They acknowledged a generalized apprehension about providing data, possibly arising from tax liability and security concerns. Some suggested the recent end of a long period of civil war provided a basis for increasing transparency, but that progress is proceeding slowly. They suggested involving industry associations and universities in the official collection of statistics, to take advantage of their high credibility. They also noted that market solutions to the paucity of official GDP data relied on a good response rate to surveys conducted privately, including from otherwise guarded investors. There was concern about the adverse effect of insufficient official data on prospective foreign investment, and inconsistencies across data sources.

Table 1. Guatemala: Data Quality Assessment Framework July 2003—Summary Results

Key to symbols: O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed.					
Datasets	National Accounts	Consumer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Dimensions/Elements					
0. Prerequisites of quality					
0.1 Legal and institutional environment	LO	LO	LO	O	LO
0.2 Resources	LO	LNO	LO	O	O
0.3 Relevance	LO	LO	LO	LO	LO
0.4 Other quality management	LO	LO	LO	O	LO
1. Assurances of integrity					
1.1 Professionalism	LO	O	O	O	O
1.2 Transparency	LO	LO	LO	LO	LO
1.3 Ethical standards	O	O	O	O	O
2. Methodological soundness					
2.1 Concepts and definitions	LNO	O	LO	O	LO
2.2 Scope	LNO	LO	LNO	LO	LO
2.3 Classification/sectorization	LNO	LO	LO	LO	LNO
2.4 Basis for recording	LO	LO	LO	LO	LO
3. Accuracy and reliability					
3.1 Source data	LNO	LO	LO	LNO	LNO
3.2 Assessment of source data	LNO	LO	O	O	LNO
3.3 Statistical techniques	LNO	LO	LO	O	LO
3.4 Assessment and validation of intermediate data and statistical outputs	LNO	LO	LO	O	LO
3.5 Revision studies	LNO	LO	LNO	LNO	LNO
4. Serviceability					
4.1 Periodicity and timeliness	O	O	O	O	O
4.2 Consistency	LNO	O	LO	O	LO
4.3 Revision policy and practice	LNO	LO	LO	LO	LO
5. Accessibility					
5.1 Data accessibility	LO	LO	LO	O	LO
5.2 Metadata accessibility	LNO	LO	LNO	LNO	LNO
5.3 Assistance to users	LO	O	LO	LO	LO

Practice observed: current practices generally in observance 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.

Table 2a. Guatemala: Assessment of Data Quality—Dimensions 0 and 1: National Institute of Statistics

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment. Its law (1985) assigns the NIS a leadership role in formulating and implementing national statistical policy. The NIS is mandated to coordinate a National Statistical System (NSS) comprising public sector units producing statistics, with the right to approve questionnaires and instructions. Implementation of aspects of the law has been unsteady, with the envisaged National Statistical Commission constituted in September 2004. The NIS law empowers NSS members to collect data, obligating a response to requests for information. At the same time, it reaffirms the constitutional requirement for the confidential treatment of individual data. Also, it allows for fines for nonreporting and misreporting. At the equivalent of about US\$65–250, however, fines lack the needed deterrent effect, and have not been applied in recent years. Moreover, the law does not provide for the preservation of the real value of fines.</p> <p>The NIS law does not assign specific responsibilities to NSS members for the production of macroeconomic statistics. In line with a mandate specified in the law governing state contracts, the NIS prepares and disseminates a monthly CPI within 30 days of the end of the reference month. The BG compiles a weekly CPI with a substantially reduced scope, but only for internal use.</p> <p>Resources devoted to the CPI are insufficient in some respects. Funding is insufficient to ensure that salary and tenure for a good portion of staff are competitive with other agencies producing macroeconomic statistics. As a result, contractuels represent nearly a third of the staff, and more than 80 percent have less than one year in the job. The number of staff dedicated to compilation is adequate, but the number of staff on data processing and field work is insufficient. Field staff also need to dedicate time to gathering data for the monthly Wholesale Price Index (WPI). Except for an excellent endowment of computer equipment, physical infrastructure is inadequate. Hiring of experts relies on donor funds.</p> <p>Relevance is partly ensured by the composition of the NIS governing board, which includes the Ministry of the Economy (ME), BG, MOF, other ministries and selected interest groups. Also, the NIS monitors user demand and level of satisfaction through its two centers open to the public. When a survey is conducted, the NIS organizes a committee of users to ensure their needs and views are taken into account. A tight budget constraint precludes participation of NIS staff in conferences and training offered abroad. NIS contribution to generating source data for the national accounts is minimal.</p> <p>Other quality management focuses on monitoring the CPI production process and identifying changes in specifications of items in the CPI basket, but evaluation of editing rates, revisions, and timeliness are insufficient.</p>	<p>Professionalism. Insufficient autonomy could give rise to questions on the adequacy of the basis for professionalism. According to its law, the NIS is a semiautonomous decentralized agency ascribed to the ME, with the Minister of the Economy presiding over the NIS's governing body. The NIS's budget is <i>effectively</i> subject to approval by the ME and the MOF. While appointed by the President of the Republic and a member of the NIS Board, the head of the NIS does not have the right to vote, which could be seen as undermining accountability. Members of the NIS Board include representatives of the ME, MOF, BG, industry associations, and other selected interest groups.</p> <p>Despite these shortcomings, the CPI presently is produced without interference, with the choice of sources and techniques made on entirely technical criteria. Recruitment and promotion of staff are governed by NIS regulations and the <i>Law of the Civil Service</i>, and generally are based on professional merit. As soon as they are available, data and a concise analysis of trends are presented to the media at a monthly press conference, with posting on the NIS's website taking place a few days later. The NIS monitors CPI data use, and while it is empowered to make clarifications on incorrect interpretation by the public or the media, this is seldom necessary.</p> <p>Transparency. Representatives of the selected interest groups in the NIS Board and the President of Guatemala have embargoed access to the CPI usually 2–24 hours prior to public release. However, the public is not informed of this practice. NIS publications provide technical details on CPI compilation and references to the law are provided in questionnaires. The NIS law and contact information are available on its website, its products are clearly identified, and the NIS requests attribution when its data are reproduced by others. While there is no policy for announcing major changes in methodology/techniques before implementation, draft questionnaires (including to select new basket weights) are circulated for comment to specialized users. The change in the reference year for the CPI was publicized shortly following implementation through a presentation to key users and a press release.</p> <p>Ethical standards. As public servants, NIS staff are required to adhere to the norms of conduct specified in the <i>Law of the Civil Service</i>. The NIS law reaffirms confidentiality and other norms, while an NIS directive applies to contractual staff engaged in data collection in the field.</p>

Table 2b. Guatemala: Assessment of Data Quality—Dimensions 0 and 1:
Ministry of Finance

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment. The legal framework is oriented to support data collection for reporting fiscal statistics to policymakers and Congress, but lacks emphasis on the need to disseminate fiscal statistics to the public at large. Rampant noncompliance with reporting requirements by units outside the budgetary central government is a matter of grave concern. All public entities are required by the budget law to provide annual budgets and periodic budget execution reports to the MOF and to Congress. However, the social security agency, some other central government units, many local governments, and most nonfinancial public enterprises do not comply with this legal obligation fully, thereby impeding a clear understanding of their finances. Long-standing forbearance may have created the sense that financial/political autonomy exempts these units from reporting obligations. Against this backdrop, a shortcoming of the budget law is lack of specification of proportionate penalties and other strong remedial measures.</p> <p>In contrast, the success of recent institutional initiatives for enhancing information systems and transparency has yielded clear improvements in the dissemination of central government data. With support from the World Bank, progress has been made in developing an Integrated Financial Information System (IFIS) (launched in 1998) that facilitates dissemination of such data with high periodicity and timeliness. Coordination with the BG is very close, with weekly meetings to review financing data and fiscal conditions.</p> <p>Resources. At present, the number of staff devoted to producing fiscal statistics is sufficient, but there are unmet training needs and the sustainability of the IFIS is not assured. Only a few experienced compilers are well trained in the <i>GFSM 1986</i>, while most have not attended suitable training courses, with little familiarity with the <i>GFSM 2001</i>. With the prospective end to World Bank funding, it is unclear whether the system will be retained with the same level of high-quality staffing. Physical infrastructure and other material resources are adequate.</p> <p>Relevance. Few measures are in place to ensure statistics meet the evolving needs of private sector users, particularly those outside the public sector. Apart from routinely responding to requests from policymakers, the MOF has met needs stemming from the Peace Accords of 1996 and the Fiscal Pact of 2000.</p> <p>Other quality management relies on work to expand coverage of the IFIS, with the medium-term goal of incorporating local governments and the rest of the public sector. A pilot system for a subset of municipalities is in place.</p>	<p>Professionalism. The <i>Law of the Civil Service</i> assists in ensuring impartiality in the work of civil servants. In addition, job stability (average tenure of staff is over seven years) and appropriately high ranking of officials in the MOF reflect conditions fostering professionalism. There is a risk that reliance on the planned improvements in coverage of the IFIS to address the lack of source data on the (above-the-line) operations of the rest of the public sector may be seen as unduly parsimonious and unrelated to technical factors, because such improvement may take much longer than expected. To reduce the likelihood of misuse and misinterpretation of data, IFIS staff have conducted seminars for the press on basic public finance concepts and related data posted in the MOF websites.</p> <p>Transparency. Practices and procedures for data compilation and dissemination usually are not made available to the public. Internal government access to certain fiscal data prior to release is not made public. The compiling unit of data released to the public is clearly identified.</p> <p>Ethical standards. Apart from constitutional safeguards and provisions in the law of the NIS and <i>Law of the Civil Service</i>, legislation on tax administration and probity and responsibility fortify protection of confidentiality.</p>

Table 2c. Guatemala: Assessment of Data Quality—Dimensions 0 and 1:
Bank of Guatemala

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment. The law of the BG mandates dissemination of macroeconomic statistics, but does not specify compilation responsibilities. To inform policymakers and discharge its dissemination obligations, the BG produces the national accounts, balance of payments, and monetary statistics. Its data-gathering capacity is buttressed by the NIS law (as a member of the NSS) and other legislation. Banking and supervisory legislation requires compulsory reporting by banks to the Superintendency of Banks (SB) and protects the confidentiality of individual data, with related provisions communicated to data suppliers. Coordination with other members of the NSS generally is adequate, and particularly close with the SB, which transmits financial data to the BG with good periodicity and timeliness. This is facilitated by the sharing of a common governing body, as the Monetary Board (MB) governs both institutions. While data sharing between the SB and BG is excellent, the SB has not yet acted to ensure that banks provide additional data needed by BG on sectorization. Resort to penalties for nonreporting or misreporting is extremely rare, perhaps because the penalties contemplated in the law of the NIS are low and declining in real terms.</p> <p>Resources. Computing resources, other physical infrastructure, and available funding are broadly adequate. While the number of overall staff dedicated to statistical production is also adequate (particularly for monetary statistics), allocation to competing tasks is not appropriate in most cases. The number of staff dedicated to production of the national accounts currently available for policymaking and dissemination is clearly insufficient. In contrast, the number of staff working on migration to <i>1993 SNA</i> and a more up-to-date base year would be reasonable, provided results are obtained promptly. Regarding production of the balance of payments, the number of staff is adequate, but professionals are frequently distracted by noncompiling tasks, which detract from their ability to concentrate on accelerating statistical improvement. In addition, a very high turnover rate for BOP appears to erode training and experience gains derived from an excellent career development program.</p> <p>Relevance is supported by the dual nature of the BG as compiler and user of statistics. There is contact with users in key public sector and international agencies, but there is no formal and regular consultation with other users.</p> <p>Other quality management is reflected by a good in-house training program, provision of opportunities for training abroad, the hiring of experts to assist in statistical improvement, and multi-layered checks in the preparation of the monetary statistics.</p>	<p>Professionalism. By law, the BG is an autonomous institution and its head (who also heads the MB) is appointed by the President of the Republic for a four-year period that overlaps the presidential term. This supports the BG's independence and fosters professionalism. Compilation decisions are made on the basis of technical criteria, with compilers exempt from outside interference. Professional competence plays a key role in recruitment and promotion policies, with internal regulations specifying educational and aptitude requirements for recruiting. Apart from ample formal training opportunities, staff are provided with other avenues for professional development, including participation in conferences, seminars, and other meetings organized by other central banks and international organizations. Choice of statistical methodology is based solely on statistical considerations, but the national accounts estimated with 1978 as a base year have not been published. The BG provides clarification (including through press releases) in the occasional case of misuse or misinterpretation of data by the public or the media. To adequately inform staff and help detect the need for clarification, the BG monitors press reports and prepares a daily summary that is circulated through its intranet.</p> <p>Transparency. The broad legal terms and conditions for compiling statistics are specified in relevant laws, which are available to the public. Not all questionnaires and publications indicate the legislation supporting data requests, compilation, and dissemination. BG publications provide the address where users may direct comments, suggestions, and questions on statistics, although specific contacts for each dataset are not given. Members of the MB (including representatives of selected interest groups) are by law required to maintain strict confidentiality in the discharge of constitutionally mandated objectives. The MB reviews data prior to release, and upon its approval certain data are disseminated to selected users prior to publication. The public is not informed that certain statistics are not disseminated to all users simultaneously. Also, the public is not given prior notice of forthcoming methodological and technical modifications, although explanations are generally provided upon release of modified data. The compiling unit is clearly identified in publications.</p> <p>Ethical standards for staff are established in the law of the BG and labor regulations, which include a code of conduct. This code covers ethical and professional standards, as well as sanctions and penalties for noncompliance. New recruits are made aware of these norms and staff are periodically reminded about the importance of observance.</p>

Table 3a. Guatemala: Assessment of Data Quality—Dimensions 2 to 5:
National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions are very outdated, conforming to those of the <i>SNA 1953</i>. The BG is currently implementing the <i>1993 SNA</i>.</p> <p>Scope. Estimates of GDP and expenditure are based on an outdated base year (1958). The BG is in the process of compiling new series with 2001 as base year.</p> <p>Classification/sectorization are outdated, based on International Standards Industrial Classification of All Economic Activities, rev. 1. The Central Product Classification (CPC) is not used, as product categories are not identified and a supply/use framework is not prepared.</p> <p>Basis of recording. Value-added taxes, excise taxes on consumption, and own-production are not factored into estimates. Agricultural work in progress is not recorded in the period it is produced, and most government transactions are recorded on a cash basis.</p>	<p>Source data are almost exclusively based on administrative records from the government, industry associations, and municipalities. Censuses are not conducted, and the use of surveys is very limited. Certain source data are untimely, and there is little effort to address the persistent loss of data sources.</p> <p>Assessment of source data is not conducted systematically or regularly.</p> <p>Statistical techniques. No adjustments are made to incorporate informal, illegal, and underground activities. Use of inappropriate methods likely results in an overstatement of real GDP growth. Quarterly accounts are not prepared.</p> <p>Assessment and validation of intermediate data and statistical outputs. Intermediate results are not assessed and the consistency of statistical output is not checked.</p> <p>Revision studies are not prepared.</p>	<p>Periodicity and timeliness. Dissemination of real sector statistics meets GDDS recommendations. Annual real GDP data are published 6–9 months following the reference period.</p> <p>Consistency. There is overall consistency between output and expenditure estimates of GDP. However, there are certain inconsistencies related to the goods for processing (<i>maquila</i>) sector and the government. Data series are consistent across a long period of time (1950–2003), but the series have not been adjusted for changes in source data. The national accounts are consistent with the balance of payments, and have more extensive coverage than the fiscal statistics.</p> <p>Revision policy and practice. There is a revision policy focusing on preliminary data. Publications identify revised data, but do not provide information on the revision. Revisions are not analyzed. The public is not provided with a schedule for updating coefficients and base year.</p>	<p>Data accessibility. The national accounts are published in hard copy and on the website. Longer series, more detail, and unpublished data are available upon request. The public is informed when data are disseminated, but there is no specialized publication or advance release calendars. The public is not adequately informed about procedures for obtaining unpublished information. Data are not made available simultaneously to all users.</p> <p>Metadata accessibility. Metadata have been prepared, but only for internal use. Tables, charts, and brief descriptions of trends are published, but research is not conducted. National accounts metadata have been prepared in the context of GDDS participation.</p> <p>Assistance to users. Publications indicate points of contact, but users are unable to access compilers directly. There is a library open to the public, and seminars are offered to students and journalists. There is no catalog of publications.</p>

Table 3b. Guatemala: Assessment of Data Quality—Dimensions 2 to 5:
Consumer Price Index

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions are generally in line with the <i>CPI Manual, 2004</i>. Prices and weights broadly follow the national accounts concepts (<i>1993 SNA</i>) for all monetary consumption expenditure. The level of detail for commodities and services is sufficient to permit detailed analysis of price movements.</p> <p>Scope. CPI weights cover urban households of all levels of income and types of occupations. Expenditure of rural households (38 percent of all household spending, according to the 1998–99 NSHIE) is not covered. Consumption of own-produced goods and imputation for rental of owner-occupied housing are excluded. These are deviations (particularly the latter) from international standard practices.</p> <p>Classification/sectorization. CPI is classified using the Guatemalan version of the COICOP, with departures from the standard COICOP (e.g., alcoholic beverages and tobacco are included in miscellaneous items).</p> <p>Basis for recording. Prices and weights are recorded using market or transaction values. However, prices do not include discounts, except when the items are to be discontinued. Following good practice, purchases of automobiles are registered on a net basis, and purchases and sales of used goods are identifiable.</p>	<p>Source data are adequate. The sampling frame for the 1998–99 NSHIE was the 1994 population census, with an adjustment based on updated maps covering the entire territory. NSHIEs have been conducted with insufficient frequency (about 20 years). There is no plan to conduct NSHIEs every 5 years, as recommended. A good practice, worth noting, is that purchases in informal markets are reflected in CPI weights.</p> <p>Assessment of source data. Validation is limited to routine checks for extreme values, consistency, and incompleteness. While low, rates of nonresponse to surveys are monitored. However, sampling errors are not monitored regularly and nonsampling errors are not calculated.</p> <p>Statistical techniques. The use of the geometric mean for price changes is a sound practice. Treatment of missing prices, quality adjustment, and new products needs to be improved.</p> <p>Assessment and validation of intermediate data and outputs. CPI is not compared with the WPI. Price data are validated with those from ministries.</p> <p>Revision studies. Monthly CPI data are not revised, but new weights are analyzed prior to implementation. However, weights are not periodically assessed for bias. Notes on price data adjustments are stored in the database. Studies on the last CPI revision were not carried out.</p>	<p>Periodicity and timeliness. Price collection is daily. The monthly CPI is published on the seventh day following the reference month, exceeding GDDS recommendations and SDDS prescriptions.</p> <p>Consistency. The CPI is internally consistent by category of expenditure and geographical area. Continuous historical series, with December 2000 as the reference base, are available up to September 2004. These data were linked to the previous series that had March–April 1983 as the reference base. While this information is not published, it is available upon request. As regards consistency with the price deflator of private final consumption, the CPI is applied to constant price estimates to obtain the current price estimates of private final consumption.</p> <p>Revision policy and practice. CPI data are considered final when first disseminated. Although there was a major revision of the CPI in 2000, there has not been a well-defined schedule with reasonable frequency for revising the index.</p>	<p>Data accessibility. An executive summary is presented to the press on the seventh of each month, along with an analysis of current trends that facilitate re-dissemination in the media. It is then posted on the NIS website, although with an irregular lag of up to a few days. More comprehensive and detailed statistics are disseminated in a hard-copy publication and in CDs. Although the publication format is adequate, time series are insufficient, and certain relevant series (food items) are not seasonally adjusted. Longer time series can be accessed through an electronic database maintained by the National Centers of Statistical Information, or upon request. The CPI is released on the seventh day of the month, but it is not released to all users simultaneously.</p> <p>Metadata accessibility. Only limited metadata are available in hard-copy and in CD. No detailed documentation is available. However, metadata have been prepared in the context of GDDS participation.</p> <p>Assistance to users. Prompt service is available through the National Centers of Statistical Information. CPI publications and the NIS website indicate contact points. The NIS has prepared materials to raise awareness about the CPI in schools and universities. A list of publications is available to users.</p>

Table 3c. Guatemala: Assessment of Data Quality—Dimensions 2 to 5:
Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions are generally consistent with the recommendations of the <i>GFSM 1986</i>. At present, there is no plan to migrate to the <i>GFSM 2001</i>.</p> <p>Scope. Fiscal statistics disseminated by the MOF cover only the budgetary central government. Coverage for statistics disseminated on a monthly and annual basis excludes certain non-budgetary central government units (including the social security agency), the local governments, and public enterprises.</p> <p>Classification/sectorization. There are no fiscal statistics on the operations of the consolidated central government, local governments, the consolidated general government, and the consolidated nonfinancial public sector. In general, expenditure is disseminated both according to functional and economic classification. Published debt data do not follow the recommended classification. Domestic debt stocks are not published, and external debt stocks by holder and instrument have to be estimated by users from published data.</p> <p>Basis for recording. Transactions are registered at market prices using exchange rates for the relevant period; and presented on a gross basis, shown net of VAT refunds due to exporters. Recording is on a cash basis, with a few deviations in the case of monthly data.</p>	<p>Source data on the budgetary central government are comprehensive and timely. Source data for the rest of the public sector are scarce, frequently received with substantial lags, mainly due to nonreporting.</p> <p>Assessment of source data. Data on central government operations are consolidated and processed by IFIS since 1998. This system ensures adequate validation and cross-checking, as well as accuracy and timeliness. Automation of tax collection through the banking system has also ensured adequate verification of tax data.</p> <p>Statistical techniques are broadly adequate. To prepare statistics for publication, compilers download IFIS accounting data into Excel, thereby creating inter-linked derivation tables. However, sampling techniques have not been used to estimate the operations of local governments.</p> <p>Assessment and validation of intermediate data and statistical outputs. Compilers verify intermediate data with information from the Superintendency of Tax Administration, the BG and other public sector entities. Debt stocks and flows are reconciled. However, part of domestic financing is estimated as a residual, and there is no regular procedure to investigate errors and omissions.</p> <p>Revision studies are not conducted.</p>	<p>Periodicity and timeliness are consistent with GDDS recommendations.</p> <p>Consistency. Datasets are internally consistent, and totals for the year can be reconciled with monthly and quarterly figures. Series are published for the period 1995–2000, except for debt stocks for which data are published beginning 2002. Also, the MOF publishes adjusted series reflecting changes in source data.</p> <p>There are some shortcomings concerning inter-dataset consistency. This is mainly because the coverage of the public sector in the national accounts is more extensive. Owing to close coordination with the BG, financing and debt stock data prepared by the MOF are broadly consistent with those obtained from the monetary accounts and with domestic debt data compiled by the BG.</p> <p>Revision policy and practice. Revisions are made on a routine basis, and revised data are clearly identified in publications. However, a revision policy has not been explicitly articulated.</p>	<p>Data accessibility. Fiscal statistics are disseminated through several MOF websites, which include links to in-house sites. While data are published in a clear format, charts and trend analysis are not published. The MOF websites offer easy access to a substantial amount of fiscal data, which are updated at least monthly. Users need to make a formal request to obtain nonpublished data, including longer series with more detail.</p> <p>Metadata accessibility. While some definitions are available in publications, no documentation with a comprehensive description of methods and sources is available for publication. However, metadata have been prepared in the context of GDDS participation.</p> <p>Assistance to users. Each compiling unit is responsible for addressing questions from users. However, publications do not provide the contact information of persons responsible for the statistics. There is no catalog of publications, and related publications are not made available to the public through a library or commercial distributors.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions are generally consistent with those in the <i>Monetary and Financial Statistics Manual (MFSM)</i> of 2000.</p> <p>Scope of the Central Bank Survey is in line with the <i>MFSM</i>. However, the Other Depository Corporations Survey (ODCS) excludes other deposit-taking institutions, such as those in the increasingly important offshore banking sector as well as credit and savings cooperatives.</p> <p>Classification/sectorization of BG accounts follow the <i>MFSM</i>. However, classification and sectorization of commercial banks and other financial institutions is deficient because the outdated Plan of Accounts does not allow for sufficient classification/sectorization (including identification of nonresident accounts).</p> <p>Basis for recording of BG accounts is in accordance with the <i>MFSM</i>. However, for commercial banks, some practices are not in line with <i>MFSM</i> recommendations, such as the use of acquisition rather than market prices for securities, and cash instead of accrual recording for interest.</p>	<p>Source data generally are derived from comprehensive data collection programs needed for compiling statistics according to the <i>MFSM</i>. However, source data for compiling the ODCS lack sufficient detail to permit more accurate classification and sectorization of accounts in line with <i>MFSM</i>.</p> <p>Assessment of source data. BG source data approximate the required definitions, scope, classification, valuation, and time of recording recommended in the <i>MFSM</i>. Balance sheets are routinely reviewed by the SB and BG, and banks are consulted for clarification when unusual movements in the data are detected.</p> <p>Statistical techniques employed in compilation are sound, relying on balance sheet report forms for data collection. The use of automated compilation processes reduces processing time and errors.</p> <p>Assessment and validation of intermediate data and statistical outputs are conducted routinely, by means of computer programs that contain built-in checks for identifying errors and inconsistencies.</p> <p>Revision studies are not carried out, except on an ad hoc basis.</p>	<p>Periodicity and timeliness meet GDDS recommendations.</p> <p>Consistency is achieved by continuous verification by BG and SB of the source data and by use of automated compilation systems to ensure consistency. Close coordination with the MOF facilitates broad consistency with the fiscal statistics, except as a result of known differences in coverage. The historical series dates back to 1995, and statistics are revised as needed to take into account more recent information.</p> <p>Revision policy and practice. No regular, well-established, and transparent procedures exist for data revisions. Preliminary data and revisions are footnoted in the tables. There are no regular studies of revisions.</p>	<p>Data accessibility. Data are presented in a manner that facilitates interpretation, with extensive detail, charts, and explanations. Although there is no pre-announced release schedule, data are disseminated on the BG website and to the media at regular intervals (weekly, monthly, quarterly, annually) that are well known to the public. Additional details are available upon request.</p> <p>Metadata accessibility. Documentation on concepts, scope, classification, data sources, and statistical techniques has not been published, pending the dissemination of such information on the IMF's GDDS website, which is expected to occur in the months ahead.</p> <p>Assistance to users. Assistance to users is readily available through BG contact points (compiling department, telephone, fax, e-mail address) indicated in the BG Internet website. Other publications, reports, and studies are available upon request.</p>

Table 3e. Guatemala: Assessment of Data Quality—Dimensions 2 to 5:
Balance of Payments

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions broadly conform with <i>BPM4</i>. Some progress has been made in the transition to the methodology of <i>BPM5</i>. Departures from the criterion of residency affect estimates of private capital flows that include exchange transactions between residents.</p> <p>Scope. Resident institutional units are defined in conformity with <i>BPM5</i>'s concepts of economic territory, residency, and center of economic interest. The data cover the entire territory of the country including goods for processing transactions, but coverage of private financial transactions is incomplete. This is particularly the case with transactions related to direct and portfolio investment, as well as those associated with foreign assets and liabilities, including of banks.</p> <p>Classification/sectorization. There are departures from the classification recommended by <i>BPM5</i>. Goods for processing are not identified separately (exports and imports) within goods but included instead as net in services. Also, portfolio and other investment transactions are not classified in the four recommended institutional sectors by <i>BPM5</i> (monetary authorities, general government, banks, and other sectors).</p> <p>Basis for recording. Transactions are valued at market prices, if available. Services, income, and financial transactions are recorded on a cash basis. No adjustment is made to convert interest to accrued. While most current account items are appropriately recorded on a gross basis, the increasing importance of goods for processing are recorded on a net basis. Financial account items are mainly recorded on a net basis and transactions related to assets and liabilities are not identified separately.</p>	<p>Source data. The principal data sources are customs records for trade transactions and the International Transactions Reporting System (ITRS) for other transactions. The ITRS, administered by banks, is insufficient and not fully reliable to ensure accurate estimates. Virtually no data are collected through surveys, with supplementary data obtained from administrative records.</p> <p>Assessment of source data. Extreme values of ITRS are verified with the banks, but not in a systematic manner, and no explanatory notes are kept. There are no other checks to audit the veracity and accuracy of the data collected through the ITRS.</p> <p>Statistical techniques. Compilation procedures for customs' records received electronically minimize processing errors (coding, editing, and tabulation), but such procedures are less frequently applied for other data sources. For instance, ITRS reports are received in hardcopy and processed manually. Outliers are not checked properly, which precludes error correction. The adjustment procedure to estimate imports (FOB) is sound, as it is based on customs documents.</p> <p>Assessment and validation of intermediate data and statistical outputs. Intermediate results are not always checked across a wide range of data sources. For example, media reports are not used to verify high-value direct investment and other transactions. Cross-check verifications are insufficient, as trade data are not validated by using partner-country information and creditor debt data are not contrasted with official estimates.</p> <p>Revision studies. The direction and magnitude of revisions of preliminary data are evaluated. However, no formal studies are conducted to keep record of revisions.</p>	<p>Periodicity and timeliness are in line with those recommended by the GDDS.</p> <p>Consistency. Data are generally consistent with other major statistical frameworks. However, foreign assets and liabilities of the banking sector are not taken from bank balance sheets. Regarding internal consistency, net errors and omissions have been relatively stable over time. In contrast, private capital flows have presented large and unexplained fluctuations over time, with no explanatory notes addressing this issue.</p> <p>Revision policy and practice. The revision cycle for balance of payments statistics follows a regular schedule, but it is not made known to the public. At the time of data dissemination, users are informed when data are to be considered preliminary. Analyses of differences between revised and preliminary data are not published, complicating assessment of the reliability of preliminary data.</p>	<p>Data accessibility. Data access is provided through the BG website and in hard copy publications. Data are not presented in a way that facilitates proper interpretation. Tables with sufficient detail are not available. No specific reference is made in BG publications to the availability of nonpublished sub-aggregates and to the terms and conditions on which they are made available.</p> <p>Metadata accessibility. An official document with metadata is not available and departures from internationally accepted standards are not documented. However, balance of payments metadata have been prepared in the context of GDDS participation.</p> <p>Assistance to users. A general note indicating the BG is the contact source with an e-mail address (webmaster@banguat.gob.gt) is provided. A specific contact person within the balance of payments unit is not identified.</p>

III. RECOMMENDATIONS

13. Recommendations are based on the review of statistical practices, discussions with the data-producing agencies, and responses from users. The overall objective of the recommendations is to promote closer adherence to internationally accepted statistical practices and enhancement of the analytical usefulness of the macroeconomic statistics.

Cross-cutting recommendations

High priority

- Launch a robust and coordinated effort to strengthen statistical culture, with support from the highest political level. Reform of the NIS law and a coordinated public relations campaign involving all statistical agencies should aim at explaining the importance of transparency and data reporting, as well as the usefulness of statistics in a modern economy with growing trade and investment links to the rest of the world. A commitment to enforce related laws and regulations is essential.
- Reform the NIS law to increase its institutional and financial independence. This will require (1) appointing the head of the NIS for a period overlapping that of the government; (2) granting the head of the NIS a leadership role and the right to vote within the NIS's governing body; (3) making the NIS budget subject to direct approval by Congress in the context of a multi-year plan for statistical improvement; and (4) increasing sanctions for nonresponse and preserving the value of fines in real terms.

Other

- Further strengthen coordination among statistical producers in the context of the National Statistical System. This would specially involve joint efforts by the BG, the SB, and the NIS to introduce urgently needed improvements in monetary statistics (see below) and calibrate the periodicity of the CPI with requirements of financial programming/inflation targeting (PRONAME). All statistical agencies should invoke the relevant legal framework in requesting data, especially provisions in the NIS law.
- Post data on websites as soon as available, and publish arrangements involving advance access to data prior to public release, identifying recipients.
- Monitor user needs, conduct regular consultations with users, and sponsor the formation of user groups to improve the quality and relevance of the statistics.
- Establish and publish advance release calendars and a well-defined revision policy that includes formal revision studies.
- Publish available information on concepts, scope, classifications, basis of recording, data sources and statistical techniques for all datasets. Make longer series and more

detail easily available to users, with adequate explanatory material on issues related to inter-temporal consistency.

- Explore the feasibility for the BG to enter into a contract with the NIS for the purchase of statistical services, including the PPI and basic data for the national accounts.

National Accounts

High priority

- Announce publication by early 2005 of the national accounts for 2001 that will serve as a benchmark in the preparation of a new series consistent with *1993 SNA*.
- Adhere to the plan for publishing a new national accounts series (2001–04), consistent with *1993 SNA* and with 2001 as the base year by early 2006.

Other

- Produce quarterly national accounts, on the basis of the new annual series supported by suitable short-term indicators. Use benchmarking procedures to ensure consistency among monthly, quarterly, and annual growth rates, which should buttress reliability of the quarterly GDP series that could be used to support inflation targeting.
- Based on an updated enterprise directory, conduct censuses and surveys with sufficient periodicity to provide adequate source data for the new national accounts series. To this end, strengthen further collaboration among the BG, NIS, and MOF.
- As an internal validation exercise, prepare rough estimates of the new series based on chained indices to monitor possible overstatement of GDP growth rates. More generally, strengthen internal documentation of sources and methods and conduct systematic follow-up of deviations from best practice.
- Establish a schedule for regularly updating the base year (preferably every five years, but with no lower periodicity than every 10 years), and form a permanent working group that should initiate preparations promptly.
- Strengthen the basis for valuation of the national accounts, by preparing (in collaboration with the NIS) a producer price index.
- Ensure data security by using databases, instead of spreadsheets, to store and document data, and require data-sharing to facilitate verification and training of new staff. This would also help reduce errors and improve documentation.
- Take steps to strengthen capacity building, including to reduce excessive dependence on external assistance.

Consumer Price Index

High priority

- Apply the standard COICOP to improve classification of alcoholic beverages, tobacco, restaurants, and hotels.
- Allocate more resources to the NIS to strengthen staff processing the CPI, increase electronic equipment for offices in the interior of the country, facilitate greater contribution to the production of source data for the national accounts, and fund compilation of a producer price index (at least for manufacturing).

Other

- Study the accuracy gains that could be derived from including in the CPI weights information on rural household consumption expenditure, rentals of owner-occupied dwellings, and goods produced for own final consumption. This information is available in the 1998–99 NSHIE.
- To ensure that CPI weights reflect changing consumptions patterns, monitor results of the standard of living survey (ENCOVI). If such results provide insufficient information, conduct a new NSHIE.
- Closely monitor consumer markets to identify the need to incorporate new products and quality changes, and prepare a plan to make related changes and improve the treatment of missing prices.

Government Finance Statistics

High priority

- Expand the coverage of the fiscal statistics to include social security agencies, local governments, and nonfinancial public enterprises. To help this objective, consider including in the budget law severe penalties and other strong action to ensure compliance with reporting requirements by all public sector units.
- Adhere to the planned timetable set by IFIS to publish general government statistics by early 2006. This will require close collaboration with the Institute of Municipal Promotion and the NIS.

Other

- Disseminate debt data with the classification recommended by the *GFSM 1986* (by holder, instrument, and maturity).

- Intensify efforts to train staff on methodological and other compilation topics.
- Strengthen coordination among MOF units involved in statistical production, including to set a plan for eventual migration (in stages) to the *GFSM 2001*. As a first step, an inventory of central government assets and liabilities could be compiled, followed by a publication of a preliminary public sector financial balance sheet.
- Strengthen consistency with other datasets by extending present collaboration with the central bank that focuses on the government financing to include national accounts, balance of payments, and debt.
- Prepare a medium-term plan to ensure that the IFIS will be preserved at a similar level of efficiency, following the end of World Bank funding.

Monetary Statistics

High priority

- Widen the coverage of the monetary statistics to include offshore banks and credit and savings cooperatives.
- Broaden the sectorization of assets and liabilities of depository corporations to permit application of the residency criterion and more complete sectorization of the domestic economy in line with the *MFSM* (i.e., private sector, and public sector by levels of government).
- Adopt accrual accounting principles in the plan of accounts for commercial banks and other depository corporations.
- Adopt the market price valuation as a general principle in the compilation of monetary statistics.

Other

- Prepare a medium-term plan to further expand coverage to include other financial corporations (insurance companies, pension funds, financial auxiliaries), which would permit eventual construction of a Financial Corporations Survey as recommended by the *MFSM*.

Balance of Payments

High priority

- Implement, as planned, the conversion of balance of payments statistics into *BPM5* and publish the data without delay.

- Substantially expand sources by implementing new ITRS forms, conducting surveys (commencing with a focus on foreign investment), and resorting to other available administrative data (e.g., balance sheets of financial institutions, grants from the MOF, and records of transactions conducted by embassies kept by the Ministry of Foreign Affairs).
- Modify, as planned, the new ITRS form following *BPM5* classification and sectorization to ensure identification of transactions involving financial assets and liabilities and the residency status of transactors.

Other

- Implement systematic cross-checking verification—in particular for quality validation of ITRS reports—by using data of banks' balance sheets and offshore banks from the bank superintendence; databases from international organizations (e.g., BIS and OECD); trade statistics from main trading partners; and surveys carried out by other organizations, such as the OIM migrants' transfers.
- Seek to reduce excessive staff turnover and make compilation performance the most important factor in evaluating and promoting staff responsible for compiling the BOP.

Table 4. Guatemala: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the Recommendations of the GDDS

GDDS Data Category		Coverage (meets GDDS)	Periodicity		Timeliness	
			GDDS	Guatemala	GDDS	Guatemala
COMPREHENSIVE FRAMEWORK						
Real sector:	National Accounts	Yes	A	A	10–14 months	6 months
Fiscal sector:	Central govt. operations 7/	Yes	A	NA	6–9 months	1 month
	General govt. operations	No	A	NA	6–9 months	NA
	Central govt. debt 8/	Yes	A	M	6–9 months	2 months
Financial sector: Depository Corporations Survey		Yes	M	weekly	2–3 months	1–2 weeks
External sector: Balance of payments		Yes	A	A	6–9 months	6 months
	International Investment Position (IIP)	No	A	NA	6–9 months	
DATA CATEGORIES AND INDICATORS						
Real Sector						
National accounts aggregates:						
GDP (nominal and real)		Yes	A (Q)	A	6–9 months	Est. 6 months
Gross national income, capital formation, saving 5/		No	A	A	6–9 months	Prel. 12 months Final 18 months
Production index/indices		No				
Manufacturing or industrial production index/indices			M	NA	6–12 weeks	NA
Primary commodity, agricultural, or other indices, as relevant		No	As relevant	NA	6–12 weeks	NA
Price indices:						
Consumer price index		Yes	M	M	1–2 months	7 days
Producer price index		No	M	NA	1–2 months	NA
Labor market indicators:						
Employment 6/		Yes	A	Q, A	6–9 months	4 months
Unemployment 6/		Yes	A	Q, A	6–9 months	4 months
Wages/earnings (all sectors)		Yes	A	A	6–9 months	12 months
Fiscal Sector						
Central government aggregates:						
Central govt. budgetary aggregates: revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency)		Yes	Q	M	1 quarter	3 weeks
Interest payments		Yes	Q	M	1 quarter	3 weeks
Central government debt:						
Central govt. debt: domestic and foreign debt, as relevant, with appropriate breakdowns (debt holder, instrument, currency) 3/		Yes	A (Q)	M	1–2 quarters	1 month
Government guaranteed debt		Yes	A (Q)	M	1–2 quarters	1 month
Financial Sector						
Broad money and credit aggregates		Yes	M	W	1–3 months	1–2 weeks
Central bank aggregates		Yes	M	W	1–2 months	1–2 weeks
Interest rates:						
Short- and long-term govt. security rates, policy variable rate		Yes	M	W	1/	1–2 weeks
Money or inter-bank market rates and a range of deposit and lending Rates		Yes	M	W	1/	1–2 weeks
Stock market:						
Share price index, as relevant		NA	M	NA	1/	NA
External Sector						
Balance of payments aggregates		Yes	A (Q)	A	6 months	6 months
Public and publicly guaranteed external debt outstanding, with maturity breakdown 4/		Yes	Q	M	1–2 quarters	2 month
Public and publicly guaranteed debt service schedule 4/		Yes	6 M	M	3–6 months	2 months
Private external debt not publicly guaranteed		No	A	NA	6–9 months	
International reserves:						
Gross official reserves denominated in U.S. dollars		Yes	M	W	1–4 months	1–2 weeks
Reserve-related liabilities		Yes	M	W	1–4 months	1–2 weeks
Merchandise trade:						
Total exports and total imports		Yes	M	M	8 weeks–3 months	1–2 months
Major commodity breakdowns with longer time lapse		Yes	M	M	8 weeks–3 months	1–2 months
Exchange rates: spot rates		Yes	Daily	daily	1/	One day

Italics indicate encouraged categories.

1/ Dissemination as part of a high-frequency (e.g. monthly) publication.

2/ Partial coverage 18%

3/ Only Fiscal Transparency

4/ Only guaranteed and no breakdown by maturity

5/ Capital formation is available

6/ Available up to the first quarter 2003

7/ Budgetary Central Government

8/ Only External Debt

This page intentionally left blank

INTERNATIONAL MONETARY FUND

GUATEMALA

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

June 10, 2005

- This Response of the Authorities has been prepared by the agencies responsible for the various macroeconomic datasets: Bank of Guatemala (BG), National Institute of Statistics (NIS), and Ministry of Finance (MOF).
- Sections authored by each of these agencies are clearly identified. Each section presents clarifications and differences of view, and some also outline plans for improvement. In some cases remedial action was already in train at the time of the assessment (October 2004) or has been initiated since then.
- In this connection, the BG recently completed compilation of the national accounts for 2001 in line with the recommendations of the *System of National Accounts 1993* (1993 SNA). It is intended that these estimates will serve as the base year for the new series currently under development.

I. BANK OF GUATEMALA

1. As part of the process of statistical strengthening, with a view to adopting the United Nations' fourth national accounts manual, *1993 SNA*, and selecting a recent base year, the second framework of technical cooperation between the BG and the NIS was signed in 2004. This provides continuity to the National Program for Improving Economic Statistics (PRONAME), which aims at implementing specific work programs to collect basic statistical information required by the *1993 SNA*.
2. Within that framework, based on the information obtained from the First Economic Survey (PEEC) and other special investigations, the following estimates for the new base year 2001 were prepared in 2004: preliminary production and generation of income accounts for 143 activities included in the Guatemalan Classification of Economic Activities (NAEG); supply and use balance sheets for 226 products; and the supply and use tables. The final results, on the basis of which the *1993 SNA* can be formally adopted, will be available in the first half of 2006, when the calculations for 2002, 2003, and 2004 have been made, based on the new methodology, and after the statistical consistency analyses have been carried out.
3. It should be noted that, for the purpose of ensuring technical quality in the process of implementing the *1993 SNA*, international consultants specializing in the field and in basic statistics have always been hired.
4. In implementing the fifth edition of the *Balance of Payments Manual (BPM5)*, action has been taken on the recommendations of the report of the IMF Balance of Payments Statistics mission to Guatemala, March 9–18, 2004. To that end, the Bank of Guatemala included in its budget for 2005 resources for improving balance of payments records. It should be noted that one of the planned actions is to conduct surveys of enterprises, hire an external advisor, and redesign the forms to collect inward and outward foreign exchange transactions. Based on these actions, it will be possible to fully adopt the *BPM5* in 2006.

II. NATIONAL INSTITUTE OF STATISTICS (NIS)

5. The National Survey on Household Income and Expenditure (ENIGFAM) is to be planned in 2005 and conducted in 2006 and 2007 with a view to changing the weights in the current CPI.
6. The CPI methodology will be published during 2005.
7. The data provided by the sources are assessed on an ongoing basis. The sources are also assessed to identify those that must be replaced as they are no longer representative of the products being researched.
8. The Organic Law of the NIS does not establish what statistics each institution should produce, but it does assign to the NIS the responsibility for coordinating and producing statistics, to avoid overlaps and information gaps.

9. The CPI was defined as an indicator of the expenditure of urban households; therefore, it does not include rural households or estimated expenditure. For example, rents imputed to owners are not included.

10. The salaries of technical and professional staff of the NIS were changed in December 2004 to levels more in line with other government agencies.

11. The practice of negotiating a price for foodstuffs was abandoned, as the final price would depend on the buyer's skill and not on the price at which the product is sold to the public. For that reason, goods were purchased at the first price given by the seller.

12. The practice of estimating the prices of seasonal goods temporarily absent from the market was not implemented; a constant price is used until the product reappears. This approach has been used because price revisions might give the impression that the NIS periodically changes the prices at will, and this would damage its credibility.

III. MINISTRY OF FINANCE

13. The challenge of introducing a new fiscal policy method in Guatemala will require decisive support to improve data collection and presentation of information, for greater transparency in national fiscal operations. In this respect, we welcome the recommendations contained in the Report, and will take them into account as we endeavor to enhance our dissemination of comparable, reliable, and timely data.

14. In February 2005, the MOF began preparation of the draft 2006 budget, which will require adoption of the performance-based budgeting method with a multi-year time frame. To this end, memoranda of understanding have been signed with four pilot ministries: Education; Public Health and Social Security; Agriculture, Livestock, and Food, and; Communications, Infrastructure, and Housing.

15. In addition, the Technical Committee on Government Finance was created in February 2005 to assist in the preparation of the draft performance-based budget for 2006 and the multi-year budget for 2006–2008, as well as to provide input for decisions of a fiscal nature. The Committee, which is now fully operational, was established under the Organic Budget Law and Regulations to advise the Minister and Deputy Ministers of Government Finance on policy, programming, control, and assessment of fiscal management. The Committee is composed of officials from the Bank of Guatemala, the Secretariat of Planning and Programming of the Office of the President, and the Superintendency of Tax Administration, as well as officials from the Ministry of Government Finance.

This page intentionally left blank

INTERNATIONAL MONETARY FUND

GUATEMALA

Detailed Assessments Using the Data Quality Assessment Framework

Prepared by the Statistics Department

Approved by Robert W. Edwards and Anoop Singh

June 10, 2005

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

Contents

Page

I.	National Accounts.....	5
II.	Price Statistics (Consumer Price Index)	33
III.	Government Finance Statistics	61
IV.	Monetary Statistics.....	83
V.	Balance of Payments Statistics	103

Tables

1.	DQAF (July 2003): Summary of Results for the National Accounts	33
2.	DQAF (July 2003): Summary of Results for the Consumer Price Index	61
3.	DQAF (July 2003): Summary of Results for Government Finance Statistics.....	81
4.	DQAF (July 2003): Summary of Results for Monetary Statistics.....	104
5.	DQAF (July 2003): Summary of Results for Balance of Payments Statistics.....	129

Appendices

1.	DQAF—Generic Framework.....	131
2.	Survey of Users of Official Macroeconomic Data	135

Acronyms

<i>1953 SNA</i>	<i>System of National Accounts 1953</i>
<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
AEIS	Accounting and Economic Information System of BG
AD	Accounting Department of BG
BEC	Classification of Broad Economic Categories, United Nations, 1989
BIS	Bank for International Settlements
BG	Bank of Guatemala
<i>BPM4</i>	<i>Balance of Payments Manual</i> , fourth edition
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
CAMC	Central American Monetary Council
CBS	Central Bank Survey or Bank of Guatemala Survey
CEMLA	Center for Latin American Monetary Studies
CPC	Central Product Classification
CPI	Consumer Price Index
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
DQAF	Data Quality Assessment Framework, July 2003 version
DSBB	Dissemination Standards Bulletin Board
ECLAC	Economic Commission for Latin America and the Caribbean
EFIS	Economic and Financial Information System of BG
ENCOVI	National Living Standard Survey
ESD	Economic Statistics Department of BG
FPS	Financial Programming Section of BG
GDDS	General Data Dissemination System
GDP	Gross Domestic Production
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics</i> , 1986
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
<i>IFS</i>	<i>International Financial Statistics</i>
IGSS	Guatemalan Social Security Institute
IMF	International Monetary Fund
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
ITD	Information Technology Department of BG
ITRS	International Transaction Reporting System
MB	Monetary Board
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NAS	National Accounts Section
NSHIE	National Survey of Household Income and Expenditure
NIS	National Institute of Statistics
NSS	National Statistical System
ODC	Other Depository Corporations

OECD	Organisation for Economic Co-operation and Development
OIM	Organization of International Migration
PPI	Producer Price Index
PRONAME	National Program for Improving Economic Statistics
ROSC	Report on the Observance of Standards and Codes
SB	Superintendence of Banks
SDDS	Special Data Dissemination Standard
STA	IMF Statistics Department
VAT	Value Added Tax
WPI	Wholesale Price Index

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, prices, government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the 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 '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*

The National Statistics System (NSS) is responsible for collecting, processing and disseminating the national accounts, in accordance with the terms and conditions of the Regulations to the Organic Law of the National Institute of Statistics (NIS), Article 6 of Decree 3–85, which came into effect on January 24, 1985.

Specifically, the national accounts are compiled and disseminated by the Bank of Guatemala (BG), a member of the NSS. Although the law does not stipulate that the BG must compile the national accounts, Article 62 of the BG Charter (*Ley Orgánica*), Decree 16–02, of May 10, 2002, provides that the BG must publish a study at least once a year on the most important aspects of the national economic situation, and must publish statistics on the major macroeconomic variables. The national accounts are compiled within the BG by the National Accounts Section (NAS) of the Economic Statistics Department (ESD), a unit of the Economics Branch (EB).

To ensure consistency of sources, methods and results, the NIS recently (September 24, 2004) created the National Statistics Commission (NSC), pursuant to Articles 20 and 21 of the Regulations to the Organic Law of the NIS, Decree 3–85. The CNE is chaired by the NIS and comprises the BG, the Ministry of Economy, the Ministry of Finance, the Ministry of Agriculture, Livestock and Food, and the Ministry of Energy and Mines, among other institutions.

For reasons having to do with the NIS's financial capacity, the BG has become involved in collecting and processing the basic statistics needed to prepare the national accounts. Because the BG has no legal basis for requesting information directly from the private sector, it has had to establish coordination mechanisms with the NIS in order to conduct this work.

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

The main sources of the basic information used in compiling the national accounts are the sectoral statistics, which are provided by private business organizations, or are obtained from administrative records such as those of the Superintendency of Tax Administration, the Guatemalan Social Security Institute (IGSS), and the Municipalities. The contribution of census and survey data prepared by the NIS for the current series of national accounts has been declining steadily, to the point where it now accounts for less than one percent in the estimation of GDP from the production approach¹, and provides only a few coefficients² for determining private consumption from the expenditure approach.

While occasional meetings are held for coordination purposes with the NIS, for example, in order to review and make contributions to survey and census bulletins, or with the Ministry of Finance to compare information from decentralized public entities, in practice there are no permanent, formal mechanisms for the coordination and supply of information.

Basic statistics gathering relies formally on agreements to provide information (such as administrative records) and on cooperation arrangements (such as the National Economic Statistics Improvement Program, PRONAME).

The PRONAME was established between the CBG and the NIS in January 2000 to prepare directories and to conduct surveys for the new base year 2001. This work is now underway and is expected to be wrapped up by the end of the year. The Framework Cooperation Agreement expired in January 2004, but is being continued in practice. Understanding on a new agreement has now been reached.

There are no formal agreements covering access to taxation data, but in practice there has been no problem when it comes to compiling the national accounts. There are no permanent, formal mechanisms for obtaining data from public or private sources, and such information is therefore provided late, limiting the ability to improve the timeliness of national accounts publications vis-à-vis the period of reference.

The recently-created NSC could become a significant mechanism in facilitating the exchange of information and improving coordination between the BG and the other entities that prepare basic statistics for use in compiling the national accounts.

¹ Slaughter of livestock for consumption, and number of persons going to cinemas.

² Obtained from the National Survey of Household Income and Expenditure (NSHIE).

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

The Regulations to the Organic Law of the NIS (Article 24) require that all information obtained by the NSS, of which the BG is part, is confidential and may not be disclosed in individual form. Except where there is a legal provision to the contrary, or express authorization from the informant, such information may only be disclosed in anonymous form. Directories that do not contain personalized statistics may be published for the benefit of informants and of users in general. Rules and regulations governing the disclosure of data impose penalties on any person who reveals confidential information (Article 26 of the Organic Law of the NIS).

When it collects information, the BG advises the informant that the information will be used for statistical purposes only, and that it is confidential in nature.

National accounts tables and products are prepared in such a way that confidential data are not disclosed, i.e., the information is conveyed in aggregated form, or through the use of indices, without specifying a firm or institution.

The general public does not have access to individual records,³ but only to general information by economic sector. Generally speaking, statistical work is based on magnetic records and individually recorded data are protected in special, restricted-access files that use limited-access database formats predefined by an administrator and are stored on a server supervised and protected by the BG Information Processing Unit.

The operating system used on BG servers is Windows 2000 Server. NAS computers use Windows 2000 and Windows XP Professional 2002. The databases are located on specific servers and are available online, but they are covered by dual security layers: besides the normal user sign-in, any person entering the system must do so as a registered database user. In addition, the database is periodically saved on backup tapes. There are firewalls to protect the databases from internal or external intrusions, and a record is kept of access by authorized database users.

With respect to hardcopy versions of informants' information, these are kept under lock and key, and after a certain period of time are sent for destruction in the BG's shredding machines.

³ Except for information pertaining to the person requesting it (Article 31, Political Constitution of the Republic of Guatemala).

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

The BG is not legally authorized to compile by itself the data used for preparing the national accounts. Nevertheless, the NIS law and the Central Bank's participation in the NSS and hence in the NSC allows the BG to request information. Moreover, the BG makes use of cooperation agreements with the NIS for collecting basic statistics for the new series of national accounts currently in preparation.

According to Article 24 of the Organic Law of the NIS, data reporting is mandatory for the public sector and the private sector. The response rate is higher for the public sector than the private sector. The degree of responses from foreign firms and from *maquila* (goods for processing) firms is considerably lower, or nonexistent. The response rate is not systematically monitored.

While violations of the data reporting obligations are defined (Articles 37 and 38 of the Organic Law of the NIS), penalties for such violations are fixed in nominal terms (Article 39 of the Organic Law of the NIS), and are rarely applied.

The PRONAME is the principal alternative mechanism for ensuring the proper provision of information for the new series of national accounts, with base year 2001, currently in construction. The program prepares appropriate forms, trains information managers for completing the economic survey sheets, and provides a series of contact points for answering informants' questions about how to complete or present the forms.

0.2 Resources

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

The NAS has 32 technical staff. Two are working in the production of the presently published series, which has the 1953 *SNA* as methodological foundation and 1958 as the base year. The remainder are working in the development the national accounts for 2001 based on the 1993 *SNA*.

For the 1958-base series, two technical staff are responsible for compiling the information and producing the accounts. For constructing the 2001-base series, 29 technicians are working on the processing of source data⁴ and compiling the base year. An information processing expert is responsible for the computer programs. These figures show that:

⁴ Provided through PRONAME, which hired 175 temporary staff to prepare the directory and process the surveys.

1) The national accounts, as currently published (base year 1958), rely on a limited number of basic sources (no census or survey data), and on simplified statistical methods (production and expenditure approaches, with changes in inventories obtained as a residual).

2) The BG is firmly committed to completing the 2001-base exercise in accordance with 1993 SNA rules, and has committed nearly 95 percent of its human resources to this purpose.

3) Finally, the 2001-base exercise is expected to be completed by December 2004: the main data gathering work has already been done, and the compilation work is being wrapped up.

Most of the NAS's staff are fairly new to the section: 25 persons have been involved with the national accounts for less than 10 years (and 15 of these for less than five years); five people have been with the unit between 11 and 20 years; and only two for longer than 20 years. There is a degree of rotation, because of the BG salary and promotion system and opportunities for early retirement,⁵ which means there is a net drain of qualified technical staff.

The salaries paid to NAS personnel are competitive.

The information processing resources allocated by the BG to the NAS are appropriate. All NAS staff have a personal computer for their work, consisting generally of a Pentium IV processor with RAM exceeding 260 MB, a hard disk with a capacity of more than 18GB, and CD readers. The office has a fax machine, two printers, and a photocopier.

For implementing the new 2001-base series, the BG has received technical assistance from the United States Census Bureau. In March 2003 it adopted the Census and Survey Processing System (CSPRO) for recording survey data. This was initially applied for the First Economic Survey of Businesses and Establishments (PEEC). There have also been some local initiatives, such as adaptation of the data capture program of the National Directory of Businesses and Locations (DINEL), which was done in PowerBuilder to extract information through the SQL Server.

The servers where the statistical information is located have permanent administrative programs for making backup copies on tape, with Linear Tape-Open Family (LTO) and Digital Linear Tape (DLT), which are kept in the vaults of the BG. For both systems there is a Local Area Network (LAN) with Transmission Control Protocol/Internet Protocol (TSP/IP), which allows NAS technical staff to communicate with each other.

⁵ Retirement age is at 50 years, or after 25 years of service.

The offices housing the NAS offer adequate physical conditions for performing its work efficiently. The furnishings, office equipment and transportation arrangements for data gathering are appropriate as well.

The BG provides the funding necessary for the normal work of gathering, compiling and publishing the national accounts, as well as for projects to update the national accounts. Budgetary procedures provide information to the BG authorities so that they can allocate the necessary funding. The financial programming horizon facilitates planning of statistical improvements, because changeovers of the BG's senior officials do not affect the continuity of projects.

0.2.2 Measures to ensure efficient use of resources are implemented

NAS staff performance is evaluated every four months, taking into account outcomes achieved in the tasks assigned, as well as personal aspects and behavior. The results of these appraisals are considered in promotion policies.

The development of Excel macros has meant a significant improvement in the efficiency with which the national accounts are compiled. Moreover, the SPSS is being used to process the BG surveys, as well as the PEEC, the basic source of information for the new national accounts series.

The NAS has conducted three evaluations of its statistical methodology and its systems for compiling the national accounts, with international technical assistance, but these were never published. The first evaluation resulted in the change of base year from 1958 to 1978, in accordance with 1968 SNA guidelines. The second was an exercise on the application of the 1993 SNA for 1998 in order to evaluate the data sources available and their limitations as well as to determine the additional information to be requested. The third evaluation, as noted earlier, involved the change of base year from 1958 to 2001, using the 1993 SNA rules.

The Organizational Development Department of the BG evaluates the resources allocated for compiling statistical information, against strategic objectives. The BG currently has an electronic procedure for preparing its budget, and this facilitates the allocation of resources.

On the basis of the Strategic Institutional Plan 2003–2007, directors and section heads are supposed to prepare an annual work plan for the department, setting goals and establishing the budget. This is approved in December by the Monetary Board (MB) and published in the official gazette (*Diario de Centroamérica*). The program is executed by its immediate managers, and monitored overall by the Department of Organizational Development of the BG, which reports to the General Manager, who in turn reports quarterly to the MB.

However, working methods are not completely adapted to the high degree of staff turnover noted earlier. For example, documenting sources and data gathering and compilation procedures, and putting more emphasis on databases instead of electronic files would strengthen the institutional memory for the national accounts and facilitate staff training.

0.3 *Relevance*

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

National accounts users outside the BG are consulted informally. There is an e-mail address, but it is used more to respond to queries than to sound out users' opinions.

0.4 *Other quality management*

0.4.1 *Processes are in place to focus on quality*

The BG's section heads and departmental managers are responsible for the quality of research and statistical work conducted by the institution's technical staff.

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

There are no specific procedures in place for monitoring the quality of the national accounts. No specific mechanisms have been established to meet new needs of external users of the national accounts.

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

Procedures have been established within the national accounts programs to take account of best international practices, including through the project to change the base year to 2001 in accordance with 1993 SNA guidelines.

1. *Integrity*

1.1 *Professionalism*

1.1.1 *Statistics are compiled on an impartial basis*

The law does not mention professional independence in the preparation of the national accounts. Professional independence is implicitly recognized at the national level for preparing the corresponding statistics, through the credibility and prestige the BG enjoys in the country.

The President of the BG is appointed by the President of the Republic for a term of four years (Article 28, BG Charter), and this term overlaps the four-year term of the President of the Republic, thereby strengthening the autonomy of the central bank.

Senior officials, such as the Director of the Department of Economic Statistics, are nominated by the General Manager, and appointed by the MB (paragraph d) of Article 34, BG Charter), while other officers and employees of the BG, such as the head of the NAS (which is part of that Department) are appointed and removable by the General Manager (Article 34, BG Charter) on the basis of technical competence.

The appointment of NAS personnel is based on technical and professional considerations, which include having completed the third year of an economics degree program at any of the country's universities, and possessing computer skills. Promotions for BG employees are handled through an evaluation process that takes into account a person's theoretical and practical knowledge, years in service, and a performance appraisal by the immediate superior.

The staff who prepare the national accounts have access to training within the country or abroad.⁶ However, in practice, this is regarded more as a "bonus" than as an input directly related to future outcomes in terms of a human capital development program. National accounts staff benefit from on-the-job professional development with the support of international consultants, and through conferences, seminars, discussions, and the exchange of experience and knowledge on statistical practices, such as through the national accounts workshop conducted in the BG between January 13 and February 7, 1997, under the 1993 SNA implementation project.

There are barely enough technical staff to cover routine activities, and this makes it very difficult to promote research and conduct statistical analysis simultaneously.

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

For compiling the national accounts, the choice of statistical sources and methods is based exclusively on statistical considerations. Nevertheless, information about the change of base

⁶ Locally there are the NIS sampling courses and the statistics and national accounts courses offered through the BG's Staff Training and Professional Development Center (CAP). Internationally, staff have done training assignments at the National Statistics Department of Colombia (DANE) and have taken courses offered by the Secretariat of the Central American Monetary Council (SECMCA), the Economic Commission for Latin America (ECLAC), the Center for Latin American Monetary Studies (CEMLA), the European Center for Training Economic Statisticians from Developing Countries (CESD), the World Tourism Organization (WTO), the International Monetary Fund (IMF), the Statistics and Census Division (DEC) of the Panama Comptroller General's Office, the National Statistics Institute (INE) of Panama, and the National Institute of Geography and Statistics (INEGI) of Mexico.

year from 1958 to 1978 was withheld indefinitely, perhaps because of the impact on macroeconomic ratios.⁷

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

The BG provides the media with explanatory materials and reports when it publishes information, to ensure it is properly interpreted.

When misinterpretation or misuse of statistics is detected, the Institutional Relations Department, together with the offices involved, prepares clarifications that are distributed as press reports. Media coverage of economic information is monitored internally by an internal service known as the *Panorama Noticioso* of the Communication and Institutional Relations Department, which uses the BG's intranet.

1.2 Transparency

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

The BG has posted its Organic Law (Charter) at its web site, where it refers to the terms and conditions under which statistics are compiled and disseminated. The BG's national accounts publications identify where more information about the data producing agency and its products can be found.

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

On those exceptional occasions when the government has advance access to the national accounts, this fact is not reported to the public.

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

Information in the national accounts is clearly identified as the product of the NAS or the BG with a logo. In the case of a table or graph, a source notation is used. For a joint publication, the information originating with the NAS is also clearly identified. The NAS does not request attribution when the national accounts data are used or reproduced.

⁷ Such as the tax burden, the output elasticity of employment, and other GDP-related macroeconomic ratios.

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

Users of statistics are made aware in advance, by various means, of changes in methodology and statistical techniques. For example, the BG's 2003 annual report (*Memoria de Labores*), published in June 2004, gave notice of the selection of a recent base year for adoption of the 1993 SNA.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are made known to staff

BG staff are well aware of the rules of conduct, which are set out in the BG Charter (Article 37), and detailed in various internal directives, such as the Regulations of Labor Relationships between the Bank of Guatemala and Its Employees (MB, Resolution MB-175-2002). Article 29 of those regulations deals with the "code of conduct," relating to ethical standards, professionalism, rights and duties for all staff. Articles 99-106 spell out the penalties for failure to observe those rules. The BG has applied the relevant penalties as necessary.

BG officers have primary responsibility for application of ethical rules through the example of their own conduct, and for instilling in their staff an attitude of striving to fulfill their tasks with efficiency and effectiveness.

New staff are given a copy of the above-mentioned regulations and take an induction course that stresses the importance of observing the rules in those regulations. Staff are reminded periodically of the prohibitions that apply to them through meetings, written documents and e-mail.

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 to compile the statistics series are consistent generally with the guidelines in the 1953 SNA Rev. 2, using 1958 as the base year. There are however some significant discrepancies with respect to the concepts, definitions, standards and rules of internationally accepted best practice as contained in the 1993 SNA.

In 1997 a decision was taken to implement the 1993 SNA for a more recent year. In 2002 it was decided to take the year 2001 as the base year. Results are promised for the end of this year, and the new historical series, with base year 2001, are to appear next year. In terms of

concepts and definitions, results are now available in the form of classifications, worksheets and tables for the central framework of the national accounts:

- Classifications and worksheets have been constructed for Institutional Sectors, Transactions, Industries (activities) and Products, using the 1993 SNA rules.
- Tables for the central compilation framework of the system of national accounts have also been prepared: Supply and Use, Integrated Economic Accounts, Cross-Classification of Industries and Financial Transactions. These tables, in Excel spreadsheet format, provide intermediate results and assure consistency in the compilation process. These tables are a local adaptation of an application from the United Nations Statistics Division that has been successfully demonstrated in various countries.⁸

2.2 *Scope*

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

The coverage of the national accounts falls short of the accounts and aggregates recommended in the 1953 SNA. Accounts are compiled regularly, for base year 1958, on:

- 1) Annual value added for 11 economic activities that make up Gross Domestic Product (GDP), at constant 1958 prices.
- 2) Annual Expenditures of GDP at current prices and at constant 1958 prices.
- 3) Annual Gross National Product (GNP) at current prices and at constant 1958 prices.⁹

In addition, Gross Output is estimated for some economic activities at constant 1958 prices.

Quarterly national accounts with 1958 base year are not compiled.

The delimitation of the constituent units of the economy follows the 1953 SNA guidelines. For example, the 1958-base historical series quantifies *maquila* activities as services exports,

⁸ “National Accounts: a practical Introduction” ST/ESA/STAT/SER.F/85, United Nations (2003).

⁹ GNP or Gross National Income is estimated without including net remuneration from abroad. Only property incomes are added to GDP. Current transfers (grants and remittances, which have represented significant amounts in recent years) are not used to construct the National Disposable Income and to determine Gross National Saving.

using the balance of payments as the source. No data are recorded for territorial enclaves in the rest of the world, or for the free zones. Nor are workers employed for part of the year in other countries included.

The production boundary follows the 1953 *SNA* guidelines. For example, the own-account production of final consumption goods, in-house research and development, production of goods for own-account fixed capital formation, mineral exploration, and the production of entertainment, literary, artistic or artistic originals and of computer software are not included.

The BG has not conducted any studies to determine the degree of significance these variables might have in compilation of the national accounts, but it considers their contribution to activity minor, given the characteristics of the national economy.

Production entering the country illegally is not considered, although its volume is significant and, according to businesses covered by the Business Opinion Survey (EOE), it is having a negative impact on manufacturing output.¹⁰ The BG has no estimate of its importance for the country's economy.

Other activities excluded from the calculation of output for the base year 1958 are informal and “underground” activities, which according to independent sources are significant. Proper coverage of such activities would mean that the new 2001 base could show a level of activity for that year, measured at current prices, that would be close to or even higher than the amount measured on the 1958 base.

The 1958-base national accounts do not include the delimitation of assets.

2.3 Classification/sectorization

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

The classification and sector system for compiling the national accounts is for the most part not consistent with currently recommended international systems. For the 1953 *SNA* system now in force, the ISIC Rev. 1 is used for classifying economic activities, the COFOG for classifying government functions, and the Common Latin American Classification of Tax Revenues (CLACIT) for government revenues. The Central Product Classification (CPC) is not used, because activities are not distinguished by product, and there is no supply-use table.

¹⁰ The Customs unit has identified more than 100 “nonauthorized” points at which products enter the country illegally, both from Mexico (essentially fuels) and from Honduras (alcohol and tobacco).

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stock.

The valuation rules used for recording flows and balances are consistent in part with the 1953 SNA directives. For the base year 1958, gross output was valued at producer prices, and intermediate consumption at purchase prices, and GDP is expressed at market prices. Own-use production, selective taxes on consumption and sales and VAT are not considered in the calculation of the national accounts, nor are any corrections made for transfer prices, since these are not taken into account. Exports and imports of goods are expressed at FOB values, and the balance of payments provides global figures on insurance and transportation for goods imports. Figures expressed in US dollars, taken from the balance of payments, are converted into local currency using the average annual weighted buying and selling rates for the banking system.

2.4.2 Recording is done on an accrual basis

The rules followed in recording flows are those of the 1953 SNA directives. The 1958-base series reflects the accrual approach, except in certain cases (Agriculture and General Government). Work in progress for growing crops is not recorded in the period when it is produced. In addition, owing to limitations in the source data, most government transactions are recorded on a cash basis.

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

Grossing and netting procedures are adhered to insofar as the source data permit. Transactions between establishments of the same firm are recorded at gross values for the 1958-base series.

3. Accuracy and reliability

3.1 Source data

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

As noted earlier, the national accounts are in a process of transition from a 1958 base year to a 2001 base year. The source data used for those two series differ substantially. The source data for recently published series is almost entirely based on administrative records rather than surveys, contrary to international recommendations.

Source data for the published series (1958 base)

The annual censuses and surveys conducted by the NIS were widely used in the first two or three decades of the 1958-base series. However, censuses are no longer in use. Two surveys are used: a survey of industrial activity (EOE) that the BG has been producing since 1981; and the NSHIE that the NIS conducted between 1979 and 1981 and between 1998 and 1999 for measuring private (household) consumption. The principal sources of information are the administrative records of the ministries, municipalities, businesses, business associations, and the BG itself.

The EOE is a qualitative survey administered semiannually to about 400 industrial establishments located in Guatemala in order to assess industrial performance. Since the first half of 2003, the sampling structure for the survey has been the DINEL. A systematic stratified sampling of businesses, according to the number of workers, is conducted. The survey form contains 18 questions asking businesses for qualitative information on changes in the volume of output, the volume of domestic and export sales, inventories of finished products, prices of domestic and imported raw materials, wages, investment in machinery, employment levels, and use of installed capacity. The responses are weighted according to the relative weight of each activity in manufacturing value added.

The NSHIE covered variables relating to housing, domestic appliances, health, education, purchasing habits, employment and income. The sampling framework consisted of all households recorded in the Tenth Population and Fifth Housing Census of 1994. It was of random, stratified design, by areas or conglomerates, with two-stage subsampling. Appropriate procedures were used for imputation and for expanding the sample to the universe.

The contribution of surveys and administrative records to estimating output from the production approach is shown below:

1958-base GDP: Production-Approach Information Sources

Economic sector	Sources
Agriculture, hunting and fishing	Ministries, businesses, associations, NIS, others
Mining and quarrying	Ministries, businesses, BG
Manufacturing	Ministries, businesses, BG (EOE), others
Electricity and water	Ministries, businesses, others
Construction	Municipalities, businesses, Superintendency, others
Transport, storage and communications	Businesses, BG, Superintendency, others
Banking, insurance and real estate	Superintendency, BG
Public administration and defense	Ministries, municipality, others
Wholesale and retail trade	(Endogenous estimate)
Owner-occupied dwellings	(Endogenous estimate)
Personal services	Hospitals, universities, associations, NIS, others

Source: BG

The contribution of surveys and administrative records to estimating output from the production approach is shown below:

GDP (with 1958-base): Expenditure-Approach Data Sources

Economic sector	Sources
Government consumption	Ministry of Finance, municipalities, IGSS, NIS, ENIGFAM
Government gross fixed capital formation	Ministry of Finance, municipalities, IGSS
Private gross fixed capital formation	Sectoral GDP (BG)
Exports of goods and services	Balance of payments (BG)
Imports of goods and services	Balance of payments (BG)

Source: BG

In both cases, administrative records contribute greatly to determining the components of economic activity. There is no single comprehensive source of administrative data on national accounts. Each of a number of administrative sources has important limitations concerning coverage, definitions, and stability. Insufficient standardization in procedures for collecting and presenting data on administrative records results in duplication and inconsistency of collected information. The rapid growth in the use of administrative records during the 1980s and 1990s stemmed in large part from the absence of censuses and surveys.

There are currently no quarterly estimates of GDP nor any monthly surveys. However, there is a “Monthly Indicator of Economic Activity” (IMAE), which consists of 39 indicators for base year 1995, and is prepared exclusively from central government administrative records, associations and private businesses, and BG, as shown below:

IMAE, base year 1995: Sources of Information

Economic Sector	Sources
Agriculture, forestry and fishing	Ministry of Agriculture, Livestock and Food. Cardamom, Sugar and Poultry Producers' Associations. Coffee, Chicle, Cereals and Rice Producers' Associations. Banana companies. Rubber tappers' union. National Cereals Council
Manufacturing	BG, Ministry of Finance (Tax Administration System), Cementos Progreso Company
Wholesale and retail trade	BG
Public administration and defense	Ministry of Finance
Banks, insurance and real estate	Superintendency of Banks
Owner-occupied dwellings	Municipality of the Department of Guatemala
Electricity and water	Wholesale Market Administrator

Source: BG

The 39 indicators represent physical units of production or variables that relate to them directly or indirectly. They account for less than 70 percent of GDP, since they exclude mining and quarrying, transportation, storage and communications, construction, and personal services. They are published with a lag of 45 days after the end of the month, primarily via the Internet, and they are provided on request to users.

When it comes to prices, the only indices available are for consumer prices, construction prices, central government purchases, and net asset prices - all of which are highly CPI-dependent. Also, a producer price index has been prepared for exports and imports of goods and services. There is no producer price index that would allow sectoral output to be monitored in real terms.

The NAS data compilation program for the 1958-base series has suffered a systematic loss of information sources, which have been only partially retrieved, and so it is neither open nor flexible. The deterioration in the statistical base is due to various factors: in some cases, government institutions that prepared them have disappeared, while in other cases the work ceased for administrative and budgetary reasons. Private economic agents have also become more reluctant to provide information, and, more recently, state enterprises stopped providing information on their operations once they were privatized.

Data sources for the forthcoming series (2001-base)

The new base year and the corresponding system of national accounts will draw on information from the Eleventh Population and Sixth Housing Surveys (2002), the Fourth National Agricultural Survey (2003), the National Household Income and Expenditure Survey (1998/99), the National Living Standards Survey (ENCOVI, 2002), and the National Employment and Income Survey (ENEI, 2002/03).

The BG, together with the NIS, is implementing the PRONAME to complement the basic information sources needed for preparing 2001-base statistics in the context of the *1993 SNA*.

The main products of the PRONAME are the DINEL directory of firms (April 2002) and the PEEC business survey (December 2003).

The DINEL, the directory of businesses and establishments (220,000 essentially urban) by economic activity (ISIC Rev. 3) is used to prepare sampling frameworks for the sectoral surveys. It covers all businesses, incorporated or not, and identifies their economic activities (principal, secondary, and auxiliary) and employment levels, so establishments can be stratified. It excludes financial intermediation companies, because of their lack of response.

The PEEC included a sample of 3,332 firms, with their corresponding establishments, derived from the DINEL, to provide the records needed for the production accounts by branch of economic activity, for the revenue-expenditure and capital financing accounts by institutional sector, and for the supply-use tables. As noted earlier, the United States Census

Bureau¹¹ helped conduct the PEEC, in terms of designing applications for capturing information and analyzing the validation, consistency and imputation of data.

Since 1997, the BG has contracted international technical assistance on its own in order to help with the process of compiling the base year figures.¹² The main outcomes have been the system of classifications and worksheets described earlier and the output, absorption, and supply-use tables, of which a preliminary version is available for the year 2001 (October 2004). The final version is expected by the end of the year.

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

When the 1953 SNA was introduced, statistical information sources were reasonably consistent in terms of scope, classification, valuation and time of recording, but the steady erosion of sources and their replacement by administrative records prepared for purposes other than the national accounts has weakened those properties, despite efforts to adjust the records for use in the national accounts.

This has reduced the coverage of GDP in terms of basic sources to below 80 percent of economic activities. Although the degree of coverage has varied, it is high for public administration and defense, and average for agriculture and private construction, while it is low for services and trade, and the manufacturing industry is based on a qualitative survey.

3.1.3 Source data are timely

The timeliness of the data is correlated with the degree of coverage of activities. For example, there are timely data available for public administration and defense, and in the financial sector, but data for private construction, agriculture and electricity are late, and data for trade and personal services are very late.

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

Administrative records from various institutions are evaluated and reviewed for consistency before they are compiled, and trends and behavior over time are compared, but on an

¹¹ Under a contract signed in December 2002.

¹² This involved the services of several experts, totaling approximately 36 person-months.

irregular and unsystematic basis. On the other hand, data from the EOE are examined for accuracy on a somewhat more regular basis, and informants are questioned about data that show abnormal values. Sampling errors in the survey are not monitored, however.

3.3 Statistical techniques

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

When it is determined that missing data are unobtainable, they are estimated by various methods, including econometric approaches. In any case, the use of these methods is very limited.

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

No adjustments are made to incorporate informal, hidden and illegal activities into calculations.

1) Production approach procedures

Two methods are in general use:

a) Under the extrapolation method, the NAS uses information on the volume or value of sectoral output at constant prices to calculate value added at constant prices, by economic activity (mining and quarrying, private construction, transport, storage and communications). In some cases, quantum indices are applied to base-year price estimates, by product and type of service (community, social and personal services, owner-occupied dwellings, and trade).¹³ This procedure assumes constant productivity, so the ratio between value added and output is fixed. The problem, in this case, is not the change in value added but rather changes in output that are estimated.¹⁴ This presupposes the cost structure reflects fixed technical ratios, and the quality and variety of output has not changed since 1958. Reliance on fixed ratios is not monitored.

b) The double deflation method is used, when the information is available, so output and intermediate consumption are estimated separately at constant prices in order to calculate

¹³ The wholesale and retail trade sector is derived by applying a marketing coefficient obtained from the 1965 business census to an aggregate known as “marketable output”, consisting of farming and manufacturing output plus imports.

¹⁴ “*Acerca de la necesidad de revisar las estimaciones del producto interno bruto y su tasa de crecimiento*” (“On the need to revise estimates of gross domestic product and its growth rate”) M. A. García Lara (mimeo) (1994)

value added as the difference (agriculture, forestry, hunting and fishing, manufacturing, electricity, gas and water, public construction, banking and insurance, public administration and defense).

GDP by production corresponds to the total of value added by sector and is published in disaggregated form for 11 branches of activity. Value added is not disaggregated into its components, for lack of information. There are no detailed estimates of intermediate consumption.

Specific issues relating to GDP compilation are addressed in part. For example, with respect to owner-occupied housing, output is valued as the estimated rentals that tenants would pay for similar accommodation. Only permanent crops and land improvements are valued as work in progress.

2) Expenditure approach procedures

Gross fixed capital formation, government consumption, and exports and imports of goods and services are derived independently. Private consumption is derived indirectly, using fixed ratios from the last NSHIE, and taking wages, consumer financing, and the interest rate as qualitative indicators. Changes in inventories are determined by the difference between GDP by production at constant prices and the above-indicated expenditure components.

Gross fixed capital formation is estimated by the flow of goods, taking as the basis the output of capital goods in the farming, industrial and construction sectors, as well as imports of capital goods.¹⁵ Government consumption is based on estimates of expenditure in this sector, using information from the Ministry of Finance, the IGSS, and the major municipalities.

GDP at current prices is obtained from the expenditure side by applying private consumer price indices. Exogenous estimates at current prices are used for final consumption by general government, and for imports and exports of goods and nonfactor services.

Expenditure estimates are compiled in an aggregated manner, i.e., without any detailed classification. The ratios are fixed, and correspond to the year 1958, except for the ratio used to determine private consumption. There are no techniques for resolving specific problems relating to GDP compilation. For example, incidental sales are not included in government final consumption, nor are expenses of residents abroad or expenses of nonresidents in the economy included. Data for general government use the concept of cash value. For certain decentralized institutions, information is taken from the financial statements and the accrual concept is used.

¹⁵ All imports are assumed to be traded, which implies overestimating direct imports.

3) Specific quarterly compilation techniques

The 1958-based national accounts contained no quarterly estimates. Nevertheless, the BG has prepared an estimate from 1987 to 2003 for internal use. Short-term changes in economic activity are estimated using the IMAE, a *Laspeyres*-type quantity index. It is calculated by combining the sectoral indices, constructed using 39 indicators, with the 1995 structure of the seven sectors¹⁶ represented, covering nearly 70 percent of output. This so-called “primary” index is highly variable, and is therefore filtered using the X-11 Census 2 statistical procedure in order to obtain its cyclical-trend component by eliminating seasonal components and the irregularities of the primary index. The IMAE is the filtered version of the primary index, and its inter-year variation shows a trend similar to that recorded for the annual variation in GDP, since in the missing sectors the growth of activities that move with the economic cycle (construction) is offset with activities that reflect economic trends more closely (personal services) and activities that are independent of the cycle, because their growth is limited by supply constraints (mining and quarrying).

The main problem with the national accounts estimates is that the reference base year is obsolete,¹⁷ which compounds the problem of the deteriorated information base discussed above. Because of this, the national accounts do not adequately reflect the changes that have occurred in the country's economic structure since 1958. A good test of the discrepancies would be to compare values for the old and new base years from records at current prices for the year 2001. The level of activity at current prices for the year 2001 using the new base is likely to be higher than that recorded using the 1958 base only to the extent that the effort to expand coverage to the limits of the production boundary (including illegal, hidden and informal activities) in the 2001 base can overcome the overvaluation of the current, 1958-based series, as a result of the fixed *Laspeyres* base.¹⁸ Otherwise, the new figure for 2001 GDP will be lower than the current figure.¹⁹

¹⁶ Agriculture, forestry and fishing; manufacturing; trade; public administration and defense; banking, insurance and real estate; owner-occupied dwellings; and electricity and water.

¹⁷ For example, the growth rate for the United States in 1998 was 4.5 percent if 1995 is used as base year, 6.5 percent at 1990 prices, 18.8 percent at 1980 prices, and 37.4 percent at 1970 prices, “A guide to use chain aggregated NIPA data” (1990), Federal Reserve Board.

¹⁸ This argument was put forth by U. P. Reich in his consulting report on the Guatemalan National Accounts (1994) and by M. A. Garcia Lara (op. cit., 1994) with respect to the inconclusive change of base year 1978. A. Young, in “Alternative Measures of Real GNP” (1989), *Survey of Current Business* Vol. 6, No. 4, explores the matter more generally. There are other factors that have led to overvaluation in Guatemala, including the use of the CPI to determine values at current prices in aggregates other than private consumption.

¹⁹ This argumentation is highly specific to the Guatemalan case; in more general terms, the causes of the differences are changes in definitions or in methods, such as moving to the
(continued)

Very preliminary and unreconciled figures suggest the recording of GDP at current prices with base year 2001 will be lower than the 2001 GDP at current prices with 1958 as base year, to varying percentages, depending on whether the estimation is done from the production or from the expenditure approach.

In effect, the differences of levels in the national accounts as a result of switching the base year are a normal phenomenon. Even in developed countries with a solid basis of primary economic statistics, variations can be significant.²⁰ For Latin America, the following table demonstrates the range of differences:

PERCENTAGE DIFFERENCES IN GDP FROM CHANGE OF BASE
Latin America: Selected countries

Cou	Base Year		Difference	SNA adopted
	Previous	New		
Venezuela	1968	1984	20,9	1968
Colombia	1975	1994	16,5	1993
Bolivia	1980	1990	-12,2	1968
El Salvador	1974	1990	-11,1	1968
Chile	1986	1996	10,5	1993
Mexico	1980	1993	-8,0	1993
Argentina	1986	1993	-8,2	1993
Uruguay	1978	1983	-5,2	1968
Ecuador	1975	1993	-3,1	1993
Panama	1970	1982	9,5	1968
Brazil	1980	1985	6,0	1993
Jamaica	1974	1986	3,7	1968
Guyana	1977	1988	-2,0	1968

Source: ECLAC

The differences range from -12.2 percent (Bolivia, 1990) to +20.9 percent (Venezuela, 1984). Countries are ranked by absolute magnitude of differences. The first six countries, with the greatest absolute differences, made their change of base year after 14 years, on average. The latter group, with smaller absolute differences, made their change after 10 years, on average. In the case of Guatemala, where the change took place after 48 years, it is not surprising there are greater percentage differences, and that they should trend more in the direction of El Salvador (-11.1 percent) than of Chile (+10.5), for example, given the overvaluation of economic activity that is not offset by new output.

Procedures are now being established for estimating the new series of national accounts with base year 2001. It is clear the GDP growth rate for the period 2001–2004, for example, will be less procyclical with base year 2001 than it was with base year 1958, because of the same

SNA 1993, in addition to the change in the coverage of the statistics or the updating of the supply-use structures.

²⁰ *SNA News*, May 2000, United Nations, Statistics Division.

phenomenon of the *Laspeyres* fixed base, which tends to overvalue dynamic activities and undervalue nondynamic activities.²¹

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The data compiled from the main sources used to compile national accounts statistics are not checked against other data sources.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

No systematic procedure has been established to routinely assess the potential discrepancies in intermediate data.

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

Given the calculation method used, there are no discrepancies between GDP by activity and GDP by expenditure. There is no supply-and-use framework for investigating discrepancies and ensuring that the statistical results are coherent. There are cases where products recorded as exports are not included in output estimates (for example, the *maquila* industry, flowers and foliage). Other problem indicators go uninvestigated: for example, data are not crosschecked against available unofficial estimates of informal activities, or surveys on remittances from abroad,²² which are based on reasonable premises and differ from the official estimates.²³

²¹ Thus it is sufficient to admit that relative prices of goods tend to decline in activities that are growing more rapidly, and to increase in activities that are growing less rapidly. There is ample empirical evidence for this phenomenon, which expresses market forces.

²² “*Estimación de la Magnitud de la Economía Informal en Guatemala*” [“Estimating the Size of the Informal Economy in Guatemala”] (2001), National Economic Research Center (CIEN).

²³ “*Encuesta sobre el impacto de las remesas en los hogares guatemaltecos*” [“Survey on the Impact of Remittances on Guatemalan Households”] (2004), Working Paper on Migration No. 9, sponsored by the Office of the Vice President of Guatemala, the IDB and BG.

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)*

There is no study or analysis of the three revisions that are made each year. There have been no major revisions, such as change of base year, since 1958.

4. **Serviceability**

4.1 *Periodicity and timeliness*

4.1.1 *Periodicity follows dissemination standards*

GDP estimates are compiled and released annually (GDDS).

4.1.2 *Timeliness follows dissemination standards*

The annual GDP estimates are disseminated within six to nine months after the end of reference year (GDDS).

4.2 *Consistency*

4.2.1 *Statistics are consistent within the dataset*

Because there is no independence between output as estimated by the production approach and by the expenditure approach, consistency between growth rates is imposed by the method. Something similar happens with estimates of GDP at current prices: volume indicators and (implicit) deflators are compatible with the “value = volume x price” framework. However, at a more disaggregated level there is no assurance of consistency in the treatment of certain specific items. There can also be discrepancies between value added and consumption by government. Finally, with GDP by expenditure, private consumption does not include adjustments for spending by nonresidents in the country and by residents abroad, which is included instead under services in the balance of payments.

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

There is a consistent time series available from 1950 to the present. During this time there has been a significant deterioration in sources, yet the historical series have not been reconstructed to reflect the loss of sources. There are no detailed methodological notes to document this process. There is no analytical text to explain unusual changes in economic trends in the database accessible to users.

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

The national accounts are consistent with other statistics, to the extent that the balance of payments is used as the source of data on transactions with the rest of the world. However, the NAS does not use those figures to construct the external account because the estimates are limited to GDP and expenditure. When it comes to government finance, the coverage of the national accounts is greater, since it includes local government (the municipalities) as well as central government.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

There is a formal, fixed schedule for reviewing the estimates in the national accounts. This calls for four reviews during the year: in March (estimated), July (estimated), December (preliminary), and after 18 months (definitive version). This revision schedule is not made public. Revisions are published at the BG website. The dates of the revisions, except for the March revision, are related to the institutional calendar, i.e., the dates of the reports the President of the BG presents to Congress, in January and July, pursuant to Article 60 of the BG Charter. The report does not contain any additional documentation to explain why adjustments were made, and when revisions outside the regular cycle are called for they are not made known to the public.

There is no formal, fixed schedule for revising and updating the weightings or the measurement methodologies, i.e., there is no pre-established schedule for change of base year. Good practice calls for this to be done every five or 10 years.

4.3.2 Preliminary and/or revised data are clearly identified

The publications containing the national accounts identify clearly whether the data are estimates, preliminary, or definitive. Users are not informed, however, whether the published data have been revised or not.

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

There are no studies or 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)*

National accounts data are published in a clear manner; charts and tables are disseminated with the data to facilitate the analysis, at the greatest possible level of detail. The IMAE is published with seasonally adjusted figures. The publication does not include any analysis of current-period trends. No data on national disposable income and savings are published. The statistics are published in a form that is too highly aggregated.

5.1.2 *Dissemination media and format are adequate*

The national accounts are published at the BG website (www.banguat.gob.gt) and in printed format, in the *Boletín Estadístico* (Statistics Bulletin) and the *Estudio de la Economía Nacional* (National Economic Review). Longer or more detailed time series requested by users are provided by e-mail (webmaster@banguat.gob.gt) or by telephone (PBX 2485–6000, 2429–6000), free of charge.

There is no publication specifically dedicated to the national accounts, such as a yearbook. Nor are press releases issued in ways that would facilitate redissemination in the media.

5.1.3 *Statistics are released on a preannounced schedule*

There is no established schedule with the dates the statistics are to be released.

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

The public is advised when the national accounts are published. The statistics are disseminated simultaneously for all users at the BG website, i.e., there is no pre-release to the media, and thus no need for embargo arrangements. Nevertheless, the government occasionally has advance access to the national accounts.

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

Users have free access to other statistics, provided they are available and are formally requested. However, the public is not informed explicitly of the administrative procedures for obtaining additional statistics.

5.2 Metadata accessibility

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

The NAS has summary documentation describing the concepts, classifications, methodologies and statistical techniques used in compiling the national accounts and its surveys. That documentation has not been published, however, and access to it is restricted.

The BG is currently in the process of adhering to the General Data Dissemination System (GDDS) of the International Monetary Fund.

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

Available breakdowns of the national accounts are provided to users upon request, and in some cases there are brochures available containing information on certain specific sectors. The BG does not publish its working papers, but merely releases texts, tables and graphs with information from the national accounts.

5.3 Assistance to users

5.3.1 *Contact points for each subject field are publicized*

All national accounts publications identify contact points for enquiries by mail, telephone, facsimile, e-mail, or at the website. However, the contact points provided, at least those at the web site (www.banguat.gob.gt), where users are invited to “contact us”, steer users to the BG and not to the NAS.

Material to raise awareness on the use of the national accounts is not available. Assistance to users is not monitored, but an attempt is made to respond to requests as promptly as possible, through various means.

The BG has a library where the public can, upon request, consult the national accounts documentation. Presentations to students and seminars for journalists are occasionally held.

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

The publications containing the national accounts are available to the public free of charge, although there are no specific catalogs listing them.

Table 1 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for the National Accounts
(Compiling Agency: Bank of Guatemala)

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	
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			The law of the Bank of Guatemala (BG) does not specify which entity is responsible for compiling the national accounts. The National Statistics Commission created in September 2004 will coordinate data reporting. BG compiles the data in cooperation with the NIS. Data reporting is mandatory. There are sanctions for failing to respond but they are seldom applied. Work methods have not been adjusted to current staff turnover levels. Informal consultations are held with external users. There is an internal product oversight process. Although the national accounts are not in line with best practices, a base year 2001/1993 <i>SNA</i> program will be completed shortly.
0.2 Resources			X			
0.3 Relevance			X			
0.4 Other quality management			X			
1. Assurances of integrity						
1.1 Professionalism			X			Dissemination of base year 1978 was held back indefinitely owing to the impact on the macroeconomic ratios. Advance governmental access to the national accounts is not announced to the public. Advance notice is given of major changes in methodology but no commitment is made regarding the time frame.
1.2 Transparency			X			
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions				X		The concepts and definitions of <i>1953 SNA</i> are used as a general framework. The entire series of accounts for the national economy established in <i>1953 SNA</i> are not compiled. ISIC Rev. 1 is used to classify economic activities. No other standard classifications are used. ISIC Rev. 3 is being implemented.
2.2 Scope				X		
2.3 Classification/sectorization				X		
2.4 Basis for recording			X			Work in progress for growing crops is not recorded in the period when it is produced. Grossing/netting procedures are followed to the extent data sources permit. Owing to limitations in the source data, most recording for the government is cash basis.

Table 1 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for the National Accounts
(Compiling Agency: Bank of Guatemala)

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	
3. Accuracy and reliability						
3.1 Source data				X		No censuses are used and only one qualitative Business Opinion Survey (EOE).is conducted. Administrative records are used but are not compatible with methodological requirements. Sources cover less than 80 percent of economic activities.
3.2 Assessment of source data				X		Consistency of administrative records is assessed on an irregular and unsystematic basis. There is no follow-up to sampling errors in the EOE.
3.3 Statistical techniques				X		Limited extension of methods to impute missing data. No adjustments for informal activities. Extensive use of extrapolation. Limited use of double deflation. Excessive used of fixed ratios, base 1958. Changes in inventory derived as a residual
3.4 Assessment and validation of intermediate data and statistical outputs				X		Primary data sources are not validated against other data sources. There are no systematic procedures to correct discrepancies in intermediate data. Supply-use tables are not used to correct discrepancies in data.
3.5 Revision studies				X		No studies and analyses of revisions are carried out.
4. Serviceability						
4.1 Periodicity and timeliness		X		X		No appropriate reconciliation framework is used. Discrepancies in export processing and government. No time series adjusted for loss of sources are constructed. There are no detailed methodology notes. National accounts are consistent with balance of payments and have broader coverage than government finances.
4.2 Consistency						
4.3 Revision policy and practice				X		There is a policy for annual revisions. There is no established timetable for changing weights and methodologies. Studies and analyses of revisions are not made public because they are not carried out.
5. Accessibility						
5.1 Data accessibility			X			Disposable national income and savings are not published. The statistics are excessively aggregated. There is no schedule for disseminating the national accounts. There is no dedicated publication.
5.2 Metadata accessibility				X		There is no public access to metadata. There are no brochures on statistical series. Explanations are very general.
5.3 Assistance to users			X			There is no direct contact point for the national accounts on the Internet. Publications are available free of charge but there are no catalogs.

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The responsibility for collecting, processing, and disseminating official statistics is set forth in several laws, regulations, and resolutions. The first Statistics Law was promulgated on November 15, 1823. In 1879, a Statistics Section was established in the Ministry of Development and converted into the General Directorate of Statistics in 1986. The Directorate of Statistics was transferred to the Ministry of Finance and Public Credit in 1936. This directorate is reassigned to the Ministry of Economy and Labor (MEL) in 1944. The second Statistics Law was promulgated in 1955 (Decree 485) and regulated the statistical activities until 1985.

Operational responsibility for collecting, compiling, and disseminating the Consumer Price Index (CPI) lies with the Price Statistics Department (PSD) in the Directorate of Statistical Production and Dissemination (DSPD) of the National Institute of Statistics (NIS). The NIS was established by the Presidential Decree No. 3–1985 “Law of the National Institute of Statistics” of January 15, 1985. The legal framework for the activities of the NIS is set forth in the NIS Law and in its Regulations (1992). Articles 1 and 2 of the NIS Law established the NIS as a semi-autonomous public decentralized entity, ascribed to the Ministry of Economy (ME), and responsible for formulating and implementing the national statistical policy, as well as coordinating the National Statistical System (NSS). The NSS comprises all state dependencies, decentralized autonomous and semi-autonomous entities, and local governments that have among their functions any activity related to the elaboration, collection, analysis, and publication of statistical information.

Article 6 of the NIS Regulations defines the statistical activity as “the set of procedures and methods for collecting, processing, and disseminating the data of censuses, continuous statistics, special surveys, indicators and indices in general, national accounts and other macroeconomic programs, as well as the statistical research and analysis.”

Article 3 (6) in Chapter I of the NIS law assigns the responsibility for the collection, compilation, and publication of official statistics to the NIS, except for the statistics expressly assigned to other institutions or public entities. Article 3 (8) establishes the NIS as the central information entity that disseminates official statistical data at the national and international levels. In addition, Article 3 (9) states among the functions of the NIS, “to promote and supervise the application of uniform methods, procedures, definitions, classifications, and technical norms in the execution of statistical programs.” In this respect, Article 22 in

Chapter VIII of the NIS Regulations gives the NIS the right to approve the statistical questionnaires and instructions used by the other entities that integrate the NSS.

Specifically, Article 4 on Price Indices and Salaries of the Regulations of the Law of State Contracts (Decree No. 57–92) of 1992 assigns to the NIS the responsibility of compiling and publishing price indices during the thirty days following the reference month.

The Bank of Guatemala (BG) compiles a reduced CPI with weekly frequency, which is used in the weekly financial programming exercise and for monetary policy decision making. The IMF 1997 multisector mission and the 1998 and 1999 national accounts missions recommended discontinuation of the compilation and publication of this index in order to avoid duplicating efforts and confusing users. The BG discontinued the publication of its CPI as recommended, but continued compilation, without harmonizing its weekly CPI with the monthly CPI compiled by the NIS. The BG's CPI covers only 80 items in Guatemala City. In contrast, the NIS's CPI covers 218 generic products with 422 varieties in the 8 regions of the country. Average annual inflation estimated with the BG's CPI has been lower than that estimated with the NIS's monthly CPI for the period January 2001–September 2004 (by about 2 ¼ percentage points). The BG's CPI has not reflected some changes in consumer price trends when they occurred or only with some lag, owing to its more limited coverage. At present, users recognize the NIS as the sole official entity responsible for compiling and disseminating the CPI as the BG's CPI is not published.

While the legal framework is adequate, some functions specified for the NIS are rather ambitious and go beyond its current capacity. On the other hand, the institutional environment features a highly decentralized statistical system, which includes ministerial statistical offices, and offices in the centralized and decentralized public entities, and in the regions.

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

The NIS is self-sufficient in the production and dissemination of the monthly CPI. Nonetheless, Article 3 (13) of the NIS Law provides the NIS with the right to access all statistical registers of public entities.

Article 5 in Chapter I of the NIS Law requires the governmental entities and dependencies, including the autonomous and semi-autonomous decentralized institutions and municipalities to collaborate with the NIS for better attaining its objectives. Article 7-f in Chapter III of the NIS Regulations states the NSS should promote the exchange of statistical information among the entities that integrate the NSS and the regional and international institutions. Additionally, Article 23 in Chapter VIII of these Regulations states that all state dependencies and decentralized semi-autonomous and autonomous entities (including the municipalities) that plan to conduct censuses or surveys, should previously coordinate such activities with the NIS.

In addition, Articles 9, 10, and 11 of the NIS Regulations envisaged the establishment of offices of statistical sector coordination. Among their functions are the following: “to plan, coordinate, supervise, and execute the statistical activity of its sector.” Article 13 states that the heads of the offices of statistical sector coordination shall integrate the National Statistical Coordination Council to ensure the proper and efficient coordination of the activities of the NSS. However, owing to decentralization of the statistical function among the entities of the NSS and infrequent communication, some duplication exists, even as the budget for the statistical function is limited. Furthermore, the NSS and the National Commission of Statistics (NSC) were only recently installed (September 24 and October 7, 2004, respectively) with the aim of improving coordination within the NSS. The NSC is expected to have its second meeting on October 29, 2004.

Another body that contributes to the coordination of the statistical activity is the NIS Directors’ Committee, which is comprised of the Minister of Economy; the Minister of Finance; the Minister of Agriculture, Livestock, and Food; the Minister of Energy and Mines; the General Secretary of the National Council of Economic Planning; the President of the BG; and representatives of the University of San Carlos of Guatemala, private universities, and the agricultural, industrial, and financial sectors. The manager of the NIS, which is the higher-ranking officer below the NIS Directors’ Committee, acts only as non-voting secretary of this committee. The Director’s Committee meets frequently to participate in decision making regarding the production and dissemination of the statistics produced by the NIS. In general, the vice-ministers attend these meetings representing the ministers. Consequently, key institutional users of the CPI are adequately informed, share CPI data, and participate in the process of decision making concerning the compilation and dissemination of the CPI.

There have been efforts to strengthen technical cooperation between the NIS and the BG. The Framework of Cooperation for implementing the Program of Improvement of Economic Statistics (PRONAME I) was subscribed between the NIS and the BG on January 12, 2000 for four years. The statistical programs envisaged in the PRONAME I were not completely achieved due to the conduct of the XI Population Census in 2002, NIS’s resource constraints, and managerial changes within the NIS. At present, a draft of the successor agreement (PRONAME II) is being discussed.

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

Article 30 of the Political Constitution of the Republic of Guatemala of May 1985 establishes that “all administration acts are public..., except the data on military or diplomatic affairs for national security or data provided by individuals under confidential guarantee.” Article 25 in Chapter V of the NIS Law declares that “data obtained by the entities and dependencies of the NSS are confidential, except in the case of the existence of a legal disposition or expressed authorization of the respondent.” The NIS has fostered respondents’ confidence that the data provided will be used only for statistical purposes and will be confidential. All

questionnaires used for censuses and surveys by the NIS include a reference to the confidentiality of data on the first page.

When conducting the National Survey of Household Income and Expenditure 1998–1999 (NSHIE) for collecting information to update the CPI, respondents were presented with a questionnaire with a section that read “Strictly Confidential. Decree Law 3–85, Article 25 of the Law of the National Institute of Statistics—NSI—for any information please call to 232–962...” (several phone numbers were given). The NIS assisted respondents in completing and submitting the questionnaires through regular visits to households in the sample and by providing a point of contact.

Price data are collected by interviews to the retailers or by direct purchases (in the case of food items). Respondents are informed on the confidentiality of the information, and that the data will be used for compiling the CPI only. Price collectors fill out price surveys with the information obtained from the respondents. Price surveys include the NIS logo, the title “Consumer Price Index, CPI-2000,” and the name of the collector and his/her supervisor.

NIS personnel compiling the CPI have access to individual source information and are aware of the confidentiality of the data and the penalties imposed by the legal framework. Article 26 of the NIS Law states that “...the employees and staff of the entities and dependencies of the NSS are responsible for damage caused by their actions and omissions in the performance of their duties under this law. Legal responsibility is also to be faced by those disclosing information on the affairs on which he/she has knowledge owing to his/her position or takes advantage of such for personal purposes to harm the country, the NIS or third parties.” Furthermore, the Manuals of the Supervisor and the Price Collector include a section prohibiting disclosing use of the information collected in the questionnaires according to Article 25 of the Decree 3–85, Law of the INS, and Article 30 of the Political Constitution of the Republic that establishes the confidentiality of the information. The manager of the NIS has the faculty to fire non-complying personnel. Some institutions have requested the NIS individual data on several enterprises for legal purposes, and the NIS has refused to provide these data in accordance with the law.

Special aggregation rules are used to prevent residual disclosure when aggregations of survey or other confidential data are disseminated. In the case of price data provided by only one enterprise (e.g., beer and cement monopolies), enterprises are asked for their authorization to disclose individual price data. When unit records are made available for research purposes (e.g., in the case of the database of the previous CPI March–April 1983=100 and the individual results of the NSHIE), the confidentiality of individual data is protected by making all records anonymous. The PSD work procedures for compiling the CPI ensure that data are disseminated only at an aggregated level. Questionnaires, once processed, are archived. After one year, they are eventually destroyed or recycled.

CPI databases are administered by the PSD of the NIS, with several levels of security. It is necessary to have an authorized user’s name and a password to gain access, and the system is protected by two levels of security (internal and external). The internal is given by the levels

of security of the operating system (Windows XP), and there is an external firewall. In addition, employees are granted access to some menus and options of the CPI application depending on their duties and tasks.

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

Article 24 of the NIS Law states that “public employees, individuals or public and private domestic or foreign enterprises, as well as residents and non-residents individuals in transit are obliged to provide the information requested by the competent authority, which by its nature and purpose is related to the compilation of official statistics.”

Chapter IX of the NIS Law (1985) establishes the sanctions for non-compliance with data requests. Those who do not respond to surveys, alter or falsify the data or delay response unjustifiably are liable to be fined with amounts ranging from Q25 to Q500 (US\$3 to US\$64, at the exchange rate prevailing at end-October 2004). Article 39 of NIS Law states that NIS Regulations will determine the procedure for applying the sanctions and the fine amount to offenders. The fines were updated in Chapter XI of the NIS Regulations (1992) to a range from Q250 to Q1000 (US\$32 to US\$127) or twice these amounts for serious transgressions. However, they are still low (particularly in the case of large and medium enterprises) and there is no mechanism to preserve its value in real terms.

The enabling legal provisions for requesting information have been rarely invoked and penalties for noncompliance have seldom been levied. The authorities prefer to encourage voluntary reporting by explaining in detail to respondents the intended use of the requested information, its confidential nature, and its importance for assessing the economic and social conditions of the country. Surveys and censuses are announced through radio, television, and newspapers with explanations of purpose. These messages are sometimes translated into the dialects spoken in the different regions to facilitate comprehension.

The response to the NSHIE 1998–1999 was 97.1 percent. The non-response (2.9 percent) was mainly concentrated in the metropolitan area and in the high-income household stratum. With respect to price surveys, the nonresponse is around 1 percent. Retailers that do not provide information are substituted by other retailers that sell the same items and are located in the same market place.

Instruments to collect information on price and market basket weights are designed to reduce respondent burden, and an attempt is made to take into account the time constraints of the respondent.

0.2 Resources

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

There are 12 staff members within the PSD working on the CPI and 23 field agents and/or supervisors assigned to price collection in the 8 geographic regions covered by the index: 13 in the metropolitan area and 10 in the other 7 regions. The latter 10 field agents cover 14 cities. Although the number of NIS staff number dedicated to the compilation of the CPI is broadly adequate, the staff assigned to the processing unit and the number of field agents in the interior of the country are inadequate. In addition, field agents also collect price data for compiling the monthly wholesale price index (WPI) and the processing unit process these data too. CPI staff members receive on-the-job training as well as formal training through courses and seminars, including a few abroad (such as those conducted by the National Institute of Statistics of Spain).

Nearly a third of the staff working on the CPI is contractual personnel, and 82 percent have less than one year in service at the PSD. These may be a source of risk for the quality and timeliness of the CPI. The PSD has tried to retain the trained contractual personnel as budgetary constraints have permitted it. The mix of staff involved in the compilation of the CPI is as follows:

Price Statistics Department	Permanent	Contractual	Total
Department Unit	2	0	2
Chief	1	0	1
Assistant	1	0	1
Processing Unit	3	1	4
Programming developer	0	1	0
Deputy	1	0	1
Coordinator of processors	1	0	1
Processors	1	0	1
Analysis Unit	6	0	6
Chief	1	0	1
Deputy	1	0	1
Staff	4	0	3
CPI Section	13	10	23
Chief	1	0	1
Deputy	1	0	1
Field agents/Metropolitan Area	4	7	11
Field agents/Departmental States	7	3	10
Total	24	11	35

Forty-six percent of the staff has less than three years in service at the PSD. Some staff members with substantial experience in the compilation of CPI have been transferred to other units of the NIS. Fortunately, some of them were transferred back to the PSD after several years. As a result, the average seniority of staff in the CPI is four years. The years in service of the staff involved in the CPI compilation is as follows:

Years in service	Staff at the PSD		
	Permanent	Contractual	Total
0 – 1	2	9	11
1 – 3	5	0	5
3 – 7	11	2	13
7 – 14	6	0	6
Total	24	11	35
Percentage composition			
0–1	8.4	81.8	31.4
1–3	20.8	0.0	14.3
3–7	45.8	18.2	37.2
7–14	25.0	0.0	17.1
Total	100.0	100.0	100.0

Absence of statistical programs in universities complicates further development of professional staff. Also, the participation in ad hoc courses and seminars on price statistics is limited by budgetary constraints.

Salaries at the NIS are about half of those at other ministries and public dependencies, with monthly wages for field agents amounting to (around Q1,900) only 75 percent of the estimated cost of the “basic vital basket of goods” (Q2,520.5, US\$320.3 by September 2004). Current minimum daily salary is Q37.67 (US\$147 monthly).

The PSD currently has sufficient processing equipment in Guatemala City for the preparation of the CPI. It has 21 computers, mainly Pentium 4; 1 server, which is also used by other units; and 10 printers. However, only 4 computers have Internet access, and only supervisors have their own NIS e-mail account. Furthermore, there are no computers for CPI data processing and transmission at the NIS departmental offices. Distribution of the 21 computers within the PSD takes into account staff assigned to the different tasks (data collection, processing, and compilation) as well as their work programs.

The CPI is presently being computed using applications developed in GENEXUS 6.1 and Visual Fox, configured to perform all calculations in an automated fashion. The SQL Server is used to store survey and CPI data. A daily back up of CPI data is made. Besides the intranet of the NIS, each employee has access to computer programs, such as Excel, Word, Power Point, Vision, and Project to program their tasks, analyze results, and prepare presentations and publications. However, software is not regularly updated due to budget constraints. Similarly, there is not an account for equipment maintenance in the budget; therefore, there are not resources available for maintaining fixed equipment regularly.

NIS does not have its own headquarters. The rented NIS building (monthly rental is Q50,000) does not provide fully adequate working facilities (cooling, space, restrooms, and power system to support NIS’s computing system). Office furniture and equipment are old but still broadly adequate to perform tasks. Transportation equipment for CPI data collection (11 vehicles) is sufficient. However, these vehicles have to be shared with other work programs as the conduct of censuses and other surveys. Nevertheless, priority is given to the CPI compilation.

The financial resources for compiling the CPI are not adequate. Funding for the compilation of the CPI is provided under the budgetary process of the Ministry of Economy, and approved by the Ministry of Finance; therefore, the NIS does not have financial autonomy. The budget for the CPI program in 2004 (1.36 million Q) represented only 2.9 percent of the total budget assigned to the NIS (47.22 million Q). A budgetary cut of 20 percent in the public sector and delays in the resource allocation to the NIS have affected the rate of execution of the CPI program, which was only 36 percent as of September 30, 2004. Requests for funding for special projects such as conducting a new NSHIE, changing the reference base of the index or conducting studies for improving CPI methodology are not included as part of the normal budgetary process. These special projects have to be financed by donations from international organizations (e.g., Inter-American Development Bank (IDB)).

0.2.2 Measures to ensure efficient use of resources are implemented

The NIS personnel are evaluated when first appointed, but their performance is not assessed regularly. A follow-up and tests are made for promoting the personnel.

The NIS Law envisages the preparation of a National Plan of Statistics with short-term, medium-term, and long-term programs and measures, but these have not been implemented. However, a draft of the first National Statistical Plan has been prepared by the NIS and is being reviewed to be presented to the entities that integrate the NSS and NSC.

Assignment of responsibilities among the PSD units is clear. The section chiefs within the PSD meet regularly in order to measure progress, define the work to be undertaken, and analyze the CPI results.

The budget is reviewed periodically to ensure that scarce resources are employed efficiently in addressing major data problems or meeting new data priorities.

Innovations have been introduced in computer processing to reduce time and cost of statistical collection, coding, editing and tabulation of source data. In the event of errors and inconsistencies, clarification is sought with respondents and corrections made. Data in databases are subjected to additional consistency checks. A very efficient application has been developed using GENEXUS 6.1 and Visual Fox to elaborate the CPI December 2000=100.

The PSD has received technical assistance from independent consultants and from the National Institute of Statistics and Information (INEGI) of Mexico and the National Institute of Statistics and Censuses (INEC) of Argentina, in the framework of the IDB's project for conducting the NSHIE. This technical assistance has assisted in applying sampling techniques, compiling the CPI December 2000=100, and systematizing the CPI compilation process. The NIS also received technical assistance from the IMF in order to review the CPI methodology in 2000.

0.3 *Relevance*

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

The NIS has an active program to take advantage of new computing technology, including the Internet, for data processing and dissemination. The NIS website is well designed, and has become an important part of the data dissemination process for both the NIS and users. In addition, the two NIS National Centers of Statistical Information provide timely information to users on NIS's statistical products. These centers monitor and keep records on users' requests and non-satisfied needs. Nonetheless, the NIS does not have regular meetings with those entities that participate in the NSS, in order to discuss statistical development and establish new data requirements. However, NIS Directors' Committee includes key public and private users. They are informed of NIS activities and participate in the process of decision making regarding statistical information. In addition, the NIS website provides an e-mail address to users (difusion@ine.gob.gt) to contact NIS personnel and provide comments if users did not find the information they needed on the NIS website.

When a new census or survey is conducted, a users' committee is created in order to satisfy users' needs by including their data requests, where relevant, in the questionnaires before implementation.

The NIS does not participate regularly in meetings and seminars on price statistics due to budgetary constraints and because these events are usually conducted in English.

0.4 *Other quality management*

0.4.1 *Processes are in place to focus on quality*

Although the NIS has not established an official program of quality awareness (e.g., total quality management, ISO 9000), many elements of such program are already in place. These relate to monitoring data collection, processing, compiling, and analyzing the CPI. The draft of the National Statistical Plan includes goals, tasks, and actions to be accomplished up to 2024 in order to improve the coverage and quality of statistics.

The NIS publishes its mission and vision in its website to inform users on its purpose and goals. Its mission states that NIS "supports an integral and sustained development of Guatemala through a diversified supply of information, with efficient and modern dissemination methods that help economic and social agents to accomplish a better future for the Guatemalan society." On the other hand, the vision of the NIS is "to be a technical entity with notable efficiency for producing, analyzing, and disseminating statistics that support appropriate decision making, in the framework of the information technology and economic globalization." In order to achieve its mission and vision, NIS plans to promote through the National Statistical Plan the following values and principles: quality, transparency,

teamwork, human development, confidence, integrity, innovation, service, flexibility, and participation.

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

Even though responses to surveys are assessed, complete monitoring processes are not in place to inform managers on the quality of ongoing statistical activities (e.g., editing rates, revisions history, and timeliness evaluations).

Compilers have access to expert guidance on the quality of their statistics and on strategies for improving data production only when international organizations donate or lend the resources to hire the experts.

Periodic reviews are not undertaken to identify steps necessary to maintain quality requirements.

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

The PSD has an ongoing program to identify changes in specifications for CPI market basket items, especially motor vehicles and high technology items. The new items specifications are introduced into the index as needed.

Although there is no official advisory group for the CPI, the NIS convenes, on an ad hoc basis, such groups when changes are being considered for the index. However, these groups tend to concentrate on issues relating to the methodological soundness of the CPI, rather than user needs and other aspects of quality. Nevertheless, the law of the NIS envisaged the establishment of the National Statistical Commission, which will advise the NIS on formulating and evaluating the programs of compilation and dissemination of statistics. This commission was established on October 7, 2004. It comprises representatives of the Ministry of Economy; the Ministry of Finance; the Ministry of Agriculture, Livestock, and Food; the Ministry of Energy and Mines; the General Secretary of the National Council of Economic Planning; the BG; the University of San Carlos of Guatemala, the private universities, and the agricultural, industrial, and financial sectors.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

In practice, the CPI is produced and disseminated without any outside influence. However, the NIS regulations do not specifically cover attempts at interference and/or influence on official statistics by parties outside the NIS. The NIS Directors' Committee includes representatives of several ministries, public dependencies, and business associations, with a

risk that a conflict of interest could emerge. The manager of the NIS may not vote in the decisions made by this committee.

Article 14 of the NIS Law gives the President of Guatemala the authority to appoint and dismiss the manager of the NIS. Article 15 of the same law requires the manager of the NIS to be Guatemalan, have a university diploma, be an active member of a professional association, and have sufficient competence regarding statistics and its related subjects, and be credited by his/her professional experience.

Professionalism is promoted through encouraging staff participation in training opportunities, workshops and seminars, to ensure awareness and understanding of statistical standards and good statistical practices. Nevertheless, opportunities at international level can seldom be utilized due to resource constraints. The training unit under the NIS Human Resources Department is in charge of personnel training.

Hiring and promotion of NIS employees are governed by NIS regulations and the Civil Service Law, and are generally based on professional merit. NIS employees are encouraged to carry out research projects and to participate in conferences, lectures and professional meetings with other professional groups. Usually research papers are a result of the employees' own initiative. The methodological studies prepared by NIS professionals are circulated for internal review and, when appropriate, for outside review. Institutional papers submitted for publication must be approved by the administration of the NIS.

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

Subject to the normal budget constraints, the selection of source data and statistical techniques for the compilation of statistical series is based solely on statistical considerations. The sources and methods for compiling the CPI are fully under the control of the NIS and concepts and practices follow international standards. Appropriate sources are used, with no outside interference or attempted interference in matters of sources, methods, and dissemination. Decisions in this regard are made internally after careful consideration of methodological recommendations by international organizations. A summary documentation on source data and methodology employed for compiling the CPI has been prepared and is available to the public.

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

When necessary, the NIS responds to erroneous interpretations of the CPI through press releases and other means. The NIS follows the press very carefully with regard to references to the CPI. Data are presented to the media at press conferences held each month at the time of release of the monthly CPI. Comments on CPI trends are included in the monthly bulletin that is distributed to the press. This bulletin identifies the main underlying factors behind unusual figures and movements, in order to improve user understanding and reduce the

likelihood of misinterpretation. The manager of the NIS is entitled to respond to public criticism of statistics or instances of misuse of statistics, but there have been few instances where response to public criticism has been required.

1.2 Transparency

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

The NIS publications are well designed and include a summary methodology and the technical conditions under which the CPI is calculated. The NIS has posted the NIS Law on its website, which informs about the NIS's standards of confidentiality and professionalism. The NIS Law is also available at the two NIS National Centers of Statistical Information under the Department of Dissemination, located in zones 1 and 12 of Guatemala City.

All CPI publications contain a directory of key personnel for each organizational unit that participates in the CPI compilation process. They also contain information on the NIS website (www.ine.gob.gt), NIS's address, phone numbers, the e-mail address of the CPI Unit (IPC_ine@mail.com), the address of the NIS National Center of Statistical Information, its phone numbers, and e-mail address (inedifusion@intelnet.net.gt). The NIS website also has an e-mail address (difusion@ine.gob.gt) to direct requests, suggestions, and contact NIS personnel.

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

The NIS indicates that the approval of published index series is exempt from outside interference. A number of high-level government officials have embargoed access to these series usually 2 to 24 hours before they are publicly released. The list of officials receiving privileged access is not published. These officials are the members of the NIS Directors' Committee and the President of Guatemala. NIS publications are authorized by the NIS Directors' Committee, but there are no specific regulations guiding this approval process. In practice, CPI release and publications are authorized by the NIS Manager.

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

All NIS publications include the Institute's logo. In the case of joint publications, each entity, whether public or private, is clearly identified in the footnotes of all published tables and/or on the title page of the document. The NIS has a policy of releasing publications on the CPI in a standard format (titles, colors, typography, etc.)

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

Major changes in methodology or data sources are not publicized before implementation. However, the questionnaires of NSHIE, used to collect information on the new market basket weights for the CPI, were presented ahead of implementation to a group of researchers and specialized users (i.e., representatives of the BG, the ministries, the General Secretariat of Planning, and the Secretariat of the Presidency of Guatemala). For the recent change in the reference base of the CPI (December 2000=100), a campaign to publicize this change was carried out by means of presentations and meetings.

1.3 Ethical standards

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

A manual of instructions is issued to field agents and supervisors that provides guidelines about staff behavior. The Civil Service Law outlines basic duties for civil servants and contains rules of staff conduct in Title VI on Rights, Obligations and Prohibitions. Article 64 of this law states that public servants have to be discrete on the affairs that due to their character are reserved according to the law, regulations or special instructions. Civil servants shall observe dignity, moral, and respect in the performance of their duties, take care of their personal appearance, and execute with promptness, efficiency, and impartiality the affairs of their competence.

Article 66 on Special Prohibitions states that civil servants cannot request gifts for carrying out its duties or for abstaining from executing them. They shall not take into account any political affiliation to hire and promote personnel or be appointed in more than one public position, with the exception of educational and social activities. Title IX of the Civil Service Law presents the sanctions to apply to civil servants that do not comply with these prohibitions. These sanctions include verbal and written reprehension, work suspension without salary, and dismissal of the employee.

The NIS law and its regulations include articles with regard to confidentiality and improper use of statistical data. Each new employee is informed of these norms and regulations and is given a personal copy of them.

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 in the CPI are generally in line with internationally accepted standards as defined by the International Labor Organization, the IMF and others in the *Consumer Price Index Manual, 2004*. The prices and weights of the CPI broadly follow

the national accounts concepts—based on the *1993 SNA/1995 ESA*—for all monetary household consumption expenditures.

Level of detail for commodities and services is sufficient for detailed analysis of price movements at the level of divisions, groups, classes, and items of the *Guatemalan Classification of Individual Consumption by Purpose* (COICOP).

2.2 Scope

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

Both the geographic weights and the market basket item weights for the CPI are based on expenditure data from all urban households included in the household sample for the 1998–99 NSHIE. The household sample is representative of all levels of income, types of occupations and household composition. The NSHIE was designed to separate consumption and business expenditures for those households with unincorporated business activity. Expenditure data from households involved in farming and fishing activities that resided in urban geographic areas were included for weights calculations for the CPI. Consumption of illegal market goods and services was not investigated in the NSHIE, and therefore, excluded from the CPI weights.

The consumption of nonmonetary goods such own-produced agriculture products and goods provided by employers as income in kind are excluded, but were investigated in the NSHIE. Also excluded from the CPI weights is the value of the rent of owner-occupied housing, although an imputation was made on the rentals of owner-occupied dwellings in the results of the NSHIE. This latter exclusion is a departure from international standard practices. However, materials used in housing repairs are incorporated in the weights.

The CPI weights cover the expenditures of all urban resident households in the country, which represent 62 percent of total consumption expenditure at national level. Even though rural households were covered in the NSHIE and their consumption expenditures represented 38 percent of total expenditures at national level, they are not covered in the CPI due to budget constraints for price collection in rural areas.

Prices are only collected in 15 major cities of the 22 geographic departments of Guatemala. These cities are grouped in eight regions, and this sample, together with the range of outlets covered in each municipality, is considered representative of the pricing structure throughout the country.

2.3 Classification/sectorization

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

All classification and coding for the 1998–99 NSHIE and the current CPI are based on a Guatemalan version of the COICOP. However, this version departs from the standard COICOP in the following divisions: Alcoholic Beverages and Tobacco; Transport; Communication; Restaurants; and Hotels. Alcoholic beverages and tobacco are included in miscellaneous goods and services; transport and communication are grouped in one division; hotels are included in recreation and cultural services; and restaurants are included together with food and non-alcoholic beverages. However, index data is published at item level (basic expenditure level), which allows users to obtain detailed data and perhaps reclassify them. Expenditure data on goods and services are classified into a seven-digit extended version of the COICOP, which includes items' varieties. The Central Product Classification (CPC) was not used to classify the items. However, the CPI classification is broadly in accordance with the CPC at product level.

2.4 Basis for recording

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

The value of consumption used for determining the weights for the CPI is based on expenditures data from the 1998–99 NSHIE. The prices used to determine expenditures were the market prices (purchaser's prices) including trade and transportation margins and taxes (value added tax). Subsidies on products were discounted. The only subsidy currently applied by the government is the subsidy on urban transport, which is reflected in the market price of transport services in the CPI.

Prices do not include discounts. According to international practices, discounted prices should only be taken into account if generally available to anyone; that is, if they are applied to all purchasers. Even though discounts are applied to all purchasers, they are not reflected in CPI prices as recommended. However, the products subject to discounts are not particularly important. Bargains are only recorded if the items will disappear from the market and be substituted by others.

CPI prices do not reflect price reductions through price bargaining (prices individually negotiated between sellers and purchasers), a general practice in cantonal and informal markets in Guatemala for food items. International standards recommend that price collectors buy items to determine the relevant price through bargaining. Nonetheless, this practice depends on the price collector's ability to bargain, which can be very different among price collectors. In addition, only some food items can be bought through bargaining in cantonal and informal markets and they represent less than 10 percent of food items. The rest of the

items are not bargained. Therefore, the price collected in the price survey is the first price asked by the retailer.

Product specifications for pricing items in the market basket include detailed item characteristics and the terms of transactions. Field agents purchase a sample of 48 food articles in order to check product specifications: unit of measurement, presentation, quantity, and weight.

2.4.2 Recording is done on an accrual basis

All prices used for estimating the market basket item weights and for monthly price collection are measured on an accrual basis. The market price of the good or service is recorded for the period in which the item is purchased, in the case of the sample of 48 items purchased by field agents. For the rest of the items, the price is recorded in the period during which the item is offered for sale.

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

For the CPI market basket weights, purchases of durable goods, such as automobiles, are registered as acquisitions less disposal of such goods. According to the information collected in the 1998–99 NSHIE, it is possible to separate out purchases of new goods from purchases of used goods for consumer durables. Sales of used consumer durables are also identifiable.

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 CPI basket and weights were derived from 1998–99 NSHIE. The sampling frame for the 1998–99 NSHIE was the 1994 Census of Population and Housing (CPH) updated for the growth in the number of households up to 1997. A total of 11,170 geographic segments/sectors were defined. The construction of the sampling frame of this survey was based on updated census maps (for the selection of sectors or segments) and updated lists of households (for the selection of households within the selected sectors). The NSHIE sampling frame covered the entire territory of Guatemala.

The NSHIE sampling frame contained 1,997,537 housing units of which 7,352 were surveyed. A two-stage stratified random procedure with replacement was applied for the selection of households and the probability of selecting them was known. The territory of Guatemala was stratified into 10 geographic strata or regions: 1) metropolitan, 2) north, 3) northwestern one, 4) northwestern two, 5) southwestern one, 6) southwestern two, 7) central, 8) northeastern, 9) southeastern, and 10) Petén. In the first stage of sampling,

specific geographic areas (or segments/sectors) were selected, and in the second stage, the households to be surveyed were selected. For each geographic segment (60), the household sample was distributed over the 12-month period that was to be covered by the survey (March 23, 1998 to April 14, 1999). The samples in the regions were considered independent populations.

Household clusters of 200 housing units in the urban areas and 150 housing units in the rural areas were designed to sample the cartographic sectors. A sample size was calculated with an estimation error of 5 percent and a confidence level of 95 percent for each region. The size of the sample in the second stage was 18 households in the urban sectors and 15 households in the rural sectors. The sampling was based on a Bernoulli distribution (binomial). It was increased in 20 percent in order to substitute households when they refused to respond to the survey. Households were stratified according to their educational level (high, medium, and low) as a proxy variable of income. The results of the NSHIE were expanded to reflect the universe of the survey-sampling frame. Even though 60 percent of the households were located in rural areas and 40 percent in urban areas, the sample was constituted by 60 percent of households located in urban areas and 40 percent in rural areas, since urban households' incomes and expenditures were more heterogeneous than those of rural households.

The first household income and expenditure survey was conducted in Guatemala in 1979–1981. Thus, these surveys have been conducted almost every 20 years historically. According to the authorities of the NIS, there is no long-term plan to conduct household income and expenditure surveys every five years. However, the NIS is currently planning to carry out a survey of living conditions (ENCOVI) in the near future, rather than a survey of income and expenditures. Since the typical survey of living conditions is carried out over a four-month period or just during one month in the Guatemalan case, rather than over an entire year, the results have the potential of having seasonal biases. However, in some countries the survey of living conditions is modified to accommodate the needs of the CPI. It is unclear whether these modifications will be made for the proposed living conditions survey.

The questionnaires of the NSHIE were constructed according to sound design principles. They were subjected to two pilot tests; hence, proposed changes were pre-tested to ensure effectiveness.

Tabulations of the 1998–99 NSHIE data were carried out in sufficient detail to accommodate the selection of the item sample and the estimation of the market basket weights for the CPI. Purchases of goods and services were valued at purchaser's prices, own production was valued at market prices, and imputed rent for owner-occupied housing was estimated based on market rents for rental units. However, own production and imputed rent were excluded from the CPI weights. Purchases in informal markets were included in the weights.

The CPI market basket includes a sample of 218 products and services and 422 varieties aggregated into nine divisions, 31 aggregations (COICOP groups), 55 groups (COICOP classes), and 159 sub-groups. Prices are collected in 15 major cities (Guatemala City, Mixco,

Villa Nueva, Chinautla, Amatlán, Cobán, Jutiapa, Puerto Barrios, Chiquimula, Escuintla, Quezaltenango, Mazatenango, Huehuetenango, Flores, and San Benito) of the eight principal regions (metropolitan, north, northeastern, southeastern, central, southwestern, northwestern, and Petén) of the country. Price indices are compiled by region and at national level. All expenditure items from the 1998–99 NSHIE with shares of greater than five percent with respect to the expenditure by group (COICOP classes) and/or reported by more than 10 percent of the households in the sample were included in the CPI market basket.

A sample of around 9,000 outlets for monthly price collection for the CPI was selected by taking into account the shopping patterns reflected in the 1998–99 NSHIE and the availability of the items selected for price collection. This sample is divided into three monthly panels of 10 days each that cover 40 percent of the sample in the first 10 days, 40 percent in the second 10 days, and 20 percent in the third 10 days. An effort is made to maintain at least 18 monthly sources for each item (six in each panel of 10 days). There are 50,304 monthly price observations/quotation included in the CPI. Detailed specifications are used to identify the specific varieties of products and services that are priced for the CPI.

Pricing outlets are selected using purposive sampling based on four main criteria: abundant variety of articles for retailing, located in places with large flow of purchasers, significant consumer sales, and the availability of a range of goods and services included in the CPI basket. The selected outlets cover the major cities of the regions. Item selection is done based on purchase volume. Within each item group, specific varieties are selected on the basis of stable and significant sales activity.

Field agents monitor items regularly to ensure that product specifications are up-to-date, especially with regard to high technology items. Price behavior for CPI market basket items is monitored and compared with information from the press and other sources (Ministry of Agriculture, Livestock, and Food, Ministry of Energy and Mines, wholesalers, and main producer enterprises).

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

Expenditure data from the 1998–99 NSHIE and the monthly price surveys are adequate for the need of the CPI. The NSHIE was designed with the CPI in mind, and incorporates the required scope of household coverage, expenditure classification, purchaser price valuations, and recall or diary reporting of expenditure in the month it was actually made. The frequency of the price collection survey (daily) is adequate to support the publication frequency of the index. Source data are consistent with the time of recording and valuation of CPI estimates.

3.1.3 Source data are timely

Only price data from the monthly price survey conducted by the NIS are used in the calculation of the published CPI. Prices are collected between the first and the twenty-seventh of each month. These data are consistently obtained in a timely manner. Respondents

usually provides information the same day of the interview. Zone supervisors apply follow-up procedures to ensure the timely receipt of source 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 about nonresponse to the NSHIE and price surveys is available (2.9 percent and 1 percent, respectively). Information about sampling errors for each of the surveys conducted is not monitored on a regular basis. Data about nonsampling errors (survey operations, biases, over/under-coverage, misclassification, and processing) are not available.

Prices collected for the CPI are scrutinized. Any atypical prices are verified with the respondents before they are used in index calculations. A constant program for review of the price collection process is carried out by the Analysis Unit of the NIS. Positive or negative variations of more than 10 percent are verified.

The proportion of household final consumption expenditure for the economy that is not covered in regular CPI compilation is not assessed and comprises 38 percent. It corresponds to household expenditures in rural areas.

3.3 *Statistical techniques*

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

Compilation procedures minimize processing errors such as coding, editing, and tabulation errors.

Adjustments to individual records are made only when clearly warranted. Unusual values are not replaced or modified unless clearly required and can be identified in datasets. Databases include footnotes when data are revised.

Elementary indices at the item level are calculated using the weighted geometric mean of short-term price relatives at variety level. The weights used are the regional expenditure shares at variety level. For higher levels of aggregation, the modified *Laspeyres* index calculation formula is used; that is, the weighted arithmetic mean of the sub-indices.

Temporarily unavailable and seasonally unavailable prices are held constant. When prices for substitution items/varieties for permanently unavailable items/varieties are available, the price change for the substitution item/variety is imputed to the permanently unavailable item/variety. Although the methodology of holding the temporarily unavailable and seasonally unavailable prices constant is a self-correcting procedure, it has the potential of causing large jumps in the index series when the prices again become available. It would be

preferable to impute all missing prices by using the price change of the rest of the item's varieties or the price change of the item's class. A more serious problem arises when items/varieties become permanently unavailable. Sometime it may take several months to determine that an item/variety will not return to the market in the outlet in which it is being priced. If the price of the old variety is held constant until this is determined and if no imputation of price change is made, there exists the potential for a permanent uncorrected bias in the index. Although this bias is likely to be small during periods of stable prices, it could be significant during periods characterized by large changes in prices.

New varieties are introduced into the index when two-month observations are available and outlets are updated when necessary. New products are introduced into the CPI only when a major revision of the index is carried out (change in the weight reference period).

In general, only repackaging quality adjustments (adjustments for the volume, weight, or count) for CPI items/varieties are made.

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

Monetary household consumption expenditure, as defined in the 1993 SNA, is used to establish weights. Expenditure weights include purchases in all markets for affected goods and services, including informal markets.

The value recorded for goods and services represents the economic cost to the consumer at the time the good or service is purchased regardless of the method for payment.

An unbiased formula (weighted geometric mean of price ratios or relatives) is used to calculate the elementary (item) level indices. A short-term price change from the previous period is used.

The method to aggregate elementary indices to higher levels uses an internationally accepted formula (modified *Laspeyres* formula).

The current weight reference period (monthly average expenditures for the period March 1998 to April 1999) and price reference period (December 2000) for the index are not the same. The weights were not adjusted for price changes to align with the price reference period as recommended when they were introduced (Lowe Index). The expenditure shares are held constant from the weight reference period (Young Index). The weight reference period was updated within the past five years (1998–99).

When the new weights were introduced, the new index was linked to the old index using international accepted practices (the splicing method); however, these series are not publicized.

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

3.4.1 *Intermediate results are validated against other information where applicable*

The CPI is not compared with comparable estimates from other major price indices such as the wholesale price indices. Export and import price indices are only compiled at aggregate level in the national accounts; therefore, CPI behavior cannot be validated against these indices at detailed level. Detailed price data is compared to information from other sources such as the Ministry of Agriculture and the Ministry of Energy.

There are no implicit deflators of private final consumption expenditures in the national accounts. Instead the overall CPI is used to inflate total consumption expenditures at constant prices to get to current prices in the national accounts. Data from micro surveys of activities suspected to have production that is not covered in regular CPI compilation; data from household and trade surveys; and global estimates based on past benchmarks or judgments are not used to improve coverage of the CPI.

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

The NIS has established a program for the constant monitoring of price data used in the CPI. Any atypical prices are reviewed with price collectors and respondents before they are included in the index.

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

Price data are checked for consistency with prices for similar products in the same geographic area and for the same products in other geographic areas. Investigations are made into the source of any errors that are detected and steps are taken to eliminate the source of these errors.

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)*

Extensive studies were carried out on the 1998–99 NSHIE with regard to the level of error and consistency in the expenditure data. Detailed documentation for the survey and these studies is available for use in a special publication of the results of the 1998–99 NSHIE.

The CPI is not revised. CPI data is final when released, but new weights are subject to analysis and validation prior to being incorporated in the index. Weights obtained from the 1998–99 NSHIE were compared to the weights used in the previous reference base (1979–81 NSHIE), and analyzed. However, periodic weight revisions are not undertaken to determine the bias of the CPI. Documentation on price data adjustments is maintained through notes

incorporated to the database. They include a description of causes of adjustments and the way data are adjusted.

4. Serviceability

4.1 *Periodicity and timeliness*

4.1.1 Periodicity follows dissemination standards

Prices are collected daily. The periodicity for the compilation of the CPI is monthly, meeting GDDS recommendations and SDDS standards.

4.1.2 Timeliness follows dissemination standards

The monthly CPI is published within 7 days of the reference month. This exceeds GDDS and SDDS standards.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

For the CPI, the all-items index tabulations are consistent regardless of whether the aggregations are made by category of expenditure or by geographical area.

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

The revised CPI began publication in January 2001 with a price reference period of December 2000. Continuous historical series for the CPI, with the December 2000 reference base, are available for the period January 2001 to the present (September 2004). This series were linked to the previous series with March–April 1983 as reference base. However, this information is not published, but it is available upon request.

Detailed methodological notes that identify and explain the main breaks and discontinuities in time series, their causes, as well as adjustments made to maintain consistency over time are not available.

The monthly publication of the CPI, in both the press release and on the NIS website, includes a brief analysis of the index and an explanation of any unusual price behavior.

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

Consistency was verified by comparing the rate of growth of the CPI with those of the Wholesale Price Index (WPI) and selected import and export price indices. Of course, these indices have different coverage and conceptual frameworks. It is not possible to check the consistency of the CPI with the implicit price deflator of private final consumption

expenditures in the national accounts, because the CPI is used to inflate the constant price estimates of total private final consumption expenditures.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Monthly CPI data are final. In principle, data may be only revised in case of eventual errors. Although there was a major revision of the CPI in the year 2000, there has not been a historically consistent pattern established for revision of the index. The household income and expenditure surveys needed for updating the CPI market basket have been conducted almost every 20 years, which is not adequate. The NIS does not have a regular plan to carry out NSHIEs every five years. However, the NIS is currently planning to conduct a household survey of living conditions rather than a new NSHIE.

A detailed documentation of the latest CPI revision is not available. A draft of a detailed methodology for the CPI is being revised in order to be published. A detailed manual describing the 1998–99 NSHIE and its results is available to users.

4.3.2 Preliminary and/or revised data are clearly identified

Due to the extensive review process in place for the CPI and the timeliness of source data, the index is published in its final form, and no corrections are published. In the unusual event that errors are discovered after publication, corrections are incorporated into the following month's index with an explanation.

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

While studies on the last CPI revision were not published, a special publication, *Encuesta Nacional de Ingresos y Gastos Familiares, 1998–1999*, contains a detailed methodology and results of the 1998–99 NSHIE and is available to the public.

5. Accessibility

5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)

The monthly NIS publication, *Indice de Precios al Consumidor*, presents the monthly national-level CPI for the last year and available months for the current year. Tables are included with the indices and percentage changes by expenditure division and region for the previous and current month and for the months of the current year. Tables of the cumulative percentage change with respect to December of the previous year and the percent changes for the current month to the corresponding months of the previous year are also included. Indices

and percentage changes for nine divisions, 31 aggregations (COICOP groups), 55 groups (COICOP classes), 159 sub-groups, and 218 products and services are included for the relevant month. In addition, charts comparing CPI trends for the previous and current years and pies on weight composition by division and region are presented. An analysis of the important price changes for the current month and their causes is included.

Although the publication format for the CPI meets standards, time series are insufficient and relevant series (e.g., food items) are not disseminated in a seasonally adjusted form.

5.1.2 Dissemination media and format are adequate

An executive summary is presented to the press on the seventh of each month. It contains tables, charts, and an analysis of current trends that facilitate redissemination in the media. More comprehensive and detailed statistics are disseminated in the CPI hard-copy publication and in CDs. Current statistics and longer time series can be accessed through an electronic database maintained by the NIS National Centers of Statistical Information or by requesting them to the PSD.

5.1.3 Statistics are released on a preannounced schedule

There is no published schedule for the dissemination of the index. However, the NIS's practice of giving a press conference on the seventh of each month and releasing CPI statistics punctually has accustomed users to expect the results of the CPI on that date.

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

The public is informed of the statistics being released, and of the procedures to access them in the NIS website and in the publications. All CPI publications contain a directory of key personnel for each organizational unit that participate in the CPI compilation process. They also contain information on the NIS website (www.ine.gob.gt), NIS address, phone numbers, the email address of the CPI Unit (IPC_ine@mail.com), the address of the NIS National Center of Statistical Information, its phone numbers, and e-mail address (inedifusion@inteln.net.gt). The NIS website also includes an e-mail address (difusion@ine.gob.gt) to direct requests and contact NIS personnel. It also has an e-mail address to place orders (ventas@ine.gob.gt) of NIS publications.

Nevertheless, CPI statistics are not made available to all interested users simultaneously. The NIS Directors' Committee, the President of Guatemala, and the ministers receive the executive summary that will be released to the press and posted on the NIS website 2 to 24 hours before releasing it. Embargos are imposed to prevent early public disclosure.

5.1.5 Statistics not routinely disseminated are made available upon request

Historical, unpublished, non-confidential CPI data are available for the national and regional indices at the item level and at higher-level of COICOP aggregations upon request from the

PSD of the NIS. The availability of additional statistics and the procedures for obtaining them are not made known to the public.

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*

A summary metadata on the CPI is available to the public in written form, but it is not comprehensive. Although it includes the geographic coverage, the number of sources and price observations, the type of index calculation formula, and the characteristics of the CPI market basket regarding the treatment of fixed weights at product level and its flexibility with respect to the number of varieties, no mention is made of the lack of self-correcting imputations for missing prices and the policy of not introducing new goods between major revisions. This methodological note is not published on the NIS website. A detailed methodology on concepts and statistical techniques for the CPI with March—April 1983 as reference base is available.

Information on 1998–99 NSHIE, such as survey characteristics, response rates, survey monitoring, method, sample frame, sample design and selection, estimation and imputation techniques and monthly average household income and expenditure by major expenditure and region were published in the *Encuesta Nacional de Ingresos y Gastos Familiares 1998-1999* available in hard copy and CD.

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

A brochure about the CPI containing a summary of the results for September 2004, some methodological notes, a comparison on the weights of the December 2000 and the March–April 1983 reference bases, and information on how to locate the CPI data is giving to users and respondents to price surveys.

A CPI publication is available in hard copy and on CDs, and gives a summary documentation of the scope, data sources, and statistical techniques. A hard-copy publication on the concepts and methodology of the previous CPI series is also available. These publications are designed for different types of index users from the typical consumer to the economic analyst.

5.3 *Assistance to users*

5.3.1 *Contact points for each subject field are publicized*

Prompt and knowledgeable service and support on the CPI is available to all index users through the NIS National Centers of Statistical Information and the key personnel listed in the CPI publication. The CPI publication contains a list with the names of departmental, unit, and section chiefs responsible for the CPI, the address of the NIS headquarters, the address of

the National Centers of Statistical Information, the NIS website, address, and phone numbers, and several e-mail addresses to contact the NIS personnel and to place orders.

Assistance to users is monitored and reviewed periodically through the NIS National Centers of Statistical Information.

The NIS has prepared materials to raise awareness on the use of statistics for schools, high schools, and universities (*El INE Escolar*). This material has been presented in the main departments of Guatemala.

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

A list of NIS publications and CDs with their price is available from the NIS National Center of Statistical Information and on the NIS website. Order can be placed through the NIS website. Assistance is provided in placing orders at the information centers. A copying fee may be charged for documents that are out of print or for information in the databases.

Table 2 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for the Consumer Price Index
(Compiling Agency: National Institute of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			Key users are informed and participate in decision making through the NIS Directors’ Committee. Some duplication of efforts exists, since the BG compiles a weekly CPI with reduced coverage. Sanctions for non-response are outdated and hardly applied. Permanent staff and financial resources are not adequate for maintenance and developmental work. Use of donations and loans from international organizations for developmental work. Statistical Advisory Council is envisaged in the NIS law, but it is not working. No users’ surveys. However, NIS Centers of Statistical Information to the public monitors and keeps records on user’s requests and non-satisfied needs. Statistical plans envisaged in the NIS law, but not implemented so far. A draft of the first statistical plan is being reviewed. User’s committees created when a new survey is conducted.
0.2 Resources				X		
0.3 Relevance			X			
0.4 Other quality management			X			
1. Assurances of integrity						
1.1 Professionalism		X				The NIS Directors’ Committee, which includes high-level government officials, and the President of Guatemala have embargoed access to CPI data usually 2 to 24 hours before public release. A list with their names is not publicized. In practice, the approval process of CPI results is exempt from outside interference.
1.2 Transparency			X			
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				Only urban households are in the scope of the index. Consumption of own-produced goods and imputed rentals of owner-occupied housing are excluded from the index. Some departures from standard COICOP (e.g., alcoholic beverages and tobacco). Discounts and prices of purchases through bargaining are not included in price data.
2.2 Scope			X			
2.3 Classification/sectorization			X			
2.4 Basis for recording			X			

Table 2 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for the Consumer Price Index
(Compiling Agency: National Institute of Statistics)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment				Comments
		O	LO	LNO	NO	
3. Accuracy and reliability						
3.1 Source data			X			The NSHIE have been conducted almost every 20 years historically. There is no a long-term plan to conduct NSHIEs every five years. Validation is limited to routine checks for extreme values, consistency, and incompleteness. Non-sampling errors are not calculated. While low, non-response rates to surveys are monitored. Treatment of missing prices, quality adjustment, and new products needs to be improved. Previous price data is imputed for missing prices and seasonally unavailable items. Changes in product specifications/quality are introduced after there are two price observations available. CPI is not compared with WPI. Monthly CPI data is final. Studies on the last CPI revision were not carried out. Notes on price data adjustments are stored in the database.
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						
4.1 Periodicity and timeliness		X				No regular timetable has been set for index updates (major revisions).
4.2 Consistency		X				
4.3 Revision policy and practice			X			
5. Accessibility						
5.1 Data accessibility			X			Only 3 years of historical data presented. No published schedule of release dates, but the practice of releasing CPI statistics punctually has accustomed users to expect release on the seventh of each month. Difficulty in determining what detailed data are available upon request. Only limited metadata is available in hard copy and CD. No detailed documentation available.
5.2 Metadata accessibility			X			
5.3 Assistance to users		X				

III. 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*

While there is no specific legal mandate to compile and disseminate the government finance statistics (GFS), the existing body of legislation provides a basis for the Ministry of Finance (MOF) to conduct these tasks. These tasks and the reporting obligation of public sector entities are supported by the following legal framework:

(a) The Political Constitution of the Republic of Guatemala. Title IV, Chapter III, Executive Branch, Article 183 (Functions of the President of the Republic), establishes that one of the functions of the President of the Republic is “to submit to Congress every four months, through the respective ministry, an analytic report on budgetary execution, for advice and supervision.”

(b) The Organic Budget Law (OBL), Decree 101–97. In particular,

- Article 2 establishes broad coverage of the applicability of this law to the entire public sector.
- Article 39 refers to the decentralized and autonomous entities with the exception of the municipalities, the University of San Carlos de Guatemala, and the National Agriculture School.
- Article 47 of Chapter IV of the Municipal Budget System: “For purposes of consolidating accounts and information by the executive branch, the municipalities shall submit their approved budgets to the Ministry of Finance, the Congress, and the Comptroller-General. As well as information on physical and financial execution of their budget, under the conditions established in the regulations. With respect to public investment, they shall also report to the Secretariat of Planning and Programming of the Office of the President.”

(c) The OBL Regulations (Government Order 240–98), which include the following references:

- Chapter VIII (Article 26) on the budget of decentralized and autonomous agencies (DAE), states that: “The entities referred to in Article 39 of the OBL shall submit to the Ministry of Finance, within 15 days after the close of each four-month period, a report containing at least the following information: (1) Physical execution of programs and projects, comparing them with the programmed schedule; (2) Financial

execution of expenditures by program and project, compared to the programmed schedule; (3) Financial execution of revenues; (4) Economic and financial results for the period; (5) Analysis and justification of the major variations.

- Article 27 states that: “The DAE referred to in this Chapter shall submit to Congress and to the Comptroller-General, no later than March 31 of each year, a report on their respective budget implementation and the corresponding financial statements. They must also send a copy of that report to the Government Accounting Directorate, for purposes of financial consolidation of the public sector. The report must contain the statements and tables mentioned in Article 31 of these regulations, where applicable.”
- Chapter IX, Municipal Budgets, Article 29: “The budgets and reports referred to in Article 47 of the Law must be submitted no later than January 31 of the fiscal year corresponding to the approved budget. Also, the budgetary management report for the preceding fiscal year must be submitted no later than March 31 of each year. That report must contain as a minimum: (1) Physical and financial execution of projects and works during the year; and (2) Financial execution of revenues.”
- Chapter X, Integrated Government Accounting, Article 31, Budget Review and Closing of Accounts: “Liquidation of the General Government Budget and the Closing of Accounts for each fiscal year, pursuant to Article 49 (g and h) of the Law, must be prepared by the Ministry of Finance through the Government Accounts Directorate, and must contain as a minimum: (1) General Balance Sheet of the Government; (2) Statement of Revenues and Expenditures; (3) Other financial statements as relevant; (4) Budgetary execution statements.”
- Article 32, Financial Statements and Other Reports: “Pursuant to Article 50 of the Law, State agencies, decentralized and autonomous entities must submit the following information to the Government Accounts Directorate no later than March 31 of each year: (1) The financial statements and tables prepared at the close of the previous fiscal year; and (2) Other Reports and documents as requested by the Government Accounts Directorate.”

(d) The Executive Branch Act (Decree 114–97) in its Article 35 (section f) notes the need “to keep consolidated records of budgetary execution and government accounts”, and “to issue guidelines for their application⁷, and prepare the corresponding consolidated analytical reports”.

(f) Government Order 217–95 that establishes the objectives, structure and relationships of the Financial Administration Reform Project.

(g) Annual Budget Law 2003 (for FY 2004) refers to laws and agreements that include commitments on targets and indicators of an economic and social nature that have a direct impact on the government's obligation to disseminate timely information on the public finances. In particular, it refers to the Integrated Financial Administration System (IFAD)

(Article 22), Article 183 (w) of the Constitution (Article 24), the 1996 Peace Accord, the Government Order 469/2002 of December 6, 2002 (Transparency Accord, creating the Commission on Transparency and against Corruption); and the Fiscal Pact of May 25, 2000.

While the legal framework described above supports the MOF in compiling and disseminating data on the government finances, it should be noted that: (1) insufficient emphasis is placed on dissemination of information; (2) penalties for noncompliance of reporting to the MOF by DAE and public corporations are not clearly specified; and (3) the responsibility of the MOF to compile and disseminate the government finance statistics is not stated explicitly. Legal obligations focus instead on the preparation and dissemination of budgetary and accounting information, and on data on the targets and economic/social indicators established in the 1996 Peace Accords and the 2000 Fiscal Pact. In spite of these limitations, the MOF is disseminating a broad range of financial information on “budgetary central government” via its Internet portal (<http://minfin.gob.gt>). This has recently become possible largely as a result of the implementation of the IFAD.

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

The Economic and Fiscal Studies and Analysis Directorate (EFSAD) compiles and disseminates the GFS. This is done monthly via the Internet, supplemented with information on the debt that the Public Credit Directorate (PCD) disseminates with the same frequency. The Technical Budget Directorate (TBD) is the unit of the MOF that sends annual GFS information to the IMF. Those entities use source data provided by the IFAD through the Integrated Government Account System (IGAS) module. The TBD, the PCD and the Government Account Directorate (GAD) channel information on financial execution for the current year from the various units (budget, public debt, accounting and treasury) via the IFAD-IGAS, for posting on the MOF website. At the same time, the Economic Studies Department of the Bank of Guatemala (DEE) is a major government user of GFS information prepared and disseminated by the MOF. There is coordination among all these entities, and this has been greatly facilitated with the implementation of the IFAD, which is the main source of information for Budgetary Central Government data.

The MOF and the Bank of Guatemala (BG) hold a weekly coordination meeting on monetary and fiscal policy at which they analyze the consistency of the government finance statistics and the monetary accounts. The meeting is attended by the Vice Minister, the Director of the EFSAD, the Director of the PCD, the Director of the GAD, the National Treasurer (NTD), the Director and Deputy Director of the TBD, for the MOF; and the Vice President, the Economic Manager, the Director of the DEE, the Director of Securities, and the Head of Financial Programming, for the BG.

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

The Constitution of the Republic of Guatemala (1985) establishes, in its Article 30 on the public nature of administrative acts, that “all acts of the administration are public. Interested persons have the right to obtain, at any time, reports, copies, reproductions and certifications, and access to the files they want to consult, except those relating to military or diplomatic matters of national security, and data provided by individuals in confidence.”

Article 25 Chapter V, on the Organic Law of the National Institute of Statistics (NIS) provides that “data obtained by entities and dependencies of the National Statistics System (NSS), of which the MOF is part, are confidential, except in the case of a legal provision to the contrary, or with the express authorization of the informant.” Also, the Organic Law of the Superintendency of Tax Administration establishes, in Article 44, the confidentiality obligations of the entity's employees. However, the Civil Service Act does not refer specifically to the confidentiality of information handled by government officials.

Apart from the NIS law, other relevant laws do not establish penalties applicable to those who failed to fulfill these obligations.

The IFAD contains standards of security and access profiles for different users, consistent with existing legislation and with the internal standards that the MOF has established in this matter.

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

The MOF has the legal authority (under the OBL) to require all entities of the public sector to report data on their finances. That power is focused primarily in the TBD and the GAD.

0.2 Resources

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

The resources available to the EFSAD for fulfilling the functions of compiling and disseminating the GFS consist of qualified staff, and adequate and sufficient installations and equipment. The EFSAD staff consists of 17 persons: one Director (economist), one Deputy Director (economist), a technical advisory department consisting of three economists, four mathematicians, one chartered accountant, two MBAs, one industrial engineer (with economic studies), one computer engineer (with economic studies), and support services, including two secretaries and one messenger. All the technical staff have PCs connected to the ministry's network (and hence to the IFAD). The workforce is stable (minimum seven years in service) and young, and is competitively remunerated (relative to central administration pay scales).

The TBD has assigned an officer to the work of preparing the annual GFS for the IMF Yearbook. That person has been performing this function since 1989, and has a PC connected to the ministry's network (and therefore to the IFAD).

Notwithstanding the above, there is a shortage of trained personnel for producing the GFS, particularly in the EFSAD. Most of the staff lack formal training either in *Government Finance Statistics Manual (GFSM 1986)* or on *GFSM 2001*. Only the TBD officer, responsible for preparing and sending information for the GFS yearbook, participated in a course on the *GFSM 1986* methodology in Washington, D.C. in 1996, and remains in contact with the IMF Statistics Department, which provides him with methodological support in preparing and sending information.

0.2.2 Measures to ensure efficient use of resources are implemented

For EFSAD staff, efficiency is measured on the basis of the quality and timeliness of the required products, including the release of monthly GFS figures, which must be available to the authorities no later than 15 days after the end of the month.

There has been no external expert evaluation of methodologies. There is no regular evaluation (costing) of the resources used to compile the GFS, nor are they compared with other statistical programs.

0.3 Relevance

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

No measures have been taken to ensure that statistics meet the needs of external users (for example, establishing a committee of users), nor have any mechanisms been established to meet new GFS requirements that might arise outside the MOF. The approach remains one of responding to ad hoc requirements of external users, who access the information via the Internet. The stance is reactive rather than proactive. Most user queries are related to the Peace Accords and the Fiscal Pact (parliamentarians, international cooperation agencies, NGOs, universities, consulting firms, and others).

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

In terms of “budgetary central government” (BG), the MOF relies on the IFAD to improve the quality of the primary information. The great challenge for the future is to expand the coverage of the IFAD to the rest of the public sector. To this end, as noted above, there is a development plan with specific targets extending to the end of the project (2007), by which time all the decentralized and autonomous entities as well as the 332 municipalities are to be integrated into the IFAD (see point 3.1.1).

However, there is a lack of procedures and activities for examining quality and for publicly announcing the intention to promote quality.

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

As noted above, a major effort to expand the coverage of the IFAD is underway, and specific targets have been programmed for the end of 2007, when the project is to be completed (see point 3.1.1). Apart from the IFAD project, there is no plan or any supplementary action (use of experts, studies, etc.) for systematically monitoring and evaluating the quality of the GFS.

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

The quality criteria relate only to the IFAD development plan, which currently provides online information on the Budgetary Central Government (BCG) that meets the timeliness and relevance criteria required for the GFS. It is planned that, from the beginning of 2006, the IFAD should provide information on the same terms for all decentralized and autonomous entities, and that this will be extended in 2007 to all local governments, thereby ensuring coverage of the entire public sector (see point 3.1.1).

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

There is no law or other provision to guarantee the professional independence of the MOF. Nevertheless, it is recognized that professionalism in preparing the GFS is important, as reflected by the stability of the technical staff working on the compilation of the GFS, with the minimum tenure of current staff at seven years. The chief of the unit that prepares the GFS (the EFSAD) is of senior rank.

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

Selection of source data and methodology for compiling statistics on the BCG is based exclusively on technical criteria. With regards to the rest of the public sector, there are no plans for a transitional system parallel to the IFAD for obtaining information on those components directly, as provided by law, or for using statistical estimation methodologies. With respect to the dissemination of GFS data, related decisions are made on the basis of statistical considerations.

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

In this area the MOF has adopted a proactive policy, particularly through the IFAD. It has conducted courses for journalists on the basic aspects of government finance and on the financial information accessible through the MOF's web portal. It has given journalists special access to the system. At the same time, it has been improving the information disseminated via the web, by including footnotes with basic conceptual definitions for the most important elements in the information published.

The EFSAD responds to all consultations (primarily telephone consultations) from external users about the information published.

1.2 Transparency

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

The MOF's web portal contains broad information on the BCG and provides links so users can readily access other sites with related economic information on government finance (for example the Superintendency of Tax Administration and the BG). The website also contains information on relevant legislation related to government financial administration.

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

For technical reasons, the MOF and the BG authorities have access to the monthly GFS approximately one week before they are publicly disclosed at the website. With respect to the online information from the IGAS on the execution of the budget of the budgetary central government, the data are available simultaneously to the authorities and the general public.

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

All statistical products published are clearly identified as produced by the responsible unit within the MOF.

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

In general, there is no advanced announcement relating to aspects of compilation. In any case, substantive changes in methodology, data sources and statistical techniques have not been made since 1998.

1.3 Ethical standards

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

Ethical standards for public servants are stipulated in various pieces of legislation, including the Civil Service Act, the Regulations to the Civil Service Act, and the Law on Probity and Responsibility. However, no specific standards are set for the statistical function.

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 for the budgetary central government are generally consistent with recommendations of the *GFSM 1986*. The EFSAD prepares the GFS monthly, based on existing budgetary classifications, which were structured during 1997 on the basis of the *GFSM 1986* and were implemented as of 1998. At present, there is no set timetable to complete migration from the analytical and conceptual framework of the *GFSM 1986* to that of the *GFSM 2001*.

2.2 Scope

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

The scope of the GFS disseminated monthly and annually by the EFSAD, and annually by the TBD, covers only the BCG.

According to the Manual of Budgetary Classifications (Ministerial Order 233–2000), the public sector legally comprises:

(a) The Central Administration, which includes the executive branch (consisting of the Office of the President of the Republic, under which there are 23 secretariats and support agencies, four social security funds, and 13 ministries), the legislative branch (National Congress), the judicial branch, and the following constitutionally agencies: Comptroller-General's Office, Prosecutor-General's Office, Constitutional Court, Public Ministry, Human Rights Ombudsman, Public Defender's Office, Supreme Electoral Tribunal, and General Property Registry; (b) Decentralized nonbusiness entities (18); (c) Autonomous nonbusiness entities (5); (d) Social security institutions (2); (e) Local governments (332 municipalities); (f) Municipal nonbusiness institutions and entities (1); (g) Municipal social security institutions and entities (1); (h) Municipal public corporations (7); (i) National public corporations (enterprises) (5); (j) Nonmonetary financial public institutions (2); (k) Monetary financial public institutions (3, including the Bank of Guatemala).

Following the sectorization of the public sector proposed by the *GFSM 1986*, the Central Government would consist of: (a), (b), (c) and (d); adding (e), (f) and (g) would yield General Government; while adding (h) and (i) would give the Nonfinancial Public Sector.

The BCG, on which the GFS are currently based, includes that portion of the central administration covered by the General Budget of State Revenues and Expenditures (GBSRE). The GBSRE includes the complete budgets of the secretariats, ministries and other entities reporting directly to the President of the Republic, as well as the budgets of the Comptroller-General's Office and the Prosecutor-General's Office, and the transfers made to other entities of the public sector. As only a few of these entities are covered by IFAD, the coverage of the monthly GFS, compiled and disseminated by the EFSAD (and annually by the TBD for the IMF Yearbook) corresponds to the scope the GBSRE.

Therefore, a shortcoming with respect to coverage is that the IFAD does not include some of the agencies of the central administration, namely: Legislative and Judicial Bodies, the Public Ministry, the Supreme Electoral Tribunal, the Constitutional Court, the Human Rights Ombudsman, the Real Property Registry, and the Public Defender's Office. Nonetheless, according to an official circular of October 8, 2004 the following public entities will be recording their budgetary execution on line through the IGAS in January 2005:

(a) Agencies, decentralized and autonomous entities: National Forestry Institute, National Statistics Institute, Agricultural Sciences and Technology Institute, Technical Institute for Training and Productivity, "Land Fund", Independent Sporting Confederation of Guatemala, Preservation Council for Antigua Guatemala, Municipal Development Institute, National Institute of Public Administration, Guatemalan Tourism Institute, Guatemalan Academy of Mayan Languages, Superintendency of Tax Administration (STA), the Judicial Branch, the Public Ministry, the Congress of the Republic, the General Property Registry, and the Guatemalan Olympic Committee.

(b) The following municipalities: Municipality of Guatemala city, Municipality of Quetzaltenango.

(c) The following nonfinancial public enterprises: *Empresa de Ferrocarriles de Guatemala* (FEGUA—railways), *Empresa Portuaria Quetzal* (EPQ—port), *Empresa Portuaria Nacional Santo Tomás de Castilla* (EMPORNAC—port), *Empresa de Telecomunicaciones* (GUATEL—telecommunications), *Empresa Portuaria Nacional Champerico* (EPNAC—port), *Zona Libre de Industria y Comercio* (ZOLIC—free zone).

According to that same circular, the entities that are preparing to record their budgetary transactions on line by IGAS as of January 2006 are the following: Permanent Exhibitions Committee, National Institute of Cooperatives, Private Sector Workers' Recreation Institute, Volunteer Fire Brigade, Military Provident Institute, Office of the Inspector-General of Cooperatives, Employee Benefits Plan, Constitutional Court, Supreme Electoral Tribunal, Human Rights Ombudsman, Institute of the Public Defender, National Agriculture School

(ENCA), Universidad de San Carlos de Guatemala (USAC), the nonfinancial public enterprise, and the Electricity Institute. Within this group, the USAC and the ENCA are not legally required to report to the MOF.

While the Guatemalan Social Security Institute (IGSS) is running a client server version of the IFAD, it is not included in the 2005/2006 program indicated in the official circular referred to above. This remains a matter of concern.

As regards the municipalities, the MOF has established the following targets for incorporating them into the IFAD: 44 in January 2005, another 100 in December 2005, 100 more in December 2006, and the remaining 88 during 2007.

2.3 Classification/sectorization

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

GFS data are not provided separately for each level of government, namely: Central Government, Local Governments, General Government, and Nonfinancial Public Sector.

The classifications of revenues, expenditures, and financing, as well as other debt, are generally consistent with classifications of the *GFSM 1986*.

In the case of monthly and annual GFS, prepared by the EFSAD, the classifications of the *GFSM 1986* are only partially reflected, in that the statistics are based directly on existing budget classifications, which, while structured according to that manual, are not fully consistent with the concepts in the *GFSM 1986*.

The EFSAD prepares a table entitled “Financial Situation of the Central Administration,” which is the equivalent of the “Summary Table of Government Operations” of the *GFSM 1986*, with memorandum items and additional tables providing further, disaggregated information on tax and nontax revenues. For expenditures, it presents disaggregated figures according to the budgetary classifications: by ministries, by purpose and function, expenditure earmarked for priority social sectors, and expenditure by social security funds (the latter two items reflecting the information requirements of the 1996 Peace Accords and the 2000 Fiscal Pact). The series began with data for 1995, with monthly figures for the current year (monthly figures for past years are kept in the MOF database).

For the annual GFS prepared by the TBD, the methodology and classifications of the *GFSM 1986* are more strictly observed. This directorate works with bridge tables between budgetary classifications and those of the *GFSM 1986*, established at an analytical level of detail. In addition, the TBD has been presenting since 2003 the GFS in the *GFSM 2001* format, adding to its worksheets a new bridge table between the concepts in the *GFSM 1986* and *GFSM 2001*. The methodology used for this bridge table, with a view to adopting the new presentation format, has been based on the IMF document “*GFSM 2001*, Supplementary

Material: Classification of *GFSM 1986* Data to the *GFSM 2001* Framework,” of October 2002. The TBD has applied this methodology in the Yearbook series back to the year 2000. The TBD includes information on the debt.

Statistics on the public debt are published monthly by the PCD at the Fiscal Transparency page of the MOF website. For external debt, the PCD publishes information on loans, disbursements, and amortization on the last day of each month, with a three-weeks lag. These data do not conform strictly to the classifications of the *GFSM 1986*, although the data by type of instrument and by type of holder can be deduced from published data. The start period for such data series is December 2002. For domestic debt, the PCD publishes detailed data monthly with a lag of three months, and the start period of the series is January 2002. Also, the BG publishes in its website monthly external debt data in U.S. dollars and domestic debt in local currency with a lag of two months. The BG also publishes annual debt data series for the period starting in 1980. However, the MOF is the official source of debt data.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Most transactions are conducted in national currency (quetzals) and are recorded at the market prices prevailing when they occur. Transactions in foreign currency (external debt disbursements and service) are converted to national currency at the monthly or daily exchange rate used by the BG. External debt disbursements and service payments are thus recorded in national currency at the exchange rate of the date the BG conducted the operations. To this end, the BG uses the buying or selling rate prevailing on the market, depending on the nature of the operation for the BG, i.e., whether it implies a purchase or sale of foreign currency by the BG.

2.4.2 Recording is done on an accrual basis

In budgetary and accounting practice, transactions are recorded on a cash basis (or very close to cash basis for monthly expenditures), which is consistent with *GFSM 1986*. The OBL requires that budget accounting be on an accrual basis, and transactions are automatically incorporated into the accounts as they accrue through the IFAD-IGAS (the integrated accounting module of the IFAD). However, when it comes to budgetary execution, this stage is very close to cash recording.

As regards revenues, taxes are collected through the banking system, and accrual and cash estimates are recorded simultaneously in the IFAD-IGAS. It is important to note that banks report collections to the MOF (GAD) on a daily basis, but they have five working days to deliver the funds to the accounts of the National Treasury Directorate (DTN) in the BG.

On the expenditure side, the basis for recording approximates cash. Payment orders (established in the Single Registry Certificates) are recorded by the Financial Administration Units of the entities in the IFAD-IGAS. Given a policy to minimize the floating debt, these

payment orders are paid within two weeks at most. Moreover, there is no supplementary spending period after the end of the fiscal year (i.e., the expenditure budget represents the maximum due and payable during the year). In addition, the MOF has an annual closing rule that fixes a deadline of December 23 for entities to enter amounts due in the IFAD-IGAS. Since there is no supplementary period, what was not paid during the fiscal year must be paid as a charge to the budget for the following year. Because of this rule, and the policy of minimizing inter-year floating debt, monthly arrears are minimal.

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

Generally speaking, all transactions are expressed in gross terms, except financing, as recommended in the *GFSM 1986*. The exception is in the recording of tax revenues, which are recorded net of VAT refunds (to exporters). Payment to banks for revenue collection services are deducted from the proceeds delivered to the NTD (two percent to STA for operations financing and payment of the banking commission) and recorded on a gross basis.

Corrective transactions, such as tax refunds or reimbursement of excess payments, are deducted from the original transaction at the time of occurrence.

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()*

For the BCG, the IFAD provides a high-quality information source that, thanks to its design and up-to-date technology, is quite comprehensive and timely. The system is subjected to periodic maintenance in order to improve quality levels and to incorporate regulatory changes as they are adopted.

The banking system plays a key role in tax collection and payments for the central administration. Tax revenues are collected entirely through the banks, and the system is organized so all payments are received in cash or through current accounts that taxpayers are required to maintain, with the result that the balance of accounts receivable has been minimized. Most payments are made electronically through the treasury module of the IFAD, which has been integrated with the banking system. This system is now used for all payments with the exception of about 20 percent of the teaching staff payroll. This percentage is expected to be reduced close to zero in the near future, because of the policy to make electronic payment faster than nonelectronic payment. This system of incorporating the banking system into revenue collection and payment has made electronic banking reconciliation significantly faster, easier, and more reliable.

For external debt, the MOF, through the PCD, has a complete and timely source of information in the Debt Management and Analysis System (DMFAS). The DMFAS is linked to the IFAD (IGAS), and there is mutual feedback between the two systems, which substantially reduces the work of recording the debt and ensures consistency between budgetary and accounting data.

For the domestic public debt, the information managed by the PCD is supplemented and reconciled weekly with information from the BG.

For the rest of the public sector that does not operate through the IFAD and DMFAS systems, information is scarce, late, and less comprehensive and reliable.

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

With respect to classifications, the source data are reasonably in line with the *GFSM 1986* directives, since the current budget classification manual for the public sector was prepared in 1997 on the basis of the concepts and definitions in the *GFSM 1986*.

Thus, source data reasonably approximate international standards. This is particularly true for the entities that are included in the IFAD and the DMFAS. The most serious problem with respect to this indicator is the scanty coverage of the source data. While BCG is a crucial sector for preparing the GFS for General Government, the unavailability of data from local governments and the decentralized and autonomous entities (particularly the social security institutions) is a serious problem. Many of such entities derive most of their financing from revenues included in the GBSRE.

3.1.3 Source data are timely

Thanks to the IFAD, the DMFAS, and the close cooperation between the MOF and the BG, data for BCG are available very promptly and on a daily basis. With the IFAD, transactions are recorded on line and a major portion are available in what is very close to real time.

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 other nonsampling error; the results of the assessments are monitored and guide statistical processes

The IFAD, which began in 1998 with application to the 1997 OBL and the New Budgetary Classification Manual (both of which are still in force), has brought a high degree of accuracy and timeliness to the source data supplied by government entities through that state-of-the-art computerized system. The system is operating in all central administration units in the GBSRE (see point 2.3.1). The IFAD project will be completed in 2007.

3.3 Statistical techniques

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

In the case of BCG, the compilation procedures used by both the EFSAD and the TBD are sound. Both units download information from the IFAD to Excel spreadsheets, establishing a system of interlinked derivation tables that allows for crosschecking to reduce processing errors.

With respect to statistical techniques, there are no plans to use statistical sampling for preparing estimates of the operations of the local governments. In the compilation of the national accounts, estimation techniques are used for annual estimation of local governments, with a sample of approximately 33 percent of the municipalities. Similarly, for estimating the operations of the nonfinancial public sector provided to Article IV missions of the IMF, the EFSAD estimates the local government subsector using nine representative municipalities.

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

In general, appropriate bridge tables have been constructed to facilitate adjustments to source data, especially in the case of annual figures prepared by the TBD. In the case of the EFSAD, derivation from the source data is more direct, and any discrepancy in the adjusted source figures is implicit in the cash variation of the financing, which is a residual.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The monthly information prepared by the EFSAD using the data from the IGAS is verified, supplemented and reconciled with intermediate information from the STA, the TBD, the PCD and the BG. Any existing differences are normally minor and have to do with the lag in verifying the accounting records.

The annual information the TBD prepares and sends to the IMF's GFS department is prepared from definitive annual figures approved by the GAD and used for the end-of-year report the MOF must by law present to Congress on behalf of the executive branch.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Any statistical discrepancies are generally minor. Nevertheless, as indicated for the figures prepared by the EFSAD, the cash variation in financing is obtained as a difference, and there is no procedure for investigating possible errors or omissions, such as by reconciling with changes in the funding account balances of BCG.

For the external public debt, the PCD reconciles flows and stocks for the respective accounts, with resort to the DMFAS and the IGAS. Nonetheless, there are clearly identified differences in external debt estimates of the central government reported by the MOF and those disseminated by the BG. This is the case with a debt the BG recorded as external public debt relating to a loan granted in 2002 by BBVA (*Banco Exterior de España*) to the firm “*Celulosas de Guatemala S.A.*” to finance a pulp processing plant. That debt was eventually assumed by the BG (US\$131 million) and was related to a debt of the Government of Nicaragua to that bank. The PCD does not include it in its record of external public debt, on the grounds that it never carried a government guarantee.

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

The statistical information processed by the TBD and the EFSAD is based solely on transactional flows. There is no annual reconciliation between the figures prepared by the two units.

The MOF is the only agency compiling the GFS, but reconciliation is conducted weekly with the BG, particularly with respect to debt figures (domestic and external). With respect to the debt processed primarily by the PCD through the DMFAS, there is proper reconciliation between flows and stocks, and that directorate reconciles the external debt information with the lending agencies, and the domestic debt with the BG. The PCD also has information on grants, which it reconciles with donors.

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)

Statistics are regularly documented, which would facilitate revision studies. There is, however, no practice of conducting periodic studies and statistical analyses of revisions.

4 Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

Statistics on BCG operations, as well as those on central government debt, are disseminated monthly. The periodicity of statistics thus follows the IMF data dissemination standards for the GDDS.

4.1.2 Timeliness follows dissemination standards

Monthly (and quarterly) statistics on BCG operations are disseminated within the following month, normally during the third week of that month. Monthly (and annual) statistics for central government debt are disseminated within the following three months for the internal debt, and with a three-week lag for external debt. Consequently, the timeliness of statistics follows the IMF data dissemination standards for the GDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The statistics are consistent within the dataset. Thus, the concepts, definitions, and classifications for producing subannual (monthly) and annual government finance statistics are the same. Similarly, the sum of subannual (monthly) statistics equals the annual statistics. There are no statistical discrepancies in the fiscal series. Data from the accounting system (IGAS) allow reconciliation between flows and stocks of assets and liabilities.

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

Consistent time series are available from 1995 to the present, with monthly data from the year 2000, and supplementary information is provided through memorandum items in order to facilitate analysis. No analytical notes are published.

When changes in source data are introduced, the historical series are reconstructed. Thus, data for the years 1995 to 1997 were adjusted to the significant changes implied by the launch of the IFAD in 1998 and the simultaneous introduction of the OBL and the Budgetary Classifications Manual for the Guatemalan Public Sector, as of 1998.

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

The National Accounts and the Balance of Payments, as they relate to central government, are based on the same sources as the GFS, which ensures source consistency. Nevertheless, in obtaining data for general government, the national accounts use annual estimates for the local government subsector, derived from a representative survey. In addition, sectorization differs across datasets giving rise to differences between debt stocks and flows. With respect to the consistency of the GFS with monetary statistics, in a policy meeting held weekly, the MOF and BG examine cross-sectoral consistency.

4.3 *Revision policy and practice*

4.3.1 *Revisions follow a regular and transparent schedule*

The figures are revised weekly, monthly and annually, according to stable cycles. The principal revisions are: (a) monthly for provisional tax returns from the banking system and the STA, with a lag of between one and five days, and the definitive information delivered by the GAD through the IGAS, with a lag of 8 working days; and (b) annual for figures delivered by the IGAS, with a lag of approximately one month. Differences between the provisional and the definitive figures are not very significant. This procedure is not formally established, nor is it made public.

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

At the time of dissemination, users are informed whenever data are preliminary. However, it is not explicitly stated that the data are definitive and that they are the result of a revision (this is left implicit).

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

As indicated in 3.5.1, there are no regular studies and analyses of statistical 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 GFS are disseminated according the budget classifications structured largely following *GFSM 1986*. However, there are differences, including in net lending and the functional classification of expenditure. Additional series and breakdowns are disseminated to meet specific users' needs (relating for example to the social expenditure commitments in the peace accords). As well, the MOF web site provides a broad range of additional addresses and links (Fiscal Transparency, IGAS, Budget, BG, STA), where further GFS-related information can be obtained.

The MOF website publishes weekly tables on budgetary execution, as well as four-monthly reports and the final annual accounts of the BCG, as the OBL requires. The statistics are disseminated in a clear manner, but they do not include any commentary on current developments (political, economic or financial) or any charts or tables to facilitate analysis.

5.1.2 Dissemination media and format are adequate

Statistics are disseminated via the website, and can be downloaded in Excel and PDF formats. This facilitates redissemination in the media. For the most recent data (current and previous year), a significant quantity of budgetary and accounting information, supplementary to the GFS, is published at the MOF website.

5.1.3 Statistics are released on a preannounced schedule

The monthly GFS figures are disseminated punctually via the website (with a three-week lag). Legal requirements regarding the presentation of four-monthly and end-of-year information for BCG are fully observed, and that information is also posted in a timely manner at the MOF website. But, there is no preannounced dissemination schedule.

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

Except for the necessary technical reviews by the various levels of management in the MOF and the BG, the statistics are disseminated to all users at the same time (see point 1.2.4). With respect to the press, it must be noted again that training has been provided through the IFAD to help journalists access and understand the information posted on the web, and a special user category has been created to facilitate access to the information.

5.1.5 Statistics not routinely disseminated are made available upon request

User requests for information and clarifications are handled via telephone. Requests for supplementary statistics must normally be submitted in writing to the MOF and are handled on a case-by-case basis.

The availability of supplementary statistics is not publicly indicated, except for the links and web addresses offered at the MOF portal.

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

Supplementary information is published in the statistical tables themselves only as memorandum items. Some basic conceptual definitions are provided to facilitate user analysis. No comprehensive documentation on methods and sources is published, and metadata are not disseminated.

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

No general use information (e.g., a brochure) about the GFS is available, nor has more specialized use information been prepared.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

Assistance is normally provided to GFS users. At the various web addresses of the MOF, and in the respective statistical tables, the unit responsible for preparation is clearly indicated. However, there is no indication of individuals that users can contact via e-mail, fax or telephone. Assistance to users is not regularly monitored or reviewed for quality control purposes.

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

There are no catalogs of publications, documents or other services available to users, nor are statistical products and services offered for sale.

Table 3 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: MOF*)

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	
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			A body of legislation supports the Ministry of Finance (MOF) in compiling and disseminating fiscal statistics. However, the legal framework does not specify sanctions for failure to report data to the MOF. Most public entities not included in the General Budget of Government Revenue and Expenditure (GBSREE) do not report the data established by the law to the MOF. There is a lack of training of GFS compilers. The services of experts have not been used to assess methodologies. No research is done to identify new GFS needs of external users (external to the MOF). There are no staff training programs or any explicit GFS improvement programs. There are no plans for tracking and assessing GFS quality. Quality criteria depend solely on the development plan for the Integrated Financial Administration System (IFAD).
0.2 Resources			X			
0.3 Relevance			X			
0.4 Other quality management			X			
1. Assurances of integrity						
1.1 Professionalism		X				The authorities have access to the GFS prior to release. There are no announcements regarding GFS compilation and processing methodologies.
1.2 Transparency			X			
1.3 Ethical standards		X				

Table 3 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(Compiling Agency: MOF)

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	
2. Methodological soundness						
2.1 Concepts and definitions			X			The concepts and definitions used are generally consistent with the recommendations of <i>GFSM 1986</i> . There are no plans for migration to <i>GFSM 2001</i> . GFS cover only budgetary central government. There are no GFS for central government. (incl. Social Security), local governments., general government., or NFPS.
2.2 Scope				X		
2.3 Classification/sectorization			X			GFS are not prepared in accordance with the sectoral categories in <i>GFSM 1986</i> . The breakdown of the primary components of the GFS is not fully in line (in classification and breakdown) with <i>GFSM 1986</i> . The average exchange rate is not used to convert from foreign currencies to domestic currency. Tax revenues are recorded net of VAT refunds to exporters.
2.4 Basis for recording			X			
3. Accuracy and reliability						
3.1 Source data		X	X			There are autonomous central government entities that are still not included in the IFAD. The Decentralized and Autonomous Entities are not included in the IFAD.
3.2 Assessment of source data			X			
3.3 Statistical techniques			X			Sampling has not been proposed for estimating local governments. The change in cash balances is calculated as a residual. As indicated, the change in cash balances is calculated as a residual and potential errors or discrepancies that might be implicit in this calculation are not investigated. There is no reconciliation between stocks and flows for the debt.
3.4 Assessment and validation of intermediate data and statistical outputs			X			
3.5 Revision studies				X		There are no periodic revision studies and analyses of the GFS.

Table 3 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: MOF*)

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	
4. Serviceability						
4.1 Periodicity and timeliness		X				There is a lack of consistency with some BOP and National Accounts (Public Investment, Current Expenditure) concepts, especially in terms of coverage issues. Furthermore, there are different intersystem sectorizations and unexplained differences between stocks and flows for the debt.
4.2 Consistency			X			
4.3 Revision policy and practice			X			There is no formally established revision and adjustment process, and it is not announced to the public. Preliminary data are explained. Final data are not explained, and there is no announcement that these data are the product of revisions.
5. Accessibility						
5.1 Data accessibility			X			Dissemination is not precisely in accordance with <i>GFSM 1986</i> . Economic comments are not included. There are no advance release calendars. The availability of supplementary data is not announced. Documentation on methods and sources is not disseminated. Contact persons to whom users could direct questions are not identified. There are no publication catalogues, or documents, etc., available to users, nor are statistical products offered for sale.
5.2 Metadata accessibility				X		
5.3 Assistance to users			X			

IV. MONETARY STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The responsibility for collecting, compiling, and disseminating monetary statistics is specified under a number of laws authorized under the Constitution to govern the financial system, as follows: (1) the Organic Law of the Bank of Guatemala (BG or Central Bank law) (Decree No. 16–2002);²⁴ (2) the Law of Banks and Financial Institutions (Decree No. 19–2002); (3) the Law of Financial Supervision (Decree No. 18–2002); and (iv) the Organic Law of the National Institute of Statistics (Decree No. 3–85). Other more recent regulations that directly bear on the collection of monetary data include the Monetary Law (Decree 17–2002); the Law of Private Financial Institutions (Decree 208); the Law that establishes the Free Market for Foreign Exchange (Decree No. 94–2000); and the Law for Combating Laundering of Money and Foreign Assets (Decree 67–2001).

The Bank of Guatemala (BG) compiles and disseminates monetary statistics. Its Organic Law (Article 62) mandates disseminating statistics on its own operations, as well as those of banks and financial institutions. While the BG law does not explicitly mandate the collection of statistics,²⁵ the BG's data-collecting responsibilities are inherent in the Organic Law of the National Institute of Statistics (Decree No. 3–85). Under that law, a National Statistical System (NSS) was created with the following functions: among other things, the authority to require all state dependencies, decentralized autonomous and semi-autonomous institutions, and local governments to compile, collect, analyze, and disseminate statistical information.

The Law of Financial Supervision (Article 3) empowers the Superintendence of Banks (SB) to collect and disseminate statistics on the operations of commercial banks and other financial institutions.

²⁴ Replacing the original Organic BG Law of 1945 (Congressional Degree No. 215)

²⁵ The Article states the BG will be responsible for disseminating, at least annually, a publication that contains a study of all aspects of the national economy. In addition, the BG is responsible for disseminating statistics on monetary, exchange rate, and balance of payments statistics, as well as other related financial matters deemed important by the MB, who will determine the periodicity of the statistics.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Adequate data-sharing arrangements are in place within the BG to ensure the flow of information among its pertinent departments, which is facilitated by an automated system for sharing information (Accounting and Economic Information System or AEIS). Under this system, the BG's Accounting Department (AD) posts the daily transactions in the ledgers and manually inputs the data into the AEIS. The Financial Programming Section (FPS) of the Economic Studies Department accesses these data electronically from the AEIS and develops monetary accounts of the central bank.

As noted earlier, the Superintendence of Banks (SB) compiles and disseminates the aggregated information gathered from the reports of commercial banks and other financial institutions. It subsequently transmits them to the BG (by electronic interface) on a weekly and monthly basis. This information is automatically consolidated with the BG data through the FPS's automated software program, Economic and Financial Information System (EFIS). The program develops a depository corporations (banking) survey (DCS) and a (partial) financial corporations survey, which are disseminated (internally and on the BG website) weekly. The full set of accounts is also published in BG's statistical bulletin (monthly, quarterly, annually) and in other periodic reports of the BG.

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

The confidentiality of individual respondents (banks and financial institutions) is guaranteed under the provisions of the Law of Banks and Financial Institutions (Article 63) and the Organic Law of the BG (Articles 27, 30, and 42). In effect, Articles 27 and 42 of the BG law state that members of the MB and the Committee on Implementation are responsible for safeguarding the confidentiality of information acquired in the conduct of their official duties and should not use such information for personal gain or to the detriment of the country, the BG, or third parties. In addition, the *Regulations on Labor Relations between the Bank of Guatemala and its employees* (Article 30-(b)) specifies guidelines for safeguarding the same level of confidentiality that is expected of the regular staff. Penalties are imposed in cases of disclosure of such data, which are considered serious offenses that could result in immediate dismissal and/or civil and criminal liabilities.

As regards the confidentiality of information submitted by other depository corporations and financial institutions, the *Law of Banks and Financial Institutions* (Article 63) states, in effect, that all personnel (including directors, managers, legal representatives, and general staff) of such institutions are prohibited under penalty of law from divulging the identity of the depositors, or any other information that may be acquired as a result of their position or in their official capacities.²⁶ Similarly, penalties are also imposed for disclosure of such data.

²⁶ Exceptions are those provisions under the "anti-money laundering" law or as directed by a competent judge in the investigation of illegal activities.

Data sharing arrangements under the electronic information systems are protected by individual passwords and codes; moreover, the data of commercial banks, development banks, and savings and loans institutions that are reported to the BG are disseminated only in a consolidated form.

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

Statistical reporting is ensured through legal mandate and/or other measures. As noted above, the Law of Banks and Financial Institutions (Article 63) requires commercial banks to report data to the SB, which may impose sanctions and penalties for noncompliance with the directives. On rare occasions, the BG has not received timely weekly reports from the SB, owing to delays in the submission by some banks or pending the clarification of data submitted by the institutions. In the past, these problems have been resolved mainly through informal contacts between the FPS with the SB.

Apart from the law, other mechanisms are in place to promote prompt and adequate reporting of data. The SB provides technical support to declarative commercial banks on completing the report forms for transmitting balance sheet data. In addition, the BG maintains direct channels of communications with commercial banks and other financial institutions by providing points of contact (i.e., staff of the FPS). Also, the BG has taken the initiative of dealing directly with commercial banks in cases where additional information or clarifications are needed to complete the surveys.

0.2 Resources

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

Staff resources for compiling statistics are broadly adequate to perform the required tasks. The FPS has a total of six full-time staff, all of whom are exclusively devoted to compiling monetary statistics. All the staff have, at least, college degrees (in economics, accounting, or statistics), and three have graduate degrees. Several individuals are currently locally pursuing post-graduate studies and/or have participated in specialized courses in monetary statistics. However, because of the recent plans for improving the coverage, classification, and sectorization of monetary statistics, it is envisaged that the FPS will require the services of three additional staff in the coming year.

In regards to training, FPS staff have had the opportunity to participate in courses conducted by international organizations, such as the IMF (especially the Monetary and Financial Statistics course), and seminars offered by regional institutions, such as the Central American Monetary Council (CAMC) and the Center for Economic and Monetary Studies for Latin America (CEMLA). Also, in accordance with Article 38 of the BG law, staff are encouraged to sharpen their technical qualifications in the field of economics, particularly in monetary and financial matters, including statistical compilation. In this connection, the BG has very good programs for financing staff development.

On technical resources, all FPS staff have personal computers with standard software, which is connected to the overall BG network via the AEIS. The derivation and compilation of monetary statistics from balance sheet data are performed using a new D-Base software program developed by the BG's Information Technology Department (ITD). Nevertheless, the FPS staff feel that more "hands-on" support from the ITD is needed to ensure smooth operation and use of the new program. The workspace, equipment, and working environment are more than adequate to facilitate efficient compilation of monetary statistics. Offices have appropriate furniture, lighting, ventilation, and equipment (telephones, electronic devices) that are upgraded constantly.

Financial resources are broadly adequate to support the current programs for monetary statistics. The budget for the monetary and statistics is reviewed in December of each year within the context of the overall BG budget, and the required appropriations are usually granted.

0.2.2 Measures to ensure efficient use of resources are implemented

In general, all programs in the BG are subject to budget considerations and performance assessments. In the case of the FPS, performance reports are conducted every four months. However, there is no specific process to measure resources used to compile the monetary statistics vis-à-vis those employed for other macroeconomic data. Annual programs are designed by the individual departments and submitted for approval by BG management. The programs are monitored and reviewed periodically, at least on an annual basis. As regards technical resources, the FPS section is equipped with relatively sophisticated computers and is supported with the latest software/hardware programs to facilitate their tasks. Studies are underway to explore ways to minimize the problems associated with the new D-Base program developed by the ITD.

0.3 Relevance

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

The BG does not have a proactive policy of regularly consulting users to obtain feedback on the quality and the relevance of its monetary statistics and, thus, input from the general public is limited. In general, feedback on the relevance and practicality of statistics is received during the course of responding to specific data requests. Also, the BG has occasionally conducted seminars and conferences for university students and the media, wherein indirect feedback on relevance and utility is obtained from the participants. However, to date, no seminars or conferences appear to have been conducted for the staff of SB or other banking and financial institutions.

Regarding mechanisms to identify new and emerging data requirements, regular visits by BG staff to other central banks and seminars organized by international and regional organizations (e.g., IMF, CAMC, CEMLA, and PARIS 21) help in assessing the relevance of

BG's monetary statistics. The FPS is pursuing the goal of adopting internationally accepted standards for monetary statistics, as demonstrated by efforts to conform to the new *MFSM*.

0.4 Other Quality Management

0.4.1 Processes are in place to focus on quality

The BG is fully aware of the importance of high quality official statistics for accurate analysis of monetary conditions and for formulating and implementing monetary policy; this awareness is embodied in the Organic Law of the Bank of Guatemala. In addition, it is sensitive to the different dimensions of data quality, as evidenced by the recent decision to participate in the General Data Dissemination System (GDDS), as well as to the necessity of data quality to build trust among users.

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

The BG has in place established procedures for quality-control of the monetary statistics. The FPS, in collaboration with the SB, routinely verifies that data reporting practices followed by the banks are consistent with the guidelines established by the BG, and routine checks are conducted on the raw data input into the computer. The balance sheet and other financial statements of the BG are externally audited every year by an internationally reputed firm. In addition, all depository corporations and other financial institutions under the aegis of the SB are also required to publish their annual balance sheets and income statements, in accordance with SB regulations.

The BG has also retained the services of international consultants and experts to improve the quality of statistics and develop strategies for improving the data. Significant improvements in monetary and financial data have been effected with the help of several technical assistance missions from the IMF Statistics Department (STA): a multisector mission (1997); monetary and financial statistics missions (1998, 2001, and 2004); GDDS missions (2004), as well as a joint IMF-CAMC seminar in Costa Rica (2004), and PARIS 21 workshop in Panama (2004).

Computer-based validation procedures for assessing the reasonableness of reported data are undertaken on a bank-by-bank basis using computer software. Supervised financial institutions use a single plan of accounts that facilitates the reporting of balance sheet data. At times, the FPS consults directly with the reporting institutions to verify the data for possible misclassifications. The production of monetary statistics is automated through the use of a database. As a measure of quality control, data processing includes a series of built-in checks and validation matrices at every stage of the production cycle.

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

There is a wide recognition of the trade-offs between data accuracy, periodicity, and timeliness. However, these factors are constantly being evaluated against the constraints and priorities posed by the overall BG budget. Meetings are regularly convened within the BG to review existing data, as well as to identify any emerging data requirements. For its part, the FPS has established a work program identifying the priorities for improving monetary statistics. For example, it is estimated that the plans to improve coverage and sectorization of monetary statistics would entail hiring three additional staff.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

No law specifically addresses the terms and conditions under which the statistics are produced in accordance with the principles of professional independence. However, the Monetary Board (MB) clearly recognizes that professionalism and independence in compiling the data, including monetary statistics, are crucial to the credibility of statistical results. Reflecting these views of management, those staff that demonstrate a high degree of professionalism are officially recognized and financially rewarded.

BG Regulations on Labor Relations between the Bank of Guatemala and Its Staff (Article 29) also state that all staff, including those involved in collecting, processing, and disseminating of statistics, should carry out their responsibilities with due diligence, dedicating to the tasks their best moral, intellectual, and physical efforts. Staff of the FPS feel that they are free from undue influence or pressures from upper management and other public sector agencies in the conduct of their duties of compiling statistics.

Professional skills are a prerequisite for hiring personnel. Considerations for advancement place a heavy weight not only on productivity and efficiency, but also on professionalism. Staff involved in the compilation of monetary statistics are encouraged to attend seminars, pursue post-graduate studies, and participate in meetings with other central banks and international organizations to sharpen these attributes.

1.1.2 Choices of sources and statistical techniques are based solely on statistical considerations

The source data for the compilation of the monetary statistics (i.e., balance sheets of the BG and the depository corporations) meet the statistical requirements for the decision-making purposes and for publication. Data sources, methods, and definitions are based solely on methodological considerations (e.g., *MFSM*). While the sectorization and coverage are not

completely in accordance with the *MFSM* requirements on the part of commercial banks, plans for improvements have been developed under the aegis of the GDDS.

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

In general, there have been no cases thus far wherein an entity has misinterpreted or misused the data. However, the BG informal policy widely known to the compilers of statistics is that whenever monetary statistics are misinterpreted, either by the public or the media, the question is directed to the pertinent department head to respond directly to the queries. This may be done by telephone, e-mail, formal letter, or meeting, depending on the circumstances. In most cases, however, questions have been resolved informally (i.e., telephone). To avoid such misinterpretations, the BG includes explanatory footnotes in its monthly publication (on the website), while a description on the implementation of monetary policy (including an explanation of the movements in monetary statistics) is contained in the quarterly statistical bulletin (*Report on Monetary Policy*) that is also published on the BG website.

1.2 Transparency

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

The broad terms and conditions under which statistics are collected, processed, and disseminated are readily available and published in various BG laws and in the Law of the Institute of National Statistics (NIS). The BG has published a recent compendium, “Principal Laws of the Bank of Guatemala, 2002”, which includes the following: (1) the Organic Law of the Bank of Guatemala (Decree No. 16–2002); (2) the Law of Banks and Financial Institutions (Decree No. 19–2002); and (3) the Law of Financial Supervision (Decree No. 18–2002). Other more recent regulations that govern the statistical operations of the financial system include the Monetary Law (Decree 17–2002), the Law of Private Financial Institutions (Decree 208); the Law of Free Circulation of Foreign Exchange (Decree 94–2000), and the Law for Combating Laundering of Money and foreign Assets (Decree 67–2001).

The BG internal labor regulations (*Regulation on Labor Relations between the Bank of Guatemala and Its Employees*) also covers other aspects of the statistical compilation, such as safeguards for confidentiality of data, professionalism in compiling information, etc. While these regulations are available only in the BG intranet, they may be obtained by the general public upon request.

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

No government official outside the BG (Monetary Board) has access to the monetary data before the release of the data to the public. Weekly monetary data are publicized on the BG website with a lag of about one week. For example, commercial bank data (in respect of the

previous Thursday) are (1) sent by e-mail to the FPS on Friday; (2) processed by FPS on Monday/Tuesday; (3) sent to the Monetary Board for approval on Wednesday; and (4) published on the BG website and sent to various “third parties” (e.g., the newspaper “*Moneda*,” National Council of Economic Planning, IDB representative, and Bankers Association) on Thursday. The weekly newspaper “*Moneda*” publishes the data on the following Tuesday. Although not explicitly documented, these arrangements are generally known to the public by virtue of the availability of these data that are published in local newspapers.

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

Publications through the BG website (weekly and monthly bulletins, reports, etc.) identify the institutions responsible for producing the data. The monthly and weekly hard copy reports distributed to the Monetary Board for review and to other institutions and the media contain the names of the departments and individuals responsible for the publication. In cases where statistics are reproduced in other documents or newspapers, the BG is generally identified as the source of the data.

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

No advance notice is given of changes in methodology, source data, and statistical techniques. Instead, they are announced and explained at the time the new data are published.

1.3 Ethical standards

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

Guidelines for staff behavior are well known to the BG staff by virtue of the Organic Law of the Bank of Guatemala (Article 37—Labor Relations) and detailed in various internal directives of the BG, such as Regulations on Labor Relations between the Bank of Guatemala and Its Employees (MB Resolution JM-175–2002). Article 29 of that Regulation deals with a code of conduct—ethical standards, professionalism, and rights and duties for all staff, while Articles 99–106 specify the sanctions and penalties for noncompliance with these standards. All new staff are informed of the existence of the employee code of conduct, and staff are periodically reminded to fully observe these rules and obligations. Article 30 (b) essentially deals with the guidelines for safeguarding the confidentiality expected of the staff. These regulations are available from the BG internal website (intranet).

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 overall structure in terms of concepts and definitions of the monetary statistics generally follows international accepted standards, guidelines, and good practices.

The analytical framework used in compiling the central bank survey (CBS) and the depository corporations survey (DCS) is generally in line with the *MFSM*. The DCS is derived from consolidating the accounts of the BG and those of commercial banks and other financial institutions. Key aggregates in the DCS include net foreign assets, net domestic credit (to central government and nonfinancial public enterprises, and private sector), monetary liabilities (M1, M2), nonmonetary liabilities, capital and reserves, and other net unclassified assets.

The analytical framework of the DCS seeks to explain the factors affecting the creation of money by means of institutional sectorization and classification of accounts. However, with respect to the accounts of commercial banks and financial institutions, because of the use of an outdated plan of accounts, the lack of information hampers the sectorization of resident and nonresident sectors, as well as poses difficulties in identifying holders and issuers of financial assets/liabilities.

Deviations from the key concepts and definitions of the *MFSM* are not clearly identified or stated in the BG publications.

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 broadly consistent with the guidelines in the *MFSM*. The financial system of Guatemala consists of the (1) **central bank** (Bank of Guatemala); (2) **other depository corporations**, comprising 28 commercial banks, 21 finance companies, and credit and savings cooperatives; and (3) **other financial corporations**, comprising other financial intermediaries (insurance companies) and various financial auxiliaries (warehouses deposits, exchange houses, pawnshops, etc.).

At present, the BG produces three surveys and a partial survey: (1) central bank (Bank of Guatemala) survey (CBS); (2) depository corporations (banking) survey (DCS) comprising the accounts of commercial banks but excluding certain other deposit-taking institutions (offshore banks and saving and credit cooperatives); and (3) a (partial) financial corporations survey that does not include some important other financial institutions such as insurance companies, pension funds, and financial auxiliaries. The DCS produced by the BG presents

accounts of resident financial corporations and quasi-corporations that are mainly engaged in financial intermediation and that issue liabilities included in the national definitions of broad money. However, the institutional coverage of the monetary statistics excludes some deposit-taking institutions, such as credit and savings cooperatives.

Currently, the BG compilation of data focuses on the DCS, which is disseminated on a weekly, monthly, quarterly, and annual basis on its website.

2.3 Classification/sectorization

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

The principles of sectorization/classification applied in the monetary statistics are generally consistent with the *MFSM*. The sectoral classification of resident units recommended in the *MFSM* for the purpose of compiling monetary statistics refers mainly to the subsectors distinguished in the *1993 SNA*, as follows: (1) central bank; (2) other depository corporations; (3) other financial corporations; (4) central government; (5) state and local government; (6) public nonfinancial corporations; (7) other nonfinancial corporations; and (8) other resident sectors.

The BG sectorization/classification of monetary accounts is broadly consistent with the *MFSM*. In its accounts, the following *sectoral* groupings of institutional units are distinguished: (1) central government;²⁷ (2) rest of public sector comprising decentralized agencies, autonomous institutions, social security institute, local governments, and other nonfinancial enterprises; (3) financial institutions (as defined in 2.2.1 above); (4) households; (5) nonprofit institutions serving households (embassies and international organizations); and (6) nonresidents.

BG *classification* of financial instruments is also generally in line with the *MFSM*, as follows: (1) gold and SDRs; (2) currency and deposits; (3) securities other than equity; (4) loans; (5) equity and paid in capital; (6) insurance technical reserves; (7) financial derivatives; and (8) other accounts receivable/payable.

With regards to commercial banks and other financial institutions, classification and sectorization of accounts is hampered by a chart of accounts that poses difficulties in identifying the holders and users of financial assets/liabilities. Actual sectorization of returns of banks may be misclassified in the sectoral groupings recommended in the *MFSM*.

Documentation exists on the classification and sectorization used by the BG, but it is intended only for internal use. However, the documentation will become publicly available on the Internet, as soon as the GDDS metadata are published on the IMF website.

²⁷ Units that are directly dependent on the general budget.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be based on market prices or market-priced equivalents (fair values). The only exception to this rule is that loans should be registered at their book values (i.e., outstanding principal plus any accrued interest) without adjustment for expected loan losses. Stocks and flows denominated in foreign currency should be converted to national currency values at the market exchange rate prevailing at the time they are recorded. Holding gains and losses arising from changes in market values (or fair values) of financial assets and of outstanding liabilities should be recorded separately in a revaluation account.

The BG accounts are generally compiled in accordance with the valuation principles recommended by the *MFSM*: (1) monetary gold is valued at market prices (daily at London closing prices); (2) financial assets and liabilities are recorded on the basis of market prices, except for loans which are registered at current book values (i.e., without any adjustment for expected loan defaults/losses); (3) valuation adjustments (including holding gains and losses on instruments) are separately included in revaluation (profits/losses) accounts; and (4) foreign currency transactions are converted to national currency at the exchange rate prevailing on the transaction date; outstanding stocks of foreign currency denominated assets and liabilities are based on end-of-period exchange rates, with valuation gains/losses included in the profit/loss accounts.

In the case of commercial banks and other financial corporations, however, some practices differ from the *1993 SNA*, *MFSM*, and International Accounting Standards (IAS): (1) Domestic securities are not valued at market (fair value) prices but, rather, on original purchase prices (acquisitions costs); (2) loans are recorded at nominal values of the outstanding principal without making the recommended adjustments for accrued interest (which are imputed into receivable accounts); and (3) only stock data (excluding flows) are provided by banks, but the BG derives the flow (transactions) data from the outstanding stocks. Notwithstanding these practices, to correct these deficiencies, the SB is developing a new plan of accounts that takes into consideration the need for more information to facilitate sectorization/classification. The documentation of deviations of the monetary accounts from international standards is limited to internal use but will be publicized once the GDDS is put on the IMF website. Deviations from the key concepts and definitions of the *MFSM* are not clearly identified or stated in BG publications.

2.4.2 Recording is done on an accrual basis

The accrual accounting principles recommended by *MFSM* specify that “interest due but not paid” on financial instruments be incorporated into the outstanding amount of the financial asset/liability, instead of recorded under other accounts receivable/payable. In addition, revenues and expenditures should be recorded in the period in which they fall due, regardless of when the corresponding cash flow actually takes place.

The BG follows these *MFSM* principles for the compilation of its own accounts. However, commercial banks and financial institutions continue to record interest on a cash basis. Interest income on loans, deposits, and securities is recorded in the income statements as it is paid. Moreover, interest is not classified with the underlying financial instrument (asset/liability) but as part of accounts receivable/payable. Similarly, dividend income is recorded as income only at the time when it is received.

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

In line with the recommendation of the *MFSM* and the *1993 SNA*, assets and liabilities of financial corporations should be collected and compiled on a gross basis.

Assets and liabilities of the BG accounts are compiled on a gross basis and aggregated into a statement of assets and liabilities without consolidating interbank positions. In the case of commercial banks and other financial institutions, data are reported on a gross basis in their monthly returns and are netted out and presented in consolidated form, in “other items net,” in their surveys.

In the dissemination of the DCS, the BG presents the credit to government and the international reserves position on a net basis (i.e., subtracting the deposits of government with BG short-term external liabilities, respectively) for purposes of facilitating economic analysis. Similarly, both reciprocal asset/liability positions between the BG and the commercial banks and claims among commercial banks are indistinguishably included in “interbank flows,” under other items (net).

Documentation on the deviations from the established international standards is available, but only for internal use. Such documentation will become publicly available once the GDDS is published on the IMF website.

3. Accuracy and reliability

3.1 Source data

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

Source data are obtained from comprehensive data collection programs that take into account the specific conditions of Guatemala. The main sources of information for compiling monetary statistics are the (1) daily BG balance sheets that are electronically linked internally to the FPS via the BG’s “Accounting and Economic Information System” (AEIS); and (2) weekly SB reports on commercial banks and other financial institutions that are available to the FPS through an interface between the SB and BG. This information is processed through the FPS’s computer program “Economic and Financial Information System” (EFIS) for aggregation and consolidation with the commercial bank accounts and with those of the

BG. The resulting DCS is sent to the Monetary Board (MB) for approval and subsequent publication in the BG website.

Notwithstanding sufficient processing capacity in the data collection programs, the standard weekly information provided by the SB on commercial banks lacks sufficient level of detail to permit classification of the data by economic sectors or by residency. The SB authorities indicated they are in the process of developing permanent supplementary report forms with the necessary information that would allow for the proper classification/sectorization.

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

The BG source data provide sufficient information to derive the accounts according to the required definitions, scope, classifications, valuation and time of recording in the *MFSM*. As noted above, however, the level of detail of the weekly reports of commercial banks and other financial institutions is insufficient to be able to distinguish between resident and nonresident transactions (residency criterion) and to properly sectorize the accounts. For purposes of the monthly DCS, supplementary information is requested from banks, so as to be able to provide a further breakdown of the total claims on the public and private sector. The SB is currently in the process of overhauling the plan of accounts and developing a new manual for financial institutions for commercial banks and financial corporations that would resolve these shortcomings. It is envisaged that the manual would be implemented by January 2006.

The data collection programs at the SB and the FPS (EFIS) are sufficiently flexible to accommodate new developments in methodology, technology, and the prospective increase in the number of reporting institutions.

3.1.3 Source data are timely

Sufficiently ample time is provided to process the accounting records of the BG and commercial banks and other financial institutions, for the following reasons: (1) accounting records are available electronically within the BG via the AEIS; (2) the SB sends the commercial bank information to the BG by electronic interface to facilitate processing of the data; and (3) regular channels of communication have been established (contact persons, e-mail, telephone) between the two institutions to ensure timely receipt and to promptly clarify inconsistencies in the data. As a result, Guatemala readily complies with the GDDS recommendations for timeliness and periodicity of monetary statistics.

The daily detailed balance sheet information of the BG becomes available to the FPS at the same time that the AD posts them on the AEIS. The accounts of the commercial banks and other financial institutions are transmitted electronically to the FPS on Thursday of each week. The FPS aggregates and consolidates the data from the two sources to produce a DCS, which is disseminated within a maximum of one to two weeks of the reference date.

3.2 *Assessment of source data*

3.2.1 *Source data (censuses, sample surveys, and administrative records) are routinely assessed (for coverage, sample error, response error) the results of the assessments are monitored and made available to guide statistical processes. (For coverage, sample surveys, and administrative records)*

The accuracy of the data from commercial banks is routinely studied by the SB for underreporting/misreporting, as well as for consistency of information. Inconsistencies and out-of-value trends are checked and discussed directly with the reporting institution prior to transmittal of the data to the BG. The automated procedures within the BG (AEIS, EFIS) ensure accuracy of the internal accounts of the institution, with built-in checks for internal consistency. Balance sheets of reporting commercial banks and other financial institutions are checked again by the FPS prior to processing into a DCS. In cases of further questions on the commercial bank information, the FPS occasionally contacts the pertinent banks directly for clarification in order to save time.

3.3 *Statistical techniques*

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

Sound statistical compilation techniques are employed by the BG and SB to deal with data sources. The BG applies the statistical concepts of principles of aggregation consolidation, and netting in accordance with the *MFSM*. The use of a sophisticated automated compilation program (EFIS) reduces the processing time and errors (i.e., in coding, editing, and tabulating). As regards the BG, the raw data are verified by the AD prior to their posting on the AEIS. The individual commercial bank reports are checked for errors and inconsistencies by the SB and returned to the reporting institutions in cases of missing or incomplete data. The final submitted data are subject to automated control checks through the application of validation techniques and accounting consistency verification.

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

As noted above, the quality of the source data for monetary statistics is monitored throughout the compilation process, which is fully automated (AEIS, EFIS) to check for statistical identities. Moreover, sound estimation techniques are employed to adjust for missing balance sheet items and to make projections on the broad credit aggregates for purposes of studies or reports for the Monetary Board. At times, the FPS has had to make estimations on the sectoral breakdown of the weekly aggregated information provided by commercial banks. In such cases, estimations are made on the basis of historical trends and future expectations applying sound statistical techniques (e.g., “least squares”). The EFIS database contains detailed weekly and monthly information dating back to 1996.

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

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

In general, the main intermediate data are not normally validated against other secondary sources. Occasionally or on an ad hoc basis, the BD performs some cross-checking of monetary data against the information provided in other sectors such as the balance of payments and fiscal accounts. For example, the central bank survey is compared with the public sector information on liabilities to and deposits with the central bank. Also, the monetary data on the stocks of foreign assets are compared with the international reserves in the balance of payments.

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

The behavior of the series is normally cross-checked by the FPS with related series/indicators, and any statistical discrepancies and unusual movements in intermediate data are investigated. As noted above, in cases of unusual variations in the intermediate data, internal checks and balances are built into the BG automated compilation system (EFIS, AEIS) to detect them. Similar automated compilation system checks are also included in the software programs utilized by the SB. Resolution of any unexplained variations in the series involves internal consultation between the FPS and AD, and among the BG, SB, and commercial banks. However, financial transactions flows are not regularly checked against the corresponding stock data; these investigations are done only as required or on an ad hoc basis.

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

As regards statistical outputs, large discrepancies and other potential indicators of problems are routinely investigated. This is mainly because, as a matter of policy, FPS staff have the responsibility for explaining the reasons for any unusually large data fluctuations in weekly, monthly, and quarterly reports that are submitted to the Monetary Board. This process may involve checking the balance sheets for data-entry errors or cross-checking financial flows with changes in the outstanding stocks of the related variables.

3.5 *Revision studies*

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

There is no mechanism in place for conducting a routine analysis of revisions to the data; thus, no formal studies on this matter are available. However, investigations are conducted on an ad hoc basis to evaluate the sources of the problems (e.g., erroneous sectorization of institutional units). Once the sources of the problems are identified, procedures are put in place to ensure that they do not reoccur. At times, the data remain preliminary for a long

period, owing to lack of full reporting of all commercial bank and financial institutions and/or when the data are still pending investigation. Only when these errors and omissions are corrected are the data revised and considered as final for purposes of publication in the BG website.

4. Serviceability

4.1 *Periodicity and timeliness*

4.1.1 Periodicity follows dissemination standards

The periodicity of monetary statistics meets the GDDS recommendations. In fact, General Data Dissemination System (GDDS) recommendations are exceeded since these data are available with a weekly periodicity.

4.1.2 Timeliness follows dissemination standards

The timeliness of the monetary statistics generally also meets the recommendations of the GDDS. Central bank aggregates are published on a weekly basis in the BG website, usually within one week (at the latest, two weeks) of the reference date (vis-à-vis GDDS recommendations of one to two months). Similarly, broad money and credit aggregates are also published weekly within one to two weeks of the end of the reference period (vis-à-vis one to three months for GDDS). These reports (e.g., statistical bulletin) on these data are also published on a monthly, quarterly, and annual basis on the website.

4.2 *Consistency*

4.2.1 Statistics are consistent within the dataset

In general, the monetary statistics are consistent within the dataset. The central bank survey presents details on credits/liabilities to the commercial banks and other financial institutions in the CBS, and vice-versa for the ODC Survey. However, credits/liabilities of commercial banks and other depository corporations to each other within the DCS are not shown separately but are netted out in interbank float. At times, discrepancies arise because of the lack of details on sectorization, particularly among commercial banks, owing to differences in the time of recording of financial transactions. Statistics for the entire financial corporations sector and the flow-of-funds accounts are not compiled.

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

Consistent time series are available over a period of at least eight years in the EFIS automated program maintained by the FPS. The database contains information on a weekly, monthly, quarterly, and annual basis. Revisions to the time series have taken place to take into account changes, such as in classification, coverage, or new information. For example,

series were revised when the Law that establishes the Free Market for Foreign Exchange (Decree No. 94–2000) allowed the public to conduct transactions in foreign exchange; these changes were clearly indicated in the corresponding tables. Other unusually large variations are explained in more detail in the monthly, quarterly, semi-annual, and annual reports to the Monetary Board.

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

Monetary statistics are not always reconcilable with other datasets. For example, it is difficult to reconcile certain monetary data with those obtained from the MOF (e.g., net credit to government) for various reasons, including (1) insufficient DCS coverage of commercial banks and other depository corporations, and (2) lack of information on sectorization and residency in reports by commercial banks. At present, consistency checks between the monetary and the balance of payments statistics are not conducted regularly. As noted earlier, a weekly policy meeting between the BG and the MOF provides an opportunity to review consistency between the monetary statistics and the GFS.

4.3 Revision policy and practice

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

There is no predetermined, well-established, and transparent revision cycle for the monetary accounts. Revisions occur occasionally, when errors are detected or when more accurate and timely data are available. However, no adequate documentation of revisions is included in the monetary publications, apart from footnotes to the tables.

4.3.2 Preliminary data are clearly identified

Preliminary data are clearly identified in the publications of monetary data. Similarly, revisions to the data are also indicated in the tables at the time they are made. The revised data are disseminated with the same level of detail as the previously published data.

4.3.3 Studies and analyses of revisions are made public

No studies and analyses are carried out routinely on the revisions to monetary data. Apart from the footnotes in the tables and the explanations in the reports for the Monetary Board, users are not normally informed separately of the causes or reasons for the 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 statistical tables published in the BG website, which presents the information of the BG and the accounts of commercial banks and other depository corporations in a balance sheet format, are presented in a way that facilitates proper interpretation. The BG website includes the DCS, comprising the analytical account of the BG and other depository corporations, which is published on a weekly, monthly, and annual basis. The main categories that are published include important aggregates, such as net foreign assets, domestic credit, money and quasi-money. Charts and tables are included in the quarterly, semi-annual, annual, and other special reports to the Monetary Board; such reports usually contain sections describing and analyzing developments in monetary and credit policies. No seasonally adjusted monetary data are published.

5.1.2 *Dissemination media and formats are adequate*

The BG disseminates daily, monthly, and quarterly monetary statistics through its website, in Spanish. Hard copies of the reports are available on request. Both recent and historical series can be obtained from the website. The weekly report on monetary statistics is regularly mailed to a list of third parties, which includes the press (e.g., the newspaper “*Moneda*”), Bankers Association, academe, representatives of international organizations, etc. The statistics are also disseminated at monthly press conferences of the president of the BG.

5.1.3 *Statistics are released on a preannounced schedule*

No preannounced advance release calendar is available to the general public. However, FPS follows a strict internal production and publication schedule.

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

After approval by the Monetary Board of the weekly reports, the monetary data are published and mailed to a select list (organizations/individuals/press) on the following day on the BG website. Thus, all users have access to the information at the same time.

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

Nonpublished (but nonconfidential) data are made available upon request from the FPS, with the approval of senior staff of the Economic Studies Department or management. However, in general, the general public is not informed of the availability of such 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

Documentation is available. However, this has not yet been made public, pending the publication of Guatemala's GDDS metadata on the IMF website (Dissemination Standards Bulletin Board (DSBB)).

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

No brochures have been prepared to inform external users about the monetary statistics. In general, no comprehensive documentation meets the various needs of different users, apart from what is published on the BG website.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

Prompt and knowledgeable service and support from the FPS on monetary statistics is available to users. The publications on the BG website contain contact points for the public, such as telephone, fax, and e-mail addresses.

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

The main instrument for informing the public of monetary information is the BG website, which contains the weekly, monthly and quarterly monetary accounts. In addition, other special reports are available, such as the "Semi-annual Report on Monetary Policy," the "Annual Report of the Bank of Guatemala," and the (annual) "Report on the National Economy," also available on the BG website. Any nonconfidential internal publications and studies not found on the BG website are available upon request. However, there is no catalog of publications, although documents and other services to users are widely available.

Table 4 .Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics.

(Compiling Agency: Bank of Guatemala)

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	
0. Prerequisites of quality						
0.1 Legal and institutional environment		x				No formal consultation with users, which is done on ad hoc basis.
0.2 Resources		x				
0.3 Relevance			x			
0.4 Other quality management		x				
1. Assurances of integrity						
1.1 Professionalism		x				Public is not formally informed in advance of revisions or modifications. Instead, this is done the same time as the changes.
1.2 Transparency			x			
1.3 Ethical standards		x				
2. Methodological soundness						
2.1 Concepts and definitions		x				Need to include off-shore banks and credit and savings cooperatives in coverage of depository corporations. Commercial bank reports need more detail for classification/sectorization (including identification of nonresidents). Accounts of commercial banks use acquisitions costs, instead of market prices; cash instead of accrual accounting of interest.
2.2 Scope			x			
2.3 Classification/sectorization			x			
2.4 Basis for recording			x			
3. Accuracy and reliability						
3.1 Source data				x		Reports used for depository corporations survey exclude credit and savings cooperatives; lack information to properly sectorize accounts, and use cash instead of accrual accounting of interest.
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		No revisions studies are regularly conducted (only on ad hoc basis).
4. Serviceability						
4.1 Periodicity and timeliness		x				Revision studies not regularly conducted (only on ad hoc basis).
4.2 Consistency		x				
4.3 Revision policy and practice			x			
5. Accessibility						
5.1 Data accessibility		x				Metadata information only available internally, pending publication in IMF GDDS website.
5.2 Metadata accessibility				x		
5.3 Assistance to users			x			No catalog of publications is available.

- 102 -

V. 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 Guatemala (BG) compiles, processes, and disseminates balance of payments statistics. The Organic Law of the BG, Decree No. 16–002 of May 2002, assigns, in Article 62, primary responsibility to the BG for the dissemination of balance of payments statistics along with other macroeconomic datasets such as the monetary statistics. The BG law does not refer to the responsibility for collecting and processing statistics. Nevertheless, the BG has a well-known practice for collecting, processing, and disseminating balance of payments statistics.

The Balance of Payments Section (BPS) of the BG is responsible for compiling and disseminating balance of payments statistics. The BPS works closely with the Foreign Exchange Statistics Section (FESS). The FESS collects data from banks and other institutions operating in the foreign exchange market, manages the International Transactions Reporting System (ITRS), and processes external trade data. Working arrangements and coordination among government agencies that provide source data are adequate. Such agencies include the Customs Intendency (CI) of the Tax Administration Superintendency (TAS), the Ministry of Finance (MOF), and the Guatemalan Tourism Institute (GTI).

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

Arrangements and working procedures within relevant BG units, such as the BPS and the FESS, are in place for the effective and efficient flow of source data for processing the balance of payments statistics.

Well-established arrangements ensure the timely flow of source data. Banks and other institutions authorized to participate in the foreign exchange market provide data needed to prepare ITRS reports, the TAS provides trade statistics, the GTI provides tourism data, and the Ministry of Finance provides external debt data. The ITRS reports are a major input to the compilation of the balance of payments, with source data are provided to the FESS from the Foreign Exchange Negotiations Section (FENS) of the BG, which receives daily copies of forms filled out by clients of banks and other institutions authorized to operate in the foreign exchange market. Trade data are received every month electronically from the TAS. The FESS processes the forms and produces the corresponding reports for the BPS, which classifies the information according to the fourth edition of the *Balance of Payments Manual (BPM4)*. The Public Credit Section (PCS) of the MOF sends monthly reports by e-mail on external public debt flows of the previous month to the Public Finance Section (PFS) of the BG, which feeds its own debt database with this information.

At present, no arrangement is in place for enabling the BG for full online access to the public sector external debt data administered by the MOF by using the Debt Management and Financial Analysis System (DMFAS) software installed with the support of the United Nations Conference on Trade and Development (UNCTAD). Also, there are infrequent meetings and telephone contacts to promote a proper understanding of data requirement with other data-producing agencies such as the MOF, the GTI, or the Migration Department.

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

The Organic Law of the National Institute of Statistics (NIS), Decree Law No. 3–5 (available in the NIS website), in Articles 25 and 39, provides for confidentiality of data and establishes penalties for employees of entities of the National Statistical System (NSS) who disclose confidential data. The regulations of the NIS law establishes in Article 22 that the statistical information collected by the NSS—which includes the BG—is confidential and cannot be revealed on an individual basis, except when authorized by other law.

This obligation is reinforced in Chapter V, Article 30 (workers' obligations and rights) of the BG internal work regulation (*Regulation and Labor Relation between the BG and its Employers*) which states that individual data from financial institutions, public entities, or from any other sources, shall not be disclosed or used for other than statistical purposes. Violations to this regulation are penalized according to Article 99. This regulation is available on the BG internal website and is distributed to new staff joining the institution.

Access to individual data is restricted to staff who require the information as part of their statistical duties through individual passwords. Confidentiality of data is guarded appropriately during storage specifically in the FESS, whose data base is administered by the Information Technology Department of the BG (IT-BG). The FESS provides specific users' profiles for different sections of the BG who may have access to its data base.

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

The BG law does not include provisions to encourage response, as it does not specifically assign direct responsibility to collecting statistics. However, the Organic Law of the NIS in Article 24 requires all government offices, public and private sector enterprises and individuals located in Guatemala to furnish the agencies of the NSS all information requested by these institutions for discharging their statistical responsibilities. Penalties for noncompliance with reporting requirements (including misreporting) are established in Chapter IX. Penalties are low, ranging from Q25 to Q1000 (US\$3 to US\$128) depending on the infraction and are not adjusted to inflation. Therefore, they do not act as effective deterrents. Moreover, there is no tradition of applying sanctions for non-response.

Article 2 of the law establishing the free market for foreign exchange (Decree No. 94–2000) provides a legal mandate to the BG to obtain daily information on foreign exchange

operations from the entities composing the foreign exchange market. Nonetheless, no penalties for noncompliance (including misreporting) are established.

In the ITRS forms, no reference is made to the NIS law for requesting data for the compilation of foreign exchange statistics. However, there is a reference to the Decree No. 94–2000, but it is to Article 1 rather than to Article 2, which is the one articulating the legal requirement for reporting data to the BG. In addition, penalties are not invoked and therefore not used on respondents who misreport or fail to respond, which might be partly related to the persistent difficulty in validating their value. As a result, though evidence of misreporting (see 3.2.1) can be verified, no sanctions for misreporting by banks of their ITRS returns have been applied so far.

The BG intends to encourage cooperation from data suppliers of the ITRS although efforts are not systematized. A workshop to raise awareness among reporting institutions operating in the foreign exchange market was organized in May 2001.²⁸ Contact with data suppliers is scarce and restricted to phone calls to check validity of large amounts.

0.2 Resources

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

Overall, the number of staff is adequate to perform required tasks. Nonetheless, about five new specialized staff will be required for the adoption of the fifth edition of the *Balance of Payments Manual (BPM5)* and in particular the implementation of surveys. The Balance of Payments Section (BPS)—responsible for collecting, processing, and disseminating balance of payment statistics—is currently comprised of seven professionals, including the chief and deputy chief; whereas the Foreign Exchange Statistics Section (FESS)—main compiler of balance of payments data sources (ITRS and trade statistics)—is comprised of a chief, deputy chief and 10 analysts, auxiliaries and administrative staff, as well as seven data processors hired from a private enterprise.

Staff qualifications are adequate, with professional staff required to have a bachelor's degree or at least three years of university studies in economics or related fields. The BG has an in-house, one-year, post-graduate course and provides funding for postgraduate courses abroad. Ninety percent of the professional staff of the Economic Studies Department already has already attended the BG post-graduate program, whereas 75 percent of the management staff has attended post-graduate courses abroad (US, Argentina, Chile, etc.)

Balance of payments staff other than those involved in data entry have professional qualifications in relevant fields such as economics, banking, and accounting. They also have

²⁸ The new ITRS format was launched in May 2001 when the liberalization of the exchange market was brought into action (the law was promulgated in December 2000).

received training from the IMF, the Center for Latin American Economic and Monetary Studies (CEMLA), the Central American Monetary Council (CAMC), and the Economic Commission for Latin America and the Caribbean (ECLAC). In the BPS unit, only one expert (who is also working for other sections) has participated in the Fund's balance of payments statistics course; whereas in the FESS unit, the chief, the deputy chief and one analyst have participated in balance of payments and external trade courses in CEMLA or ECLAC.

Salary and benefit levels are competitive with public administration and private sector conditions. However, staff turnover in the BPS unit has been very high in recent years, leading to loss of part of the human capital acquired in post-graduate education funded by the BG. The chief and the deputy chief of the BPS unit were appointed early in 2004. In contrast, staff turnover in the FESS is apparently lower, with the benefit of a deputy with long tenure (since 1988).²⁹ Turnover at the analyst level is also high (average tenure is less than two years).

Computing facilities are appropriate. The IT department provides support on technical matters. Hardware is distributed adequately to facilitate the efficient collection, processing, and management of databases. Software for compiling and analyzing the statistical series is effective, periodically updated, and well adapted to performing existing tasks. The database of the FESS has been developed and administered by the IT department. There is an integrated computing network access to databases, and, particularly in the FESS unit, data are backed up properly for retrieval of statistical series and updates in the event of natural disasters, accidents, etc. All hardware has e-mail access, but only chiefs and deputy chiefs have Internet access, whereas the remaining staff shares a computer with internet access for the whole section.

Working space and equipment are adequate to perform required tasks.

An annual budget determines reasonable funding. While the mission was in Guatemala, the BPS was preparing the budget requirements for performing balance of payments activities in 2005. This may include the budgetary needs to adopt *BPM5*, estimated at five new staff. The budgeted resources for implementing surveys are still being discussed in coordination with the National Program for Improving Economic Statistics (PRONAME).

0.2.2 Measures to ensure efficient use of resources are implemented

The BG has established administrative controls for monitoring and evaluating staff performance and work processes. There is a performance review every four months.

²⁹ The chief who has considerable statistical knowledge, took early retirement recently. Staff can retire early provided they have completed 25 years of service and are 50 years old.

The BG has been seeking outside expert assistance to evaluate statistical methodologies and compilation systems. In 1997, an IMF multisector statistical mission evaluated compilation and registration practices and made recommendations for improving source data and adopting *BPM5*. In February 2004, an international expert, financed by the BG, evaluated the quality of source data. Following this consultation, in March 2004, an IMF consultant conducted an extensive evaluation of balance of payments compilation and registering procedures and proposed plans for improvements. Nonetheless, despite expert recommendations, poor data sources and lack of updated methodologies still remain the major shortcomings of balance of payments statistics, and few actions were undertaken over the last seven years to overcome them.

This was due to high staff turnover, insufficient delineation of responsibilities between compilation and analytical tasks, and a performance review process that gives insufficient weight to compilation work. All these factors have hampered the build-up of professional experience needed to implement expert recommendations.³⁰ However, recent developments indicate an increasing awareness of the importance of balance of payments statistics among the authorities and the need to implement *BPM5* and conduct surveys in 2005. To this end, a committee for implementing the *BPM5* methodology comprised of chiefs and deputy chiefs involved with balance of payments compilation tasks has been recently created. Moreover, a plan for improvement following expert recommendations has also been prepared.

0.3 *Relevance*

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

There is a formal and regular procedure for monitoring new economic developments from media reports making sure that statistics cover new events and emerging issues. In addition, BPS staff regularly participate in statistical meetings and seminars organized by international and regional organizations and by professional organizations (e.g., IMF, CAMC, and CEMLA). There is, however, no specific survey or committee for balance of payments users. Outside users' needs have not been considered a priority, while compiler agencies are not mandated to consult with users. Accordingly, there is no established consultation with a wider public, although BG staff makes informal contact with users.

0.4 *Other quality management*

0.4.1 *Processes are in place to focus on quality*

BG management and staff are aware quality is an essential component of the statistical work. BG management is aware of the need to promote human resources development and offers

³⁰ Over the last 10 years, the heads of BPS have not lasted more than 1 ½ years on average.

training in best practices for human resource management. In addition, the BG has created a training center and an in-house, one year, post-graduate program that aims to raise graduate student standards to an international level to prepare for post-graduate courses abroad. Nonetheless, courses for improving compilation practices and statistical techniques are not offered, and no formal measures are implemented to focus on specific quality of compilation practices. For instance, as already pointed out, the performance review process does not give prominence to performance in statistical work.

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

Commendably, the BG has been hiring experts (see 0.2.2) to evaluate the quality of its statistics and to recommend strategies for improving data production. There is, however, no documentation that would facilitate consistent quality review at the various stages of data collection, processing, and dissemination. Some basic reviews are undertaken to identify problems at some stages of data collection and processing. New data are compared with data established for previous periods. When large inconsistencies are detected, respondents are contacted before making appropriate corrections. Foreign trade source data compiled by the BG are reviewed manually to detect inconsistencies between physical volumes and transactions values.

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

Although few formal processes are in place to deal with specific quality considerations and to guide planning for existing and emerging needs, the need to improve data quality is being taken into account in planning the work program. Additional staffing needs for 2005 are considered in order to start implementing *BPM5*, and a decision regarding the implementation of surveys in 2005 is being assessed in the framework of the PRONAME. On the other hand, feedback from users on quality standards and new and emerging data requirements have not been taken into account in planning the work program. For example, no significant efforts have been made to identify users' needs for quarterly balance of payments estimates or international investment position data. Currently, these data are either not disseminated or not elaborated by the BG.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Article 2 of the BG Organic Law establishes its autonomy, and staff is independent in the performance of their statistical duties. Appointment and removal of the heads of sections are transparent and there is emphasis on professional qualifications and performance.

Professional competence plays a key role in recruitment and promotion policies. Internal Work Regulations establish minimum requirements for potential recruits, including as regards education and written aptitude tests. While there are no internal workshops on balance of payments methodology, courses in specific accounts of the balance of payments (e.g., direct investment) have been organized in the past. The BG does not have a policy for encouraging research, and thus publications are sporadic. Until 2001, however, the Department of Economic Studies organized discussions in subjects of interest to the Department (e.g., real effective exchange rate), but such events were discontinued. Meetings to discuss specific balance of payments subjects were organized in the framework of the CAMC until 1998, but were later discontinued.

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

The choice of source data, (e.g., between primary data sources—ITRS reports—and administrative data sources—customs reports, MOF debt data), is made by the BPS staff and based solely on statistical considerations. Decisions to disseminate data, as well as the timing and publication vehicles, are taken by the Monetary Board.

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

When there is an erroneous interpretation of published data, the BG provides comments and clarification to the media. The BG monitors media coverage of its data through its public relations department. It is prepared to comment publicly and in a timely manner on erroneous interpretation or misuse of the statistics in the media. Nonetheless, the BG has seldom needed to provide explanatory material when releasing balance of payments data. Every year the BG organizes workshops for the media (“economics for non-economists”) aimed at promoting understanding of its statistics and projections/targets, particularly the monetary program, but lectures on the balance of payments are infrequent.

1.2 Transparency

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

As noted, the NIS and BG laws specify the terms and conditions under which statistics are collected, the obligation to compile and disseminate statistics, the confidentiality of individual reporters’ data, and the approval process for data dissemination. The BG provides, in its hard copies and electronic publications, an e-mail address (webmaster@banguat.gob.gt) where users may find more information about the terms of data production as well as address comments, suggestions, or questions on any BG statistics.

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

The Monetary Board, in its capacity of the governing body of the BG, may review statistics prior to release. Upon approval of the BG authorities, selected users (government agencies and international organizations such as the IMF) may be given access to preliminary balance of payments statistics before data are released to the public. The public is not made aware that certain government and international officials may access data prior to public release.

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

The paper and electronic publications of balance of payments data are clearly identified as a BG product, with BG publications bearing the institution's logo. Most published tables include a footnote indicating the data source, but the BG does not request attribution when its statistics are reproduced. However, official government reports that include balance of payments information acknowledge the BG as the data source. The NIS also disseminates balance of payments data in its paper and electronic publications, identifying the BG as the data source. When the BG includes data from other government agencies on its webpage (e.g., CPI statistics released by NIS), the source is clearly identified.

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

The BG has not introduced major changes in balance of payments methodologies, source data, or statistical techniques in recent years. Changes were introduced to some balance of payments components, such as foreign trade, but the modifications were not announced in advance to the public (it was done at the time of release). The mission was informed the BG has decided to provide users of balance of payments statistics with advance notice on the planned conversion of balance of payments data from *BPM4* to *BPM5*.

1.3 Ethical standards

The BG Internal Work Regulations, which provide broad ethical guidelines for BG staff, are distributed to new staff and are available in the BG internal website. These regulations offer guidelines on a range of issues including professionalism, data confidentiality, outside jobs, and acceptance of gifts. The Human Resource Department of the BG is in charge of monitoring work practices. Violation or nonobservance of the standards of conduct is penalized according to Chapter XV of the Internal Work Regulations.

2. Methodological soundness

2.1 Concepts and definitions

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

The overall conceptual framework used to compile the balance of payments statistics is in broad conformity with the guidelines presented in *BPM4*. Plans are underway to make the transition to *BPM5*. Current, capital, and financial accounts of the balance of payments statement are defined according to the guidelines of the *BPM4*, and the current account balance is, in principle, equal (with sign reversed) to the net capital and financial account balance. The financial account, however, does not provide for a separate recording of transactions in assets and transactions in liabilities. In constructing the balance of payments statement, a double-entry system is applied as a basic principle, and the net residual is, in principle, embedded in the errors and omissions item. Reserve assets are, however, defined considering the concept of monetary authorities' effective control and availability for use.

In general, balance of payments transactions involve those conducted by resident economic entities of the compiling economy with nonresidents. Nonetheless, given the high reliance on ITRS reports as a main source data and the lack of clear definition of the concept of residence in the forms and reporting instructions, misclassification at the time of filling the forms may arise with some transactions not always classified according to the guidelines of the residency criteria. For example, foreign direct investment transactions may not be defined by applying the 10 percent of ownership rule. In the ITRS instructions, a direct investment enterprise is defined as a "foreign entity," which "aims to obtain a durable participation in a national enterprise or in a foreign enterprise resident in the national economy." The *BPM5* definition of direct investments is, however, more accurate by considering as direct investment, those transactions performed by a "direct investor, who is resident in another economy [and] owns 10 percent or more of the ordinary shares or voting power ..." (*BPM5*, paragraph 362).

Furthermore, there is no reference to the period of time in which a transactor has to be located/operating abroad/in the country to be considered a resident/nonresident. For instance, compensation of employees is considered inflows and outflows for "salaries and remunerations that nationals/foreigners obtain abroad/in the country," while according to *BPM5* "employees, in this context, include seasonal or other short-term workers (less than one year) and border workers who have centers of economic interest in their own economies" (*BPM5*, paragraph 269). Additionally, the ITRS entries do not permit easy identification of foreign currency deposits of residents in resident and nonresident financial institutions.

On the other hand, GTI reports use the concept of nationality instead of residency, thus data might include nonresidents (Guatemalans working continuously for one year or more in a foreign country) as residents, and residents (foreigners living in Guatemala continuously for more than one year) as nonresidents.

2.2 *Scope*

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

In principle, balance of payments statistics cover all resident-nonresident transactions. The data cover the entire economic territory of Guatemala, and most *maquila* transactions operating under two regimes: inward processing (*maquiladoras*) and free zones. However, due to lack/limitations of data sources, some transactions between resident and nonresidents are not fully covered. Among these are (1) undervaluation and overvaluation of merchandise trade;³¹ (2) non-registered trade (mostly contraband);³² (3) underreporting of services credits and debits, mainly passenger transportation, construction, communication, financial and insurance services, and all other income (including reinvested profits of direct investment enterprises), services and financial transactions that may not be measured by the ITRS;³³ (4) underreporting or misreporting of financial account transactions such as inward and outward direct and portfolio investment, and foreign assets and liabilities of banks and non-banks.

³¹ Comparing trade statistics (on a f.o.b. basis) between Guatemalan authorities' data and US trade data (main Guatemalan trading partner representing approximately 50 percent of exports and 30 percent of imports) shows a substantial difference between both databases. According to trade statistics of the U.S. Census Bureau, there is a surplus in favor of Guatemala, whereas the Guatemalan authorities report a deficit with the U.S. The exercise shows that, on average for 2002 and 2003, imports were overvalued in 17 percent of the cases and exports undervalued in 25 percent. The mission received various reasons for this divergence, e.g., internal tax evasion (enterprise income tax) and different ways of registering imports (by country of origin vs. by seller country). Another reason for export undervaluation might also be the valuation of *maquila* exports based on inter-company transfer prices (in Guatemala) and the probable revaluation at market prices by U.S. customs authorities.

³² Over the last few years, the customs administration, which is part of the TAS, has made considerable progress in improving merchandise trade control and tax collection. Nowadays there is an integrated computerized system for customs operating 100 percent electronically and all payments are done through the banking system. Notwithstanding these efforts, the customs department estimates that there are 100 non-authorized post (*pasos no autorizados*) concentrated in particular on the Mexican border (smuggling of fuel) and the Honduran border (smuggling of tobacco and alcohol).

³³ Transactions between residents and non-residents that do not involve cash payments, for example reinvested profits of direct investment enterprises, trade finance, the incurrence of arrears, debt rescheduling, and debt cancellation, are not included in the ITRS report.

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 balance of payments transactions conforms to the recommendations of *BPM4*. Nevertheless, deviations from the classification recommended by *BPM5* are kept under review, and most major differences are identified. The main deviations included in national publications, apart from the presentation itself, are as follows:

Goods: (1) these are not broken down in the five categories recommended by the *BPM5* (general merchandise, goods for processing, repairs on goods, goods procured in port, and nonmonetary gold); (2) goods for processing (that is, goods that enter Guatemala for processing and return to the country of origin without a change of ownership) are not identified separately within “goods for processing” (exports and imports) but included in net terms in services.

Services: (1) Transportation services are not disaggregated by means of transport (sea, air, other transport), although customs documents offer the possibility to provide separate data on ports of entry which can be the source of information for means of transport; (2) travel services are not disaggregated by purpose of traveler (business or personal); (3) payments of services for processing goods sent to Guatemala from a foreign economy (imported) and, upon processing in Guatemala, sold (exported) to a third economy, are not considered as “other trade related services.”

Current and capital transfers: Transfers (especially grants) are not broken down into grants in cash and in kind, or by general government and other transfers (NGOs and religious organizations). The ITRS considers all grants as current, and the BPS unit makes a breakdown between current and capital, applying a factor taken from the ITRS data when the exchange control system was fully operational. The lack of identification of imports of grants in kind may result in underreporting of current transfers credits.

Financial Account: *BPM5* recommends that portfolio investment and other investment transactions be classified in four institutional sectors (monetary authorities, general government, banks, and other sectors). However, since Guatemala publishes balance of payments statistics according to *BPM4* the breakdown is done into three institutional sectors (non-financial public sector, monetary authorities such as BG, and private sector). This institutional breakdown does not identify transactions of banks (including their reserve assets) and transactions of public enterprises, which are attributed to the non-financial public sector instead of to other sectors.

2.4 *Basis for recording*

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

The balance of payments is presented in U.S. dollars. Transactions are valued at market prices when available. Services are valued at the price paid for the services provided. Goods are valued on an f.o.b. basis. Goods for processing are valued at enterprise-reported prices and, therefore, may not always be at market prices, as recommended by *BPM5*.³⁴ Nontradable financial instruments as well as those generally traded on a regular basis are valued at nominal value, when the latter are recommended to be valued at market prices.³⁵ Reserve assets include value changes not attributed to transactions resulting from exchange rate variations. Nonetheless, *BPM5* recommends—in contrast to *BPM4*—to exclude all changes in reserve assets not attributable to transactions (*BPM5*, paragraph 436).³⁶

When the actual date of the transaction is not available, an annual average exchange rate is used. The exchange rate prevailing on the day of transaction is used for exports and imports of goods, and for the transactions obtained through the ITRS reports. Disbursement and debt service payments are converted into local currency using the exchange rate at the time of the transaction.

2.4.2 *Recording is done on an accrual basis*

Transactions are recorded on a cash basis. In general, change of ownership is the principle governing the recognition of transactions and their time of recording. Merchandise trade statistics are recorded largely according to the time of clearance by customs (as with other countries), which may not be at the same time that the goods change ownership. Services, income and financial transactions are recorded on a cash basis. Loan drawings are entered in the accounts at the time of actual disbursement, and amortization and interest payments are recorded on a cash basis, with no adjustment to convert interest to an accrual basis.

³⁴ *BPM5* (paragraph 100) states that “for transactions between affiliated parties, the determination of values comparable to market values may be very difficult, and compilers may have not other choice than to accept valuations based on explicit costs incurred in production or any other values assigned by the enterprise.”

³⁵ In recent years, the government has placed bonds in international markets.

³⁶ For calculating transactions from data on stocks see *Balance of Payments Compilation Guide* (paragraphs 778 to 783)

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

Grossing/netting procedures are broadly consistent with *BPM5*. Most current account items are recorded on a gross basis, except goods for processing which are recorded on a net basis. Financial account items are recorded mainly on a net basis, but there is no separation for assets and liabilities, since the ITRS forms do not allow making this distinction.

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

As no surveys are conducted, data sources are insufficient and not fully dependable to compile the balance of payments statistics. Data collection based on the ITRS—which is the main data source—is difficult to validate. Following the liberalization of the exchange control regime in 1994, and particularly in 2001 (when liberalization was completed), the reliability of the ITRS report has been substantially eroded. This, however, was not offset by the introduction of complementary data sources, such as surveys.

ITRS data collection

The coverage of reporting institutions in the ITRS is integrated with the register of entities operating in the foreign exchange market maintained by the bank supervision authorities. All institutions operating in the foreign exchange market should provide to the BG information on inflows and outflows of exchange market operations between residents and nonresidents. The ITRS includes transactions of the banks' clients in cash and via banking accounts and transactions of the banks' own accounts. The forms are sent daily by commercial banks and other institutions operating in the foreign exchange market to the Foreign Exchange Negotiations Section (FENS) of the BG. The FENS upon reconciling stock positions and flows, transfers the forms to the FESS of the BG for their processing.

The current foreign exchange transactions reporting form was introduced in May 2001 in the wake of the liberalization of the foreign exchange market. Nonetheless, important classification and sectorization shortcomings remain for capital and financial accounts transactions. For example, the classification system does not allow the distinction between foreign exchange inflows and outflows of the banking system related to foreign exchange deposits that residents maintain in the system, which might be included within foreign deposits.³⁷ Other shortcomings are: the ITRS forms are not designed in a way that makes

³⁷ Banking statistics do not distinguish between residents and nonresidents. On current plans, the new chart of accounts to be introduced by the SB in 2005 will not redress this deficiency. (continued)

them easy to complete; they are not appropriate for computer processing since there is no coding system implemented; there is no use of reporting thresholds that may facilitate collection of data on numerous small-volume transactions;³⁸ and reporting instructions do not specifically impede netting of balance of payments transactions (credit net of debits), which is current in the case of transportation companies. Staff are aware of shortcomings and have designed a new form fully adapted to *BPM5* for current and financial transactions to be implemented in 2005.³⁹

Administrative data sources

Information from other available sources supplements, to some extent, core compilation. Data collection based on administrative data sources are relatively adequate and include: the TAS for international merchandise trade statistics based on customs recording procedures;⁴⁰ the MOF, for external public debt data; the BG, for reserve assets of the BG; and the GTI, for travel credits and debits derived from entry/exit cards provided by the Department of Immigration and completed by nonresidents and residents in major ports.

Data on reserve assets do not distinguish transactions from valuation changes, although this breakdown can be obtained from other departments of the central bank such as the monetary or accounting department. Data on foreign assets of the banking sector are not taken from their balance sheets, which can be provided by the Superintendency of Banks.

No data are obtained from the Ministry of Foreign Affairs for information on embassies abroad or on foreign embassies in Guatemala, or from the MOF for information on official grants. No surveys are conducted of embassies, NGOs, or international organizations. Moreover, there are few actions undertaken by the BPS to provide for new developments in

Instead, the SB is planning to require financial institutions to provide supplementary data to permit classifying transactions according to the residency criterion.

³⁸ If thresholds are to be used, some information on transactions falling below the threshold should be collected, aggregated and then examined from time to time through sample surveys. It should be noted, however, that in the case of Guatemala if a threshold is to be applied, its level should not be higher than the minimum amount transferred by migrants, so as to capture the whole data under this concept as has been done so far.

³⁹ The new form was revised by STA-IMF staff and some changes must be incorporated following recommendations.

⁴⁰ For all types of trade regimes (general trade, *maquila* and free zones) there are three different customs declarations (for imports, exports and goods in transit) with an identical format.

sources. There are no periodic contacts with the business community to identify new developments that need to be taken into account in the balance of payments compilation process. Local media and the Internet are, however, routinely monitored for information on international transactions.

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

Administrative records used to compile balance of payments statistics, such as customs data, provide a good approximations of the methodological requirements of the balance of payments. With the integrated computerized system for customs, which was implemented in 2000 and was fully operational in 2004, deviations of this source data from requirements of the balance of payments are sufficiently detailed to ensure the appropriate adjustments. An exception is goods for processing, since the customs forms and the corresponding codification system do not allow appropriate identification of goods for processing, which are intermingled in different export incentives regimes: inward processing of *maquilas* (regulated by Decree Law 29/89) and free trade zones (regulated by Decree 65/89). This is a major hurdle to classify goods for processing according to *BPM5*, though some approximations might be possible by considering the exports and imports included in Decree Law 29/89 as goods for processing.^{41 42}

The external debt data base of the BG used by the BPS for compiling public debt data is not fully suitable for obtaining public external debt transactions and positions on an accrual basis as recommended by *BPM5*. Data obtained from the MOF (see 0.1.2.) is recorded by the BG on a cash basis (or due-for-payment basis). The Public Sector Section of the MOF keeps a database on official grants that should be used to check the information received through ITRS and improve the breakdown between current and capital transfers.

Moreover, given the reasons stressed in 3.1.1. source data drawn from ITRS are not fully consistent with the definitions, scope and classifications of the balance of payments statistics, though time of recording is adequate. Pilot tests are conducted very sporadically.

3.1.3 Source data are timely

Data collection and processing timetables are adequate to meet timeliness and periodicity for disseminating the balance of payments statistics. Since the beginning of 2004—when the

⁴¹ According to the customs intendancy and the *Maquila* Exporters' Association (AGEXPRONT), from the five export incentive regimes included in Decree No. 29/89 the first two are mostly currently used, which by definition are maquila type transactions.

⁴² Other alternative data source to be considered is that of the OPAM (*Oficina de Perfeccionamiento Activo*) of the AGEXPRONT.

integrated computerized system for customs was fully operational—custom data have been available online one month after the end of the reference period. Hard-copy ITRS records are provided on hard copies on the day following the reference period and weekly internal reports are prepared with a time lag of three days after the end of the reference period. Public external debt data processed by the BG is monthly and is received from the MOF with a time lag of one month after the end of the reference period. The reporting of the BG's reserve assets and liabilities is timely. The number of travelers (inward and outward tourism) received from the GTI is received monthly with a time lag of two months from the reference period. The BG employs follow-up procedures to ensure the timely receipt of providers' data (e.g., telephone calls to GTI to remind their staff of timely data provision).

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

Customs data are generally good due to the use of a fully computerized system. Accuracy of the information from the ITRS is partially assessed. The opening and closing values of accounts of the banks are reconciled with transactions by the FENS before transferring the forms to the FESS. When unidentified or high-value transactions arise, some follow-up with reporting banks through telephone calls to confirm their accuracy are done, though visits to banks are very infrequent and no confirmation record is kept.^{43 44}

As no systematic analysis of ITRS reports is conducted and no cross-checks for consistency with alternative data sources are undertaken. As a result, there is a considerable risk of misclassification in the capital and financial account. Possible examples include ITRS estimates of net private capital inflows for 2003 (about US\$2.5 billion) and of net outflows of direct investment abroad (about US\$2.1 billion). These figures might be inconsistent with estimates of private sector external debt and direct investment abroad derived from other sources. For instance, data from the Bank for International Settlements (BIS) show that foreign banks claims on the non-bank sector in Guatemala decreased by US\$108 million in 2003, whereas liabilities vis-à-vis the non-bank sector (deposits of Guatemalans abroad) increased by about US\$248 million.^{45 46}

⁴³ When the new forms were implemented (May 2001) training sessions for commercial bank staff were conducted. No recent meetings have taken place to discuss the accuracy of ITRS reporting.

⁴⁴ Transactions of up to US\$100,000, which are somewhat uncertain to be accurately classified are checked.

⁴⁵ See: <http://www.bis.org/statistics/bankstat.htm>

Cross-checking with the Superintendency of Banks concerning the transactions of Guatemalan private banks with their off-shore platforms (which might not be included in the BIS database) might also be needed. This is particularly important in order to verify whether these transactions are of a short-term nature, instead of medium- and long-term loans as they currently treated.⁴⁷

There also seems to be scope for assessing several other source data by comparing them to alternative sources. For example, data on migrants' transfers from the ITRS should be compared with the annual survey implemented since 2002 by the International Migration Office (IMO). The figures obtained are very close to data on migrants' transfers from the ITRS, which validates the quality of both data sources.⁴⁸ Data on official grants is not cross-checked with OECD statistics or with the MOF data source on grants.⁴⁹

Accuracy of public sector external debt, international trade, travel, and other supplementary data sources are assessed but not systematically. The external debt data base of the DMFAS system administered by the MOF is routinely assessed. Travel data from ITRS is checked with GTI data on a number of tourists to which a factor of length of stay and expenditure per day is applied.⁵⁰ Both data sources are very similar in the case of credits. As for debits, flows obtained through the GTI are half of those obtained through the ITRS, despite clear evidence that GTI data may be overestimated, as nonresident Guatemalans are included in the outward tourism flows (travel debits).

⁴⁶ On the other hand, foreign banks' claims (loans) to all Guatemalan sectors (including banks) have decreased in US\$199 million, whereas liabilities vis-à-vis all sectors (deposits abroad) have decreased US\$197 million.

⁴⁷ Nonnegligible interest differentials between the U.S. and Guatemala in the context of a virtually fixed exchange rate might be a factor behind such transactions.

⁴⁸ The IMO has published in October 2004 the results of its last survey on migrants' transfers called *Encuesta sobre Impacto de Remesas Familiares en los Hogares Guatemaltecos (Año 2004)*. The first survey was implemented in 2001, and the organization plans to conduct surveys every year provided that funding is available.

⁴⁹ See annual OECD report on *Geographical Distribution of Financial Flows to Aid Recipients*.

⁵⁰ This factor is estimated according to a survey implemented several years ago by GTI with the support of the Japan International Cooperation Agency (JICA).

3.3 *Statistical techniques*

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

Compilation procedures of trade data minimize processing errors such as coding, editing, and tabulation errors, but these techniques are less used for compilation of the ITRS report and debt data. In addition, data reported from administrative sources are often checked against similar reports from previous periods. In case of anomalies, data are adjusted after consultation with the respondent. Trade data derived from customs documents are sent by TAS to the BG electronically. It converts such data into its own software (built on ORACLE),⁵¹ which allows transformations according to the needs of the different BG units. Public external debt flows from the MOF to the BG is submitted monthly by e-mail.

Data from the ITRS reports are received in hardcopy and processed manually. There are some automated controls to detect errors focusing on the use of the exchange rate. However, compilation procedures are not sufficiently stringent to avoid tabulation errors. Unusual values are checked individually, but are not replaced or modified even when there is clear evidence of misreporting or misclassification (see 3.2.1.).

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

Some procedures are in place to adjust data from various sources to improve coverage, classification, valuation, and to conform to international standards. For instance: (1) imports are adjusted from c.i.f. to f.o.b. basis by using information on insurance and freight from customs declarations; (2) estimates on travel carried out by the GTI are used to augment or verify data from the ITRS; (3) export data of the traditional products such as coffee, sugar, bananas and oil that represent approximately 20 percent of total trade are also adjusted. The mission compared data for 2002–03, and the gap between customs and BPS data is marginal. BPS staff agreed that adjustments to trade data were warranted as customs automatization was not yet fully operational and thus using export association data was warranted.

There are no surveys on transportation enterprises or communications companies that may serve to check ITRS data.

There are parallel databases that may serve to verify data from the ITRS, such as (1) migrants' transfers from OIM, (2) donors' transfers from the MOF, and (3) expenditures from Guatemalan embassies abroad and from foreign embassies in Guatemala from the Ministry of Foreign Affairs. Such cross-checking is not done systematically.

⁵¹ *Sistema Automatizado de balanza cambiaria y comercio Exterior (SABCCE)*: Electronic system for foreign exchange balance and external trade

Statistical procedures used to incorporate unrecorded activities (including nonregistered border trade and illegal activities) are not carried out. For example:

- Periodic surveys conducted at *nonauthorized border points* on goods are not carried out.
- No adjustments of trade data are made using partner-country data. Partners' import data could be used to adjust for the underestimation of exports, which may also be related to the lack of adjustment of transfer prices used in inter-company trade (see example with U.S. data in footnote 31 of this report).

BPS believes data from customs is relatively accurate, as even very small transactions are included. Nonetheless, some adjustments may be warranted, mainly when large and unexplained amounts of private capital flows reported by the ITRS are taken into account (see 3.2.1.), which might be partly related with nonregistered credits or debits of the trade balance.

3.4 *Assessment and validation of intermediate results and statistical outputs.*

3.4.1 *Intermediate results are validated against other information where applicable*

Information from the International Coffee Organization are used to monitor trends in international coffee prices, production in major exporting countries, and other developments that may affect export earnings. In general, however, intermediate results are not always checked across a wide range of data sources, though information reported in the financial press is used to verify high-value direct investment and other transactions. Since surveys are not implemented, cross-checking with this core data source is not possible. Nonetheless, survey data implemented by other entities may be used. For instance, the BPS is planning to use the IMO survey on migrants' transfers to check the consistency of ITRS data.

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

The behavior of a given series is assessed against a related series, although not routinely and systematically. For instance data on freight earnings are assessed in relation to the value/volume of the trade flows; data on travel-related transactions are analyzed in relation to information compiled by the immigration authorities on the numbers of international travelers entering/leaving the country; the reported financial flow data are reconciled with changes in the corresponding stock data collected for external debt.

Nonetheless, other important cross-checking is not carried out, due to limited data sources. For instance, data on investment income payments and receipts of direct investment enterprises are not assessed in relation to the corresponding stock data, as surveys are not carried out and the international investment position is not compiled.

The jump in migrants' transfer from 2001 to 2002 was perhaps not adequately cross-checked and investigated, though the mission was informed that the liberalization of the foreign exchange market might have been a major reason for this result.

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

Staff involved in producing balance of payments monitor developments in the errors and omissions item and seek to understand them, e.g., by cross-checking entries in the current, capital, and financial accounts. ITRS data on private capital flows, however, are not adequately monitored or investigated, and thus large and unexplained inflows and outflows in certain years arise (see 3.2.1.). On the other hand, although the BIS locational international banking statistics on foreign assets and liabilities of residents are followed up by BPS staff, this is not systematically compared with private capital flows reported through the ITRS. Large discrepancies warrant an investigation, as pointed out in 3.2.1. The BG does not carry out bilateral comparisons with data of major trading partners, or comparison with the joint BIS-IMF-OECD-World Bank Statistics on External Debt. The MOF, however, does such cross-checking for debt data routinely. Other current and financial account items with other data sources and large differences are not investigated.

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 magnitude of revisions between preliminary and final data are evaluated. However, no formal studies are conducted to keep a record of revisions.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The BG compiles annual balance of payments statistics with periodicity consistent with GDDS recommendations. While not disseminated directly by the BG, quarterly balance of payments estimates prepared by the BG are redisseminated by the IMF in its statistical publications. The BPS's plan for improvement envisages dissemination of quarterly data, though a specific date is not yet set.

4.1.2 Timeliness follows dissemination standards

The BG disseminates annual balance of payments data within six months after the end of the reference period. This timeliness is consistent with GDDS recommendations.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

Concepts and definitions for producing quarterly and annual balance of payments statistics are the same, though classification for the quarterly and annual balance of payments presented in IMF publications (*IFS* and *BOPSY*) are done according to *BPM5*, and thus they differ from the official annual presentation, which conforms to *BPM4* format.

Over the long run, the net errors and omissions item has been relatively stable. Private financial flows, however, have presented large and unexplained fluctuations over time.

The international investment position is not prepared.

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

Consistent time series are available for an adequate period of time. On the BG website, a balance of payments series of seven years is published.

There are no methodological notes that identify and explain the main breaks and discontinuities in the balance of payments component time series and their causes. For example, the jump of 100 percent in migrants' transfers between 2001 and 2002 was not explained and adjustments were not made to maintain consistency over time. In the commentary related to the balance of payments of the BG annual publication, this jump was stressed but not explained.⁵²

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

The balance of payments data on trade in goods are reconciled with international merchandise trade data. The balance of payments statistics are largely consistent with national accounts and the monetary statistics (particularly the reserve assets of the BG). However, the foreign assets and liabilities of the financial sector are not taken from their balance sheets. The balance of payments components comprising external debt data are largely consistent with the corresponding MOF debt stocks.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The revision cycle is predetermined and reasonably stable from year to year, and it is made known to the public when the annual publication (*Annual National Economic Study*) is

⁵² See *Estudio de la Economía Nacional 2002*.

released in the month of June. Nonetheless, the source data, the timing of revisions with related datasets, and the timing of important economic policy documents are not explained. In addition, there is no adequate documentation of revisions in the publication of the statistical series and in the database accessible to users.

4.3.2 Preliminary and/or revised data are clearly identified

At the time of data dissemination, users are informed whenever data are preliminary, though users are not informed when data are revised.

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

Revisions are not measured, assessed, and explained in the balance of payments publication and in the database accessible by users. Analysis of differences between the revised and preliminary data is not published for major aggregates to allow an assessment of the reliability of the preliminary data.

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)

Data access to the balance of payments is provided through the BG website and in hard copy publications. The BG, however, disseminates balance of payments statistics only through one official summary table, which is accompanied by a more disaggregated table of two pages. A larger set of detailed tables on balance of payments components with key concepts and definitions that facilitate analysis is not presented. The BG prepares a set of detailed tables on balance of payments components available only for internal use. These tables might be useful to facilitate proper interpretation of balance of payments statistics specifically for current account transactions.

Charts related to the external sector, particularly on foreign exchange transactions, foreign trade and international reserves are presented along with commentaries on current-period developments in the annual reports.

5.1.2 Dissemination media and formats are adequate

Balance of payments data are disseminated in two BG publications, which are also available on the BG website. The main BG's publications that include balance of payments statistics are as follows:

- The *Annual National Economic Study* presented in June, which includes a summary table and another more disaggregated table with data on balance of payments

statistics aggregates (annual data for the past two years), accompanied by three tables with data on exports and imports, and tables on exchange rate, foreign exchange balance, international reserves, and public debt. The publication includes an explanatory text with several charts mostly related to foreign exchange outflows and inflows, reserve assets, and the trade balance.

- The *Economic Evaluation of the Year and Prospects for the Coming Year* presented in the end-of-the-year report (*Política Monetaria, Cambiaria y Crediticia: Evaluación a Noviembre y Propuesta para el Próximo Año*) presents a summary balance of payments with preliminary data for the past year and estimated data for the current year. It also includes an explanatory text for the current year and charts and comments on the performance of international reserves.
- The *Quarterly Report on Monetary Policy* presents a chapter on the external sector. This chapter includes comments on the performance of the world economy, comments and charts on the trade balance of the period, and comments and charts on international reserves for the corresponding period. No balance of payments statistics is presented.

5.1.3 Statistics are released on the preannounced schedule

There is no preannounced schedule for publication of balance of payments statistics. Nonetheless, a chart with a calendar of reports to be presented to the Monetary Board is included in the Economic Evaluation of 2003 (*Política Monetaria, Cambiaria y Crediticia: Evaluación a Noviembre 2003 y Propuesta para 2004*). Upon approval of the Monetary Board, the majority of these reports are currently published. Moreover, the Organic Law of the BG establishes in Article 62 that the BG must publish at least once a year macroeconomic statistics including balance of payments statistics. Users of external sector statistics know informally that the website is updated at the end of every month.

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

Balance of payments statistics are made available to all users simultaneously. However, selected users (government agencies and international organizations) may have access to preliminary balance of payments statistics before data are released to the public.

5.1.5 Statistics not routinely disseminated are made available upon request

Statistics not routinely disseminated can be made available to users upon request. Requests should be submitted to management for approval. No specific reference is made in BG publications on the availability of nonpublished subaggregates, and the terms and conditions on which they are made available.

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*

An official metadata document that includes concepts, scope, classification, basis for recording, data sources, and statistical techniques is not available, and departures from internationally accepted standards are not documented. However, in context of upcoming GDDS participation, balance of payments metadata and will soon be posted in the IMF website.

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

No brochure is available to inform general users about balance of payments and other external sector statistics. No document on sources and methods has been produced to inform analysts and other users of balance of payments statistics on the compilation methods and techniques.

5.3 Assistance to users

5.3.1 *Contact points for each subject field are publicized*

The BG publications and website include a general note indicating the BG is the contact source and include specific addresses, telephones and faxes that may be contacted by users, as well as an e-mail address: webmaster@banguat.gob.gt. A specific contact person within the balance of payments area is not identified, but the inquirer is supposedly referred to the area specialist in a prompt and knowledgeable way. Assistance to users is not monitored through periodic users' surveys or through an equivalent mechanism.

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

There is no catalog of publications and documents. The BG does not charge for any statistical products and services.

Table 5. Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Guatemala)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			Non-optimal sharing of external debt data. Unclear reference to legal framework in ITRS forms.	
0.2 Resources		X					
0.3 Relevance			X			Users’ needs not monitored through a regular consultation process.	
0.4 Other quality management			X			Few and undocumented processes for monitoring data quality, and guiding planning for users’ needs.	
1. Assurances of integrity							
1.1 Professionalism		X					
1.2 Transparency			X			Terms and conditions under which data are collected and disseminated are not made public.	
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X			Balance of payments statistics compiled in broad conformity with <i>BPM4</i> . Plans are underway to adopt <i>BPM5</i> . Residency criteria are not fully consistent with international standards.	
2.2 Scope			X			Incomplete coverage for some services, direct investment, and other financial transactions.	
2.3 Classification/sectorization				X		Departs from <i>BPM5</i> in a number of ways.	
2.4 Basis for recording			X			Interest and some financial transactions not recorded on accrual basis. Goods for processing are not recorded on a gross basis. No separation for assets and liabilities in financial accounts.	

Table 5. Guatemala: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Guatemala)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	
		O	LO	LNO	NO		
3. Accuracy and reliability							
3.1 Source data				X		No surveys implemented. ITRS reports not fully dependable.	
3.2 Assessment of source data				X		Accuracy of ITRS reports only partially assessed. No consistency checks with related data sources.	
3.3 Statistical techniques			X			Insufficient quality control in data compilation.	
3.4 Assessment and validation of intermediate data and statistical outputs			X			Data on private capital flows not adequately monitored or investigated. Bilateral data reconciliation is not carried out.	
3.5 Revision studies				X		No revision studies are conducted, but revisions are evaluated.	
4. Serviceability							
4.1 Periodicity and timeliness		X					
4.2 Consistency			X			Errors and omissions relatively stable, but large and unexplained private capital flows.	
4.3 Revision policy and practice			X			No revision studies are conducted, but revisions are carried out routinely.	
5. Accessibility							
5.1 Data accessibility			X			More detailed tables are needed by users. Users are not informed of availability of balance of payments detailed data.	
5.2 Metadata accessibility				X		No metadata prepared, except in the framework of GDDS participation.	
5.3 Assistance to users			X			A specific contact person within the balance of payments unit is not identified.	

**DATA QUALITY ASSESSMENT FRAMEWORK—GENERIC FRAMEWORK
(JULY 2003 FRAMEWORK)**

Quality Dimensions	Elements	Indicators
0. Prerequisites of quality 	0.1 Legal and institutional environment — <i>The environment is supportive of statistics</i> 0.2 Resources — <i>Resources are commensurate with needs of statistical programs.</i> 0.3 Relevance — <i>Statistics cover relevant information on the subject field.</i> 0.4 Other quality management — <i>Quality is a cornerstone of statistical work.</i>	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. 0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs. 0.2.2 Measures to ensure efficient use of resources are implemented. 0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored. 0.4.1 Processes are in place to focus on quality. 0.4.2 Processes are in place to monitor the quality of the statistical program. 0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.
1. Assurances of integrity <i>The principle of objectivity in the collection, processing, and dissemination of statistics is adhered to firmly.</i>	1.1 Professionalism — <i>Statistical policies and practices are guided by professional principles.</i> 1.2 Transparency — <i>Statistical policies and practices are transparent.</i> 1.3 Ethical standards — <i>Policies and practices are guided by ethical standards.</i>	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. 1.2.1 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. 1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness</p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions—<i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization—<i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.4.1 Market prices are used to value flows and stocks.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>
<p>3. Accuracy and reliability</p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.</i></p>	<p>3.1 Source data – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Assessment of source data—<i>Source data are regularly assessed.</i></p> <p>3.3 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 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.</p> <p>3.3.1 Data compilation employs sound statistical techniques to deal with data sources.</p> <p>3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.4.1 Intermediate results are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).</p>

Quality Dimensions	Elements	Indicators
4. Serviceability <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i>	4.1 Periodicity and timeliness — <i>Periodicity and timeliness follow internationally accepted dissemination standards.</i> 4.2 Consistency — <i>Statistics are consistent within the dataset, over time, and with major datasets.</i> 4.3 Revision policy and practice — <i>Data revisions follow a regular and publicized procedure.</i>	4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards. 4.2.1 Statistics are consistent within the dataset. 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks. 4.3.1 Revisions follow a regular and transparent schedule. 4.3.2 Preliminary and/or revised data are clearly identified. 4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).
5. Accessibility <i>Data and metadata are easily available and assistance to users is adequate.</i>	5.1 Data accessibility — <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i> 5.2 Metadata accessibility — <i>Up-to-date and pertinent metadata are made available.</i> 5.3 Assistance to users — <i>Prompt and knowledgeable support service is available.</i>	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. 5.3.1 Contact points for each subject field are publicized. 5.3.2 Catalogs of publications, documents, and other services, including information on any changes, are widely available.

Users' Survey

I. Summary of results of survey data users

1. To enrich the basis for assessment, the mission elicited the views of selected users of the macroeconomic statistics through a survey and a follow-up meeting. Users were largely satisfied with recent efforts at disseminating macroeconomic statistics through the Internet, but a majority saw scope for substantial improvement in several areas. Many were concerned about weaknesses in the national accounts and related uncertainties about the level and growth rates of GDP. They were uninformed about intense remedial efforts currently underway at the BG. A majority pointed to poor timeliness of annual estimates, expressing a strong desire for quarterly national accounts and balance of payments estimates as well as improved methodology. There was demand for more detail and longer series, including for those variables modified as a result of methodological change. A majority expressed dissatisfaction with available metadata and lack of information on data revisions.

2. In addition, users provided more general insights and recommendations during the meeting. They acknowledged a generalized apprehension about providing data, possibly arising from tax liability and security concerns. Some suggested the recent end of a long period of civil war provided a basis for increasing transparency, but that progress is proceeding slowly. They suggested involving industry associations and universities in the official collection of statistics, to take advantage of their high credibility. They also noted that market solutions to the paucity of official GDP data relied on a good response rate to surveys conducted privately, including from otherwise guarded investors. There was concern about the adverse effect of insufficient official data on prospective foreign investment, and inconsistencies across data sources.

II. Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004

		% of Respondents	Respondents Answering Question	Respondents	% with an Opinion
I. General information about the uses of official macroeconomic statistics					
1.	Which official statistics do you use regularly?				
1.1	National Accounts (NA), e.g. GDP, GNP, Sectoral Value Added	95%	18		
1.2	Prices: Consumer Price Index (CPI), Producer Price Index (PPI)	100%	19		
1.3	Government Finance Statistics (GFS) or fiscal data	79%	15		
1.4	Monetary and Financial Statistics (monetary)	78%	14		
1.5	Balance of Payments (BOP)	63%	12		
1.6	Other (please specify): _____				
1.6.1	Production indices	42%	8		
1.6.2	Labor market (employment, unemployment, wages)	47%	9		
1.6.3	Merchandise trade	79%	15		
1.6.4	International capital flows and foreign liquidity	100%	19		
1.6.5	External debt (public and publicly guaranteed)	68%	13		
1.6.6	International Investment Position	42%	8		
2.	What are your sources of official statistics?				
2.1	National Statistics Office (INE)	84%	16		
2.2	Central Bank - Bank of Guatemala (BG)	100%	19		
2.3	Ministry of Public Finance (MFP)	74%	14		
2.4	Other government agencies or departments (please specify)	42%	8		
2.5	International and regional organizations (IMF, World Bank, IDB, ECLAC, UN, etc.)	84%	16		
2.6	News media	26%	5		
3.	Do you refer to descriptions of sources and methods provided by agencies compiling the macroeconomic statistics?				
			<u>18</u>		
3.1	Yes	63%	12	67%	67%
3.2	No	32%	6	33%	33%
3.3	No opinion	5%			
4.	For what purposes do you use the official statistics?				
4.1	Analysis of current developments for short-term decision making	58%	11		
4.2	Analysis of trends for longer-term policy formulation	47%	9		
4.3	Model building and forecasting	37%	7		
4.4	Economic research	68%	13		
4.5	Comparison with economic developments in other countries	53%	10		
4.6	General economic background	74%	14		
4.7	Market research	37%	7		

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
Section B: Information concerning quality aspects of official macroeconomic statistics						
5. Coverage and detail						
5.1 In general, are you satisfied with the coverage of official statistics?						
5.1.1 National Accounts				19		
1.1	Yes		47%	9	47%	56%
1.2	No		37%	7	37%	44%
1.3	No opinion		16%	3	16%	
5.1.2 CPI/PPI				19		
1.1	Yes		79%	15	79%	88%
1.2	No		11%	2	11%	12%
1.3	No opinion		11%	2	11%	
5.1.3 GFS				19	100%	
1.1	Yes		47%	9	47%	69%
1.2	No		21%	4	21%	31%
1.3	No opinion		32%	6	32%	
5.1.4 Monetary				19	100%	
1.1	Yes		68%	13	68%	87%
1.2	No		11%	2	11%	13%
1.3	No opinion		21%	4	21%	
5.1.5 Balance of Payments				19	100%	
1.1	Yes		63%	12	63%	75%
1.2	No		21%	4	21%	25%
1.3	No opinion		16%	3	16%	
5.2 In general, are you satisfied with the official statistics in terms of available detail?						
5.2.1 National Accounts				19	100%	
1.1	Yes		47%	9	47%	56%
1.2	No		37%	7	37%	44%
1.3	No opinion		16%	3	16%	
5.2.2 CPI/PPI				19	100%	
1.1	Yes		79%	15	79%	88%
1.2	No		11%	2	11%	12%
1.3	No opinion		11%	2	11%	
5.2.3 GFS				19	100%	
1.1	Yes		42%	8	42%	57%
1.2	No		32%	6	32%	43%
1.3	No opinion		26%	5	26%	
5.2.4 Monetary				19	100%	
1.1	Yes		68%	13	68%	87%
1.2	No		11%	2	11%	13%
1.3	No opinion		21%	4	21%	
5.2.5 Balance of Payments				19	100%	
1.1	Yes		68%	13	68%	81%
1.2	No		16%	3	16%	19%
1.3	No opinion		16%	3	16%	

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
5.3	Do you find the data collection surveys (e.g. business survey) to be adequate?					
5.3.1	National Accounts			19	100%	
	1.1	Yes	47%	9	47%	75%
	1.2	No	16%	3	16%	25%
	1.3	No opinion	37%	7	37%	
5.3.2	CPI/PPI			19	100%	
	1.1	Yes	53%	10	53%	91%
	1.2	No	5%	1	5%	9%
	1.3	No opinion	42%	8	42%	
5.3.3	GFS			19	100%	
	1.1	Yes	37%	7	37%	70%
	1.2	No	16%	3	16%	30%
	1.3	No opinion	47%	9	47%	
5.3.4	Monetary			19	100%	
	1.1	Yes	47%	9	47%	90%
	1.2	No	5%	1	5%	10%
	1.3	No opinion	47%	9	47%	
5.3.5	Balance of Payments			19	100%	
	1.1	Yes	47%	9	47%	90%
	1.2	No	5%	1	5%	10%
	1.3	No opinion	47%	9	47%	
5.4	Do you find the statistical series to be consistent over time?					
5.4.1	National Accounts			19	100%	
	1.1	Yes	79%	15	79%	83%
	1.2	No	16%	3	16%	17%
	1.3	No opinion	5%	1	5%	
5.4.2	CPI/PPI			19	100%	
	1.1	Yes	68%	13	68%	76%
	1.2	No	21%	4	21%	24%
	1.3	No opinion	11%	2	11%	
5.4.3	GFS			19	100%	
	1.1	Yes	58%	11	58%	69%
	1.2	No	26%	5	26%	31%
	1.3	No opinion	16%	3	16%	
5.4.4	Monetary			19	100%	
	1.1	Yes	79%	15	79%	100%
	1.2	No	0%	0	0%	0%
	1.3	No opinion	21%	4	21%	
5.4.5	Balance of Payments			19	100%	
	1.1	Yes	74%	14	74%	88%
	1.2	No	11%	2	11%	13%
	1.3	No opinion	16%	3	16%	

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
6.	Periodicity and timeliness					
6.1	Are you satisfied with the frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly, annual)?					
6.1.1	National Accounts			20	100%	
	1.1	Yes	25%	5	25%	31%
	1.2	No	55%	11	55%	69%
	1.3	No opinion	20%	4	20%	
6.1.2	CPI/PPI			20	100%	
	1.1	Yes	70%	14	70%	88%
	1.2	No	10%	2	10%	13%
	1.3	No opinion	20%	4	20%	
6.1.3	GFS			20	100%	
	1.1	Yes	40%	8	40%	57%
	1.2	No	30%	6	30%	43%
	1.3	No opinion	30%	6	30%	
6.1.4	Monetary			20	100%	
	1.1	Yes	65%	13	65%	87%
	1.2	No	10%	2	10%	13%
	1.3	No opinion	25%	5	25%	
6.1.5	Balance of Payments			20	100%	
	1.1	Yes	35%	7	35%	47%
	1.2	No	40%	8	40%	53%
	1.3	No opinion	25%	5	25%	
6.2	In general, do you consider that the official statistics are disseminated with the appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)?					
6.2.1	National Accounts			19	100%	
	1.1	Yes	32%	6	32%	35%
	1.2	No	58%	11	58%	65%
	1.3	No opinion	11%	2	11%	
6.2.2	CPI/PPI			19	100%	
	1.1	Yes	63%	12	63%	71%
	1.2	No	26%	5	26%	29%
	1.3	No opinion	11%	2	11%	
6.2.3	GFS			19	100%	
	1.1	Yes	53%	10	53%	63%
	1.2	No	32%	6	32%	38%
	1.3	No opinion	16%	3	16%	
6.2.4	Monetary			19	100%	
	1.1	Yes	63%	12	63%	75%
	1.2	No	21%	4	21%	25%
	1.3	No opinion	16%	3	16%	
6.2.5	Balance of Payments			19	100%	
	1.1	Yes	26%	5	26%	31%
	1.2	No	58%	11	58%	69%
	1.3	No opinion	16%	3	16%	

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
7.	Other dissemination practices					
7.1	Do you know if there is a publicly disseminated calendar that pre-announces the dates on which various official statistics will be disseminated?					
7.1.1	National Accounts			19	100%	
	1.1	Yes	5%	1	5%	5%
	1.2	No	95%	18	95%	95%
	1.3	No opinion	0%	0	0%	
7.1.2	CPI/PPI			19	100%	
	1.1	Yes	16%	3	16%	16%
	1.2	No	84%	16	84%	84%
	1.3	No opinion	0%	0	0%	
7.1.3	GFS			19	100%	
	1.1	Yes	5%	1	5%	5%
	1.2	No	95%	18	95%	95%
	1.3	No opinion	0%	0	0%	
7.1.4	Monetary			19	100%	
	1.1	Yes	16%	3	16%	17%
	1.2	No	79%	15	79%	83%
	1.3	No opinion	5%	1	5%	
7.1.5	Balance of Payments			19	100%	
	1.1	Yes	5%	1	5%	6%
	1.2	No	89%	17	89%	94%
	1.3	No opinion	5%	1	5%	
7.2	If there is a calendar of release dates, in your experience, are official statistics released on the pre-announced dates?					
7.2.1	National Accounts			19	100%	
	1.1	Yes	5%	1	5%	17%
	1.2	No	26%	5	26%	83%
	1.3	No opinion	68%	13	68%	
7.2.2	CPI/PPI			19	100%	
	1.1	Yes	21%	4	21%	50%
	1.2	No	21%	4	21%	50%
	1.3	No opinion	58%	11	58%	
7.2.3	GFS			19	100%	
	1.1	Yes	5%	1	5%	17%
	1.2	No	26%	5	26%	83%
	1.3	No opinion	68%	13	68%	
7.2.4	Monetary			19	100%	
	1.1	Yes	16%	3	16%	43%
	1.2	No	21%	4	21%	57%
	1.3	No opinion	63%	12	63%	
7.2.5	Balance of Payments			19	100%	
	1.1	Yes	5%	1	5%	17%
	1.2	No	26%	5	26%	83%
	1.3	No opinion	68%	13	68%	

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
7.3	Is there enough information about revisions to official statistics to satisfy your needs?					
7.3.1	National Accounts			19	100%	
	1.1	Yes	42%	8	42%	50%
	1.2	No	42%	8	42%	50%
	1.3	No opinion	16%	3	16%	
7.3.2	CPI/PPI			19	100%	
	1.1	Yes	58%	11	58%	73%
	1.2	No	21%	4	21%	27%
	1.3	No opinion	21%	4	21%	
7.3.3	GFS			19	100%	
	1.1	Yes	58%	11	58%	73%
	1.2	No	21%	4	21%	27%
	1.3	No opinion	21%	4	21%	
7.3.4	Monetary			19	100%	
	1.1	Yes	47%	9	47%	69%
	1.2	No	21%	4	21%	31%
	1.3	No opinion	32%	6	32%	
7.3.5	Balance of Payments			19	100%	
	1.1	Yes	37%	7	37%	50%
	1.2	No	37%	7	37%	50%
	1.3	No opinion	26%	5	26%	
7.4	Do you find the policy and procedure for revisions to the statistics to be adequate (scope of the revision, periodicity, announcement, etc.)?					
7.4.1	National Accounts			19	100%	
	1.1	Yes	21%	4	21%	29%
	1.2	No	53%	10	53%	71%
	1.3	No opinion	26%	5	26%	
7.4.2	CPI/PPI			19	100%	
	1.1	Yes	47%	9	47%	64%
	1.2	No	26%	5	26%	36%
	1.3	No opinion	26%	5	26%	
7.4.3	GFS			19	100%	
	1.1	Yes	37%	7	37%	54%
	1.2	No	32%	6	32%	46%
	1.3	No opinion	32%	6	32%	
7.4.4	Monetary			19	100%	
	1.1	Yes	42%	8	42%	67%
	1.2	No	21%	4	21%	33%
	1.3	No opinion	37%	7	37%	
7.4.5	Balance of Payments			19	100%	
	1.1	Yes	32%	6	32%	50%
	1.2	No	32%	6	32%	50%
	1.3	No opinion	37%	7	37%	

Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004 (cont'd)

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
8.	Accessibility					
8.1	Can you easily access official statistics?					
8.1.1	National Accounts			19	100%	
	1.1	Yes	79%	15	79%	83%
	1.2	No	16%	3	16%	17%
	1.3	No opinion	5%	1	5%	
8.1.2	CPI/PPI			19	100%	
	1.1	Yes	74%	14	74%	78%
	1.2	No	21%	4	21%	22%
	1.3	No opinion	6%	1	5%	
8.1.3	GFS			19	100%	
	1.1	Yes	47%	9	47%	60%
	1.2	No	32%	6	32%	40%
	1.3	No opinion	21%	4	21%	
8.1.4	Monetary			19	100%	
	1.1	Yes	79%	15	79%	94%
	1.2	No	5%	1	5%	6%
	1.3	No opinion	16%	3	16%	
8.1.5	Balance of Payments			19	100%	
	1.1	Yes	79%	15	79%	88%
	1.2	No	11%	2	11%	12%
	1.3	No opinion	11%	2	11%	

			% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion
8.2	Can you easily access information pertaining to official statistics (explanatory notes, methodological descriptions references concerning concepts, classifications, statistical practice)?					
8.2.1	National Accounts			19	100%	
	1.1	Yes	26%	5	26%	28%
	1.2	No	68%	13	68%	72%
	1.3	No opinion	5%	1	5%	
8.2.2	CPI/PPI			19	100%	
	1.1	Yes	32%	6	32%	33%
	1.2	No	63%	12	63%	67%
	1.3	No opinion	5%	1	5%	
8.2.3	GFS			19	100%	
	1.1	Yes	21%	4	21%	25%
	1.2	No	63%	12	63%	75%
	1.3	No opinion	16%	3	16%	
8.2.4	Monetary			19	100%	
	1.1	Yes	37%	7	37%	41%
	1.2	No	53%	10	53%	59%
	1.3	No opinion	11%	2	11%	
8.2.5	Balance of Payments			19	100%	
	1.1	Yes	26%	5	26%	29%
	1.2	No	63%	12	63%	71%
	1.3	No opinion	11%	2	11%	
8.3	Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you?					
	8.3.1	Yes	16%	3	16%	
	8.3.2	No	68%	13	68%	
	8.3.3	No opinion	16%	3	16%	
8.4	In what format do you get access to official statistics?					
Hard copy:				45	100%	
	8.4.1	Official releases	79%	15	33%	
	8.4.2	Press releases	21%	4	9%	
	8.4.3	Special requests	32%	6	13%	
	8.4.4	Official policy papers	53%	10	22%	
	8.4.5	Private sector summaries and analyses	26%	5	11%	
	8.4.6	Newspapers	26%	5	11%	
Electronic form:				42	100%	
	8.4.7	Official website	95%	18	43%	
	8.4.8	Official database and other (such as CD-ROM)	37%	7	17%	
	8.4.9	Private websites	16%	3	7%	
	8.4.10	News media websites with official policy papers	16%	3	7%	
	8.4.11	E-mail	47%	9	21%	
	8.4.12	Other	11%	2	5%	

Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004 (cont'd)

			% of Respondents	Respondents Answering Question	Percent of Respondents	% w/ an Opinion
8.5	Does the presentation of the data (format, clarity of the text, tables, graphics) meet your needs?					
8.5.1	National Accounts			19	100%	
	1.1	Yes	74%	14	74%	78%
	1.2	No	21%	4	21%	22%
	1.3	No opinion	5%	1	5%	
8.5.2	CPI/PPI			19	100%	
	1.1	Yes	79%	15	79%	83%
	1.2	No	16%	3	16%	17%
	1.3	No opinion	5%	1	5%	
8.5.3	GFS			19	100%	
	1.1	Yes	68%	13	68%	81%
	1.2	No	16%	3	16%	19%
	1.3	No opinion	16%	3	16%	
8.5.4	Monetary			19	100%	
	1.1	Yes	74%	14	74%	88%
	1.2	No	11%	2	11%	13%
	1.3	No opinion	16%	3	16%	
8.5.5	Balance of Payments			19	100%	
	1.1	Yes	74%	14	74%	88%
	1.2	No	11%	2	11%	13%
	1.3	No opinion	16%	3	16%	
8.6	Do you find user support to be easily accessible, timely, and competent?					
8.6.1	National Accounts			19	100%	
	1.1	Yes	16%	3	16%	19%
	1.2	No	68%	13	68%	81%
	1.3	No opinion	16%	3	16%	
8.6.2	CPI/PPI			19	100%	
	1.1	Yes	26%	5	26%	29%
	1.2	No	63%	12	63%	71%
	1.3	No opinion	11%	2	11%	
8.6.3	GFS			19	100%	
	1.1	Yes	21%	4	21%	25%
	1.2	No	63%	12	63%	75%
	1.3	No opinion	16%	3	16%	
8.6.4	Monetary			19	100%	
	1.1	Yes	32%	6	32%	38%
	1.2	No	53%	10	53%	63%
	1.3	No opinion	16%	3	16%	
8.6.5	Balance of Payments			19	100%	
	1.1	Yes	26%	5	26%	31%
	1.2	No	58%	11	58%	69%
	1.3	No opinion	16%	3	16%	

Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004 (cont'd)

			% of Respondents	Respondents Answering Question	Percentage of Respondents	% w/ an Opinion
9. Overall assessment						
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?						
9.1.1 National Accounts				19	100%	
1.1	Yes		26%	5	26%	33%
1.2	No		53%	10	53%	67%
1.3	No opinion		21%	4	21%	
9.1.2 CPI/PPI				19	100%	
1.1	Yes		68%	13	68%	87%
1.2	No		11%	2	11%	13%
1.3	No opinion		21%	4	21%	
9.1.3 GFS				19	100%	
1.1	Yes		26%	5	26%	45%
1.2	No		32%	6	32%	55%
1.3	No opinion		42%	8	42%	
9.1.4 Monetary				19	100%	
1.1	Yes		68%	13	68%	100%
1.2	No		0%	0	0%	0%
1.3	No opinion		32%	6	32%	
9.1.5 Balance of Payments				19	100%	
1.1	Yes		32%	6	32%	46%
1.2	No		37%	7	37%	54%
1.3	No opinion		32%	6	32%	
9.2 In general, do you consider the official statistics to be reliable?						
9.2.1 National Accounts				19	100%	
1.1	Yes		58%	11	58%	65%
1.2	No		32%	6	32%	35%
1.3	No opinion		11%	2	11%	
9.2.2 CPI/PPI				19	100%	
1.1	Yes		74%	14	74%	82%
1.2	No		16%	3	16%	18%
1.3	No opinion		11%	2	11%	
9.2.3 GFS				19	100%	
1.1	Yes		58%	11	58%	85%
1.2	No		11%	2	11%	15%
1.3	No opinion		32%	6	32%	
9.2.4 Monetary				19	100%	
1.1	Yes		89%	17	89%	100%
1.2	No		0%	0	0%	0%
1.3	No opinion		11%	2	11%	
9.2.5 Balance of Payments				19	100%	
1.1	Yes		68%	13	68%	76%
1.2	No		21%	4	21%	24%
1.3	No opinion		11%	2	11%	

Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004 (cont'd)

		% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion	
9.3	How would you compare the official statistics of Guatemala with those of other countries in the region?					
						Average rating 1/
9.3.1	National Accounts		19	100%		-0.47
	Better	5%	1	5%	6%	
	Same	37%	7	37%	41%	
	Worse	47%	9	47%	53%	
	No opinion	11%	2	11%		
9.3.2	CPI/PPI		19	100%		-0.18
	Better	11%	2	11%	12%	
	Same	53%	10	53%	59%	
	Worse	26%	5	26%	29%	
	No opinion	11%	2	11%		
9.3.3	GFS		19	100%		-0.40
	Better	5%	1	5%	7%	
	Same	37%	7	37%	47%	
	Worse	37%	7	37%	47%	
	No opinion	21%	4	21%		
9.3.4	Monetary		19	100%		-0.06
	Better	11%	2	11%	13%	
	Same	58%	11	58%	69%	
	Worse	16%	3	16%	19%	
	No opinion	16%	3	16%		
9.3.5	Balance of Payments		19	100%		-0.31
	Better	5%	1	5%	6%	
	Same	47%	9	47%	56%	
	Worse	32%	6	32%	38%	
	No opinion	16%	3	16%		

Survey of Users of Official Macroeconomic Data - Guatemala City - October 27, 2004 (cont'd)

		% of Respondents	Respondents Answering Question	Respondents	% w/ an Opinion	
9.4	How do you assess the overall quality of the official statistics of Guatemala? <i>(Please rate on a scale of 1-5 the overall quality of the statistics, with 1 rated as poor and 5 as excellent)</i>					
						Average rating
9.4.1	National Accounts		19	100%		3.00
	1	5%	1	5%	6%	
	2	16%	3	16%	19%	
	3	42%	8	42%	50%	
	4	16%	3	16%	19%	
	5	5%	1	5%	6%	
	No opinion	17%	3	16%		
9.4.2	CPI/PPI		19	100%		3.63
	1	0%	0	0%	0%	
	2	11%	2	11%	13%	
	3	16%	3	16%	19%	
	4	53%	10	53%	63%	
	5	5%	1	5%	6%	
	No opinion	17%	3	16%		
9.4.3	GFS		19	100%		3.00
	1	0%	0	0%	0%	
	2	21%	4	21%	27%	
	3	37%	7	37%	47%	
	4	21%	4	21%	27%	
	5	0%	0	0%	0%	
	No opinion	21%	4	21%		
9.4.4	Monetary		19	100%		3.67
	1	0%	0	0%	0%	
	2	0%	0	0%	0%	
	3	37%	7	37%	47%	
	4	32%	6	32%	40%	
	5	11%	2	11%	13%	
	No opinion	21%	4	21%		
9.4.5	Balance of Payments		19	100%		3.40
	1	0%	0	0%	0%	
	2	11%	2	11%	13%	
	3	37%	7	37%	47%	
	4	21%	4	21%	27%	
	5	11%	2	11%	13%	
	No opinion	21%	4	21%		

Source: User survey and IMF staff estimates.

1/ Weighting: Better=1; Same=0; Worse=-1.